EL MONTE UNION HIGH SCHOOL DISTRICT

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE

SOUTH EL MONTE, CA 91733

CONTRACT DOCUMENTS

PTN. : 64519-114 **DSA APPLICATION NO.: 03-122825**

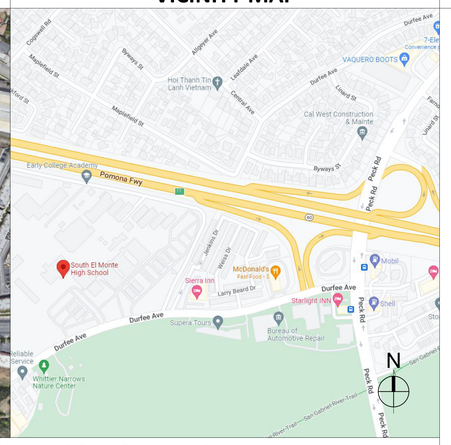
APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

LOCATION MAP

VICINITY MAP



PROJECT DIRECTORY

OWNER: EMUHSD
3537 JOHNSON AVENUE
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(626) 444-9005

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PRINCIPAL ENGINEER
TX ENGINEERING
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POMONA, CA 91767
(213) 295-5532
thomas.xu@txecorp.com

STRUCTURAL ENGINEER: JIM PEARSON, SE
PRESIDENT
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A-021	DEMOLITION REFLECTED CEILING PLAN
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SHEET COUNT: 57

SCOPE OF WORK

PROFESSIONAL DEVELOPMENT CENTER IMPROVEMENTS INCLUDING:

REPLACE EXTERIOR METAL PLASTER WALL WITH STOREFRONT SYSTEM (WINDOWS AND ENTERANCE DOORS). NEW EXTERIOR METAL SCREEN. NO CHANGE TO THE STRUCTURE ELEMENTS. COMPLETE RENOVATIONS TO MULTI USE RESTROOM. NEW CONFERENCE ROOM, NEW BREAK ROOM, PARENT ROOM ,AND IDF ROOM. ALL EXTERIOR PAINTING, INTERIOR PARTITIONS, FLOORING, CEILING, SOFFITS, FINISHES, PAINTING, CASEWORK, PLUMBING FIXTURES, TOILET COMPARTMENTS & ACCESSORIES, WINDOW COVERINGS, FURNITURE, FIXTURES, AND EQUIPMENT, AMONG OTHER CHANGES TO BUILDING MECHANICAL, PLUMBING, ELECTRICAL, LIGHTING, ETC.

NO CHANGE IN OCCUPANCY, A-3, A# 03-109501.

STATEMENT OF GENERAL CONFORMANCE

THE CIVIL, ELECTRICAL, & PLUMBING DRAWINGS AND/OR SPECIFICATIONS AND/OR CALCULATIONS 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 THE DESIGN INTENT AND APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME.

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

THE STATEMENT OF GENERAL CONFORMANCE SHALL NOT BE CONSTRUCTED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336 , 4-341, AND 4-344 OF TITLE 24, PART 1.

I FIND THAT

ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET

☑ ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND
☑ HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

YISAN TAI, ARCHITECT — DATE: 05-08-2023

LICENSE NUMBER: C-29766 — EXPIRATION DATE: 06-30-2023

GENERGAL CODE NOTES

•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.

•ALL WORK SHALL CONFORM TO 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

•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.

•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.

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

•WHENEVER DSA FINDS ANY CONSTRUCTION WORK IS BEING PERFORMED IN A MANNER CONTRARY TO THE PROVISIONS OF CALIFORNIA BUILDING CODE AND THAT WOULD COMPROMISE THE STRUCTURAL INTEGRITY OF THE BUILDING, THE DEPARTMENT OF GENERAL SERVICES, STATE OF CALIFORNIA, IS AUTHORIZED TO ISSUE A STOP WORK ORDER PER SECTION 4-334.1 CALIFORNIA ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).

•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)

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

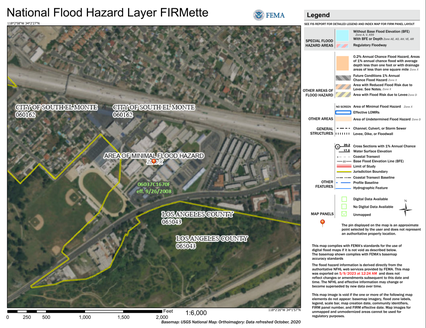
•TITLE 24, PARTS 1-5 AND 9 MUST BE KEPT ON SITE DURING CONSTRUCTION.

•SUBMIT RFI'S TO DESIGN TEAM IN CASE OF INCONSISTENCIES BETWEEN APPROVED DRAWINGS AND APPROVED SPECIFICATIONS IN THE DESCRIPTIONS OF WORK TO BE DONE, EQUIPMENT TO BE PROVIDED OR MATERIAL TO BE USED. IT SHALL BE THAT THE MORE STRINGENT, THE MORE RESTRICTIVE, THE HIGHER QUALITY, AND THE GREATER QUANTITY OF WORK SHALL APPLY. SUBMIT REVISED DRAWINGS OR SPECIFICATIONS AS RESULT OF SUCH RFI'S TO DSA VIA CCD'S IF REQUIRED BY IR A-6.

•ALL STRUCTURAL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING MATERIALS INSTALLATION TO COMPLY WITH APPLICABLE CODES, STANDARDS, AND MANUFACTURER'S RECOMMENDATIONS.

•THE PROJECT INSPECTION (PI) SHALL WITNESS AND VERIFY GROUNDING.

FEMA MAP



AUTHORITY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

CSDA DESIGN GROUP
LISTEN COLLABORATE CREATE

610 E. Franklin Ave
El Segundo, CA 90245
(415) 689-9800
www.csdadesigngroup.com

ARCHITECT STAMP

LICENSED ARCHITECT
YISAN TAI
No. C-29766
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

PROJECT OWNER:
EL MONTE UNION HIGH SCHOOL DISTRICT
3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

https://www.emuhsd.org/

PROJECT NAME:
EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	06/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

PROJECT NO.: **21095.01**

SHEET TITLE:
COVER SHEET - INDEX, SCOPE OF WORK & VICINITY MAP

SHEET NO.:
G-001

5/10/2023 9:02:22 AM

BID SET - NOT FOR CONSTRUCTION

GENERAL NOTES

1. ALL CONSTRUCTION AND ALL ON-SITE AND SITE-RELATED ACTIVITIES SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES, ORDINANCES AND STATUTES.

2. DRAWINGS AND SPECIFICATIONS, INTEGRAL OR SEPARATELY PACKAGED, REPRESENT FINISHED CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, SHORING AND TEMPORARY BRACING.

3. WRITTEN DIMENSIONS GOVERN OVER SCALED DIMENSIONS. EXISTING BUILDING DIMENSIONS ARE FOR GUIDANCE ONLY, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE COMMENCING WORK. OMISSION OR CONFLICTS BETWEEN VARIOUS ELEMENTS IN THE DRAWINGS, NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.

4. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING AND/OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS AND ASCERTAIN WORK NEEDED. PERFORM THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.

5. NO DEVIATION FROM THE APPROVED DRAWINGS AND SPECIFICATIONS IS PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. ANY DEVIATION OR MODIFICATION FROM THE DSA APPROVED PLANS AFFECTING THE HEALTH, FIRE/LIFE SAFETY, STRUCTURAL INTEGRITY, OR ACCESSIBILITY SHALL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL PRIOR TO COMMENCING SUCH WORK. THE ARCHITECT'S INTERPRETATION OF THESE DOCUMENTS SHALL BE FINAL. ALL MATTERS OF COLOR, TEXTURE, DESIGN AND INTERPRETATION OF DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ARCHITECT BY THE CONTRACTOR FOR RESOLUTION BY HIM OR HER.

6. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING THE JOB TO FAMILIARIZE HIMSELF / HERSELF IN DETAIL AS TO THE EXTENT OF THE WORK REQUIRED AND THE EXISTING CONDITIONS, AND SHALL TAKE THESE INTO CONSIDERATION IN THE COST OF THE BID. UPON BEING AWARDED A CONTRACT AND BEFORE BEGINNING WORK AT THE SITE, THE CONTRACTOR IS TO INSPECT AND VERIFY THE CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT, AND TO IMMEDIATELY REPORT DISCREPANCIES WITH THE PROJECT DOCUMENTS TO THE ARCHITECT.

7. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND LICENSES, AND SHALL POST OR PUBLISH, AS REQUIRED, ALL NECESSARY NOTICES PRIOR TO PERFORMING ANY WORK ON SITE. THE COSTS OF THESE PERMITS, LICENSES AND NOTICES IS INCIDENTAL TO OTHER ITEMS OF WORK AND NO ADDITIONAL PAYMENTS WILL BE MADE FOR COSTS INCURRED FOR PERMITS, LICENSES AND NOTICES OR IN CONFORMING TO THE REQUIREMENTS THEREOF.

8. THE CONTRACTOR SHALL FURNISH THREE (3) SETS OF SHOP DRAWINGS AND PERFORMANCE SPECIFICATIONS AS REQUESTED FOR REVIEW AND APPROVAL OR REJECTION BY THE ARCHITECT OR ENGINEER PRIOR TO FABRICATION OR DELIVERY OF MATERIAL. REVIEW OF SUCH SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH ALL CONTRACT REQUIREMENTS.

9. ANY WORK OR MATERIALS NOT DIRECTLY NOTED IN THE CONTRACT DOCUMENTS, BUT NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE INTENT THEREOF, ARE IMPLIED AND ARE TO BE PROVIDED AS IF SPECIFICALLY DESCRIBED AT NO ADDITIONAL COST.

10. THE CONTRACTOR SHALL PHOTOGRAPH EXISTING CONDITIONS AT START OF JOB AND VERIFY FUNCTIONALITY OF ELECTRICAL AND MECHANICAL SYSTEMS. ALL DAMAGED AND NON-FUNCTIONING ITEMS NOT IDENTIFIED SHALL BE REPAIRED PRIOR TO ACCEPTANCE OF THE PROJECT.

11. TRUCK ROUTES USED FOR THE CONSTRUCTION OF THIS PROJECT ARE TO BE SUBMITTED TO AND APPROVED BY ALL RELEVANT JURISDICTIONS, AS REQUIRED.

12. THE CONTRACTOR SHALL ASSUME CARE, CUSTODY & RESPONSIBILITY FOR SAFEGUARDING THE OWNER'S PROPERTY OF EVERY KIND, WHETHER FIXED OR PORTABLE. BEFORE BEGINNING WORK AT THE SITE THE CONTRACTOR SHALL INSPECT AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTY ITEMS, CASEWORK, EQUIPMENT AND OTHER ITEMS WHICH MUST BE PRESERVED AND PROTECTED, AND/OR REMOVED TO BE PROPERLY STORED AND RE-INSTALLED, IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT. THE CONTRACTOR SHALL PROVIDE ALL FORMS OF SECURITY AND PROTECTION NECESSARY TO PROTECT OWNER'S PROPERTY, REGARDLESS OF THE CAUSE.

13. THE CONTRACTOR SHALL REPAIR, REPLACE OR OTHERWISE RESTORE ANY DAMAGED PROPERTY UNDER THE CONTRACTOR'S CARE.

14. IN THE DEMOLITION DRAWINGS, DASHED LINES INDICATE CONSTRUCTION FIXTURES OR ITEMS TO BE REMOVED OR SALVAGED. 'REMOVE' MEANS DEMOLITION AND DISPOSAL OF ITEMS. 'SALVAGE' MEANS CAREFUL EXTRACTION AND PROTECTION FOR REINSTALLATION, STORAGE OR OTHER DISPOSAL, AS DIRECTED. ITEMS NOT SPECIFICALLY NOTED FOR SALVAGE, ARE TO BE REMOVED AND DISPOSED OF.

15. THE CONTRACTOR SHALL MAINTAIN FIRE PROTECTION DURING DEMOLITION AND CONSTRUCTION AND SHALL USE CONSTRUCTION MATERIALS, THAT COMPLY WITH ALL APPLICABLE FIRE-RELATED REGULATIONS.

16. EACH CONTRACTOR AND SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL RUBBISH AND WASTE IN THEIR AREA OF WORK AT LEAST TWICE A WEEK AND SHALL AT ALL TIMES OPERATE IN A CLEAN AND SAFE MANNER. TRASH AND CONSTRUCTION RELATED DEBRIS MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER OR DISPERSAL BY WIND OR ANIMALS. AT THE COMPLETION OF THE PROJECT, CONTRACTOR SHALL TURN OVER AN ACCEPTABLY CLEAN SITE TO OWNER.

17. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE OR FOOT TRAFFIC. SITE ACCESS WAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY OR ADJOINING PROPERTIES. ANY SUCH ACCIDENTAL OR OTHER DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.

18. FUELS, OILS AND SOLVENTS AND OTHER TOXIC OR NON-NATIVE MATERIALS MUST NOT CONTAMINATE ANY SOILS, SURFACE WATERS OR GROUND WATER, AND MUST BE STORED IN ACCORDANCE WITH THEIR LISTING IN APPROVED STORAGE CONTAINERS, FULLY PROTECTED FROM WIND, RAIN AND ANIMALS. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN THE PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE STORMWATER OR SEWAGE SYSTEMS.

19. **HAZARDOUS MATERIALS MAY BE PRESENT ON SITE. THE CONTRACTOR IS TO REVIEW THE DISTRICT'S HAZMAT DOCUMENTS AND GET DIRECTION FROM THE DISTRICT REGARDING REMOVAL OF HAZARDOUS MATERIALS. SHOULD CONTRACTOR DISCOVER WHAT IS BELIEVED TO BE HAZARDOUS MATERIALS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY AND WAIT FOR DIRECTION. NOTHING IN THESE DOCUMENTS INDICATE OR INVOLVE REMOVAL OR HANDLING OF HAZARDOUS MATERIALS. SEE SPECIFICATIONS 024119.**

20. NO MOTOR VEHICLES ARE TO BE STORED IN BUILDINGS UNDER CONSTRUCTION.

21. THERE SHALL NOT BE ANY TRESPASSING ON ANY ADJOINING PROPERTY. NO MATERIALS SHALL BE STORED ON ANY ADJOINING PROPERTY. REPRESENTATIVES OF THE OWNER AND OF THE CONTRACTOR ARE TO INSPECT ALL SIDEWALKS, ROADWAYS AND ADJOINING PROPERTIES PRIOR TO COMMENCING WORK. ALL EXISTING DAMAGE SHALL BE NOTED AND AGREED TO BY BOTH PARTIES. ANY DAMAGE TO THESE SIDEWALKS, ROADWAYS OR ADJOINING PROPERTIES OCCURRING DURING THIS CONTRACT SHALL BE REPAIRED PRIOR TO COMPLETION.

22. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE PUBLIC RIGHT OF WAY UNLESS AND ENCROACHMENT PERMIT IS FIRST OBTAINED FROM THE APPROPRIATE LOCAL AUTHORITY.

23. ALL PAINT AND STAIN MATERIALS MUST COMPLY WITH LOCAL, STATE AND FEDERAL AIR POLLUTION CONTROL MANDATES.

24. ALL CONSTRUCTION APPARATUS AND ACTIVITIES SHALL BE LIMITED TO DESIGNATED AREAS. ALL WORK SHALL BE DONE IN A MANNER WHICH WILL NOT ENDANGER USERS OF THE FACILITIES OR THE PUBLIC.

25. THE CONTRACTOR SHALL FUMIGATE BUILDING(S) AND EMPLOY LICENSED PEST CONTROL CONTRACTOR TO REMOVE ANY INSECTS, BIRDS, OR RODENTS ON SITE, AND TO CLEAN UP CARCASSES AND DROPPINGS DURING CONSTRUCTION & PRIOR TO SUBSTANTIAL COMPLETION.

26. CONTRACTOR IS TO PROVIDE ALL ITEMS THAT ARE NEW AND OF KIND AND QUALITY INDICATED BY THE DRAWINGS AND SPECIFICATIONS U.O.N.

27. ALL CONSTRUCTION DOCUMENTS ARE COMPLEMENTARY AND WHAT IS SPECIFIED BY ONE SHALL BE BINDING AS IF SPECIFIED BY ALL. ANY WORK SHOWN OR REFERRED TO ON CONSTRUCTION DOCUMENTS, WHETHER DRAWINGS OR SPECIFICATIONS, SHALL BE PROVIDED AS THOUGH IT WERE SHOWN ON ALL RELATED DOCUMENTS. GENERAL NOTES APPLY TO ENTIRE PROJECT. SHEET NOTES APPLY TO ENTIRE SHEET ON WHICH THEY OCCUR. KEY NOTES APPLY TO THE SERIES OF DRAWINGS TO WHICH THEY BELONG.

28. N.I.C. ITEMS ARE SHOWN FOR SCOPE COORDINATION PURPOSES ONLY, AND ARE NOT A PART OF THE DSA APPROVAL.

29. THE CONTRACTOR AND THEIR SUBCONTRACTORS SHALL NOT WORK BEFORE OR AFTER THE HOURS PERMITTED BY LOCAL GOVERNMENT AGENCIES & HUSD, AND IN NO CASE PRIOR TO 6:00 AM EACH WEEKDAY AND 8:00 AM ON WEEKENDS AND HOLIDAYS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALLOWABLE WORKING HOURS.

30. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR VENT, DUCT, CONDUIT SLEEVE PENETRATIONS, ETC. NOT SHOWN ON THE ARCHITECTURAL DRAWINGS.

31. CONTRACTOR SHALL NOT DRILL, CUT OR CORE DRILL ANY EXISTING FLOOR, WALL OR ROOF JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED ON THE DSA APPROVED DRAWINGS OR PRIOR APPROVAL OBTAINED BY A.O.R. OR S.E.O.R. & DSA PRIOR TO COMMENCING SUCH WORK, AND SHALL MAKE OPENINGS OF PROPER SIZE FOR CONDUITS, DUCTS, PIPES OR OTHER ITEMS PASSING THROUGH. DO NOT PROGRESS WITH SUCH WORK BEFORE FIRST SECURING THE CONCURRENCE AND APPROVAL OF THE STRUCTURAL ENGINEER AND/OR ARCHITECT & DSA, (UNLESS SPECIFICALLY INDICATED ON DSA APPROVED DRAWINGS) AND ALL PENETRATIONS CAUSED BY THIS WORK SHALL BE TREATED FOR A TIGHT SEAL BY THE CONTRACTOR USING A MATERIAL OF THE SAME INTEGRITY AS THE EXISTING PENETRATION. IF DETAILS DO NOT SHOW OR CONFORM TO THE APPROVED DRAWINGS, THEN REVIEW OF DETAILS TAKES PLACE BEFORE ANY WORK IS STARTED. APPROVAL BY ARCHITECT, STRUCTURAL ENGINEER AND ANY OTHER APPLICABLE AUTHORITY IS REQUIRED. WORK SHALL BE COORDINATED WITH SCHOOL SCHEDULE THROUGH THE CONSTRUCTION MANAGER.

32. CONTRACTORS SHALL REPAIR, PATCH AND FINISH OR REFINISH TO MATCH ADJACENT EXISTING FINISHES ON ANY NEW OR OLD STRUCTURES OR FINISHES WHICH ARE DAMAGED BY CUTTING, GRINDING, DRILLING, DEMOLITION OR OTHER MEANS DURING CONSTRUCTION.

33. WHERE CONDUIT, DUCTS, PIPES AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED IN EXISTING WALLS OR PARTITIONS, NEATLY CHASE THE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS. MAKE THE INSTALLATION INDISCERNIBLE IN THE FINISHED WORK. APPROVAL BY A.O.R. IS REQUIRED.

34. SEAL TIGHT AND PROTECT WITH FIRE SAVING NEW SLEEVES AND OPENINGS THROUGH FIRE RATED PARTITIONS.

35. WHERE "MATCH EXISTING" IS INDICATED, NEW CONSTRUCTION OR FINISHES ARE REQUIRED TO MATCH THE EXISTING PRODUCTS, MATERIALS AND FINISHES.

36. PAINT ALL EXPOSED CONDUITS, METALS, PIPES, DUCTS, ETC. (U.O.N.). COLORS TO BE SELECTED BY THE ARCHITECT.

37. THE CONTRACTOR SHALL PROVIDE ACCESS PANELS OF REQUIRED SIZES WHERE PLUMBING AND HEATING VALVES NEED TO BE ACCESSIBLE.

38. CONNECTIONS OF ALL DISSIMILAR METAL ITEMS SHALL BE FURNISHED WITH DIELECTRIC SEPARATORS. THE CONTRACTOR TO ENSURE COORDINATION WITH ALL TRADES TO PREVENT ELECTROLYSIS.

39. WHERE WORK IS PERFORMED THAT AFFECTS EXISTING PAINT FINISHES, THE CONTRACTOR SHALL REPAINT AFFECTED AREA TO NEAREST CLEAR BREAK POINT OR WHERE NOTED BY A.O.R.

40. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKBOARDS, ELECTRICAL OUTLETS, CONDUITS, ETC. AS REQUIRED BY THE OWNER'S TELEPHONE COMPANY, TO ACCOMMODATE THEIR INSTALLATION.

41. ALL ELECTRICAL, PHONE, ELECTRONIC, MECHANICAL, PLUMBING AND OTHER LINES SHALL BE CONCEALED UNLESS OTHERWISE NOTED.

42. NO THERMOSTATS SHALL BE LOCATED IN THE CENTER OF WALLS, OR IN ANY OTHER CONSPICUOUS LOCATIONS, WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.

43. ALL MECHANICAL , PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2016 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7, CHAPTER 13.

44. PROOF LOAD TEST FOR EXPANSION ANCHOR BOLTS, ALL CONCRETE ANCHOR BOLTS OF THE EXPANSION TYPE (LOADED IN EITHER PULLOUT OR SHEAR) SHALL BE PROOF TESTED AS SPECIFIED IN CBC SECTION 1910A.5.7. IF THERE ARE ANY FAILURES, THE IMMEDIATELY ADJACENT BOLTS MUST ALSO BE TESTED. ALL TEST RESULTS MUST BE IMMEDIATELY REPORTED TO THE ARCHITECT, STRUCTURAL ENGINEER & DSA.

45. EXIT SIGNS AND DIRECTIONAL SIGNS CONFORMING TO ALL APPLICABLE CODES AND REGULATIONS, INCLUDING TITLE 24, CCR SHALL BE PROVIDED.

46. FIXTURES REQUIRED FOR EXIT ILLUMINATIONS SHALL BE SUPPLIED FROM SEPARATE SOURCES OF POWER. THE POWER SUPPLY FOR EXIT ILLUMINATION SHALL BE PROVIDED BY THE PREMISES' WIRING SYSTEM U.O.N. IN THE EVENT OF ITS FAILURE, ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY SYSTEM. ALL EXIT WAYS IN THE AREA OF WORK SHALL BE EQUIPPED WITH AN APPROVED EMERGENCY SYSTEM AND SHALL BE SUPPLIED FROM STORAGE BATTERIES OR AN ON-SITE GENERATOR SET AND THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ELECTRICAL CODE.

47. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL EFFORT OR KNOWLEDGE. FLUSH BOLTS OR SURFACE BOLTS ARE PROHIBITED, SPECIAL LOCKING DEVICES SHALL BE AN APPROVED TYPE ONLY.

48. ALL EXIT WAYS IN THE AREA OF WORK SHALL BE EQUIPPED WITH AN APPROVED EMERGENCY LIGHTING SYSTEM OF 5 FOOT-CANDLES OR MORE DESIGNED TO OPERATE WHEN THE BUILDING POWER SOURCE IS INTERRUPTED.

49. THE EQUIPMENT MANUFACTURER OR PRODUCT BRAND SPECIFIED IS USED AS A MEASURE OF QUALITY AND UTILITY OR AS A STANDARD. IF THE CONTRACTOR DESIRES TO MAKE A SUBSTITUTION, IT SHALL BE HIS OR HER RESPONSIBILITY TO PROVIDE PROOF THAT THE SUBSTITUTION IS OF EQUAL QUALITY. THE OWNER SHALL ACCEPT OR REJECT THE REQUEST FOR SUBSTITUTION AND THE DECISION SHALL BE FINAL. THE CONTRACTOR SHALL PROVIDE A LIST OF PROPOSED SUBSTITUTIONS DURING THE BID PERIOD OR PRIOR TO CONSTRUCTION.

50. WHEN REQUIRED, FIRE-RATED GYPSUM WALLBOARD AND/OR PLASTER WALL AND CEILINGS ARE BROKEN TO ANY EXTENT, THE DAMAGED GYPSUM WALLBOARD AND/OR PLASTER SHALL BE REPLACED OR RETURNED TO THE REQUIRED LEVEL OF FIRE RESISTANCE USING A LISTED REPAIR SYSTEM OR USING MATERIALS AND METHODS EQUIVALENT TO THE ORIGINAL CONSTRUCTION, AS PER CFC SECTION 703.1 (MAINTENANCE OF FIRE-RESISTIVE CONSTRUCTION) OR ANY OTHER APPLICABLE REGULATION.

51. CONTRACTOR IS TO VERITY ALL EXISTING DIMENSIONS WHERE NEW CONSTRUCTION IS DEPENDENT ON EXISTING DIMENSIONS, BEFORE COMMENCING WORK, AND TO IMMEDIATELY INFORM THE ARCHITECT OF ANY DISCREPANCIES OR ERRORS.

52. ALL DEMOLITION SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS, INCLUDING CBC CH. 34 AND CFC CH. 14, AND THE LATEST PUBLISHED EDITION AND AMENDMENTS.

53. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS, INCLUDING TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR), LATEST ADOPTED PUBLISHED EDITION AND AMENDMENTS.

54. ALL WALL DIMENSIONS ARE FROM FACE OF FINISH TO FACE OF FINISH.

55. PROVIDE BACKING FOR ALL WALL MOUNTED OR CEILING MOUNTED EQUIPMENT EVEN IF NOT NOTED. POSITIVE CONNECTION IS REQUIRED THROUGH OUT THE PROJECT.

ABBREVIATIONS

NOTE:
NOT ALL ABBREVIATIONS ARE USED IN THIS PROJECT

d	PENNY
#	POUND OR NUMBER
~	APPROXIMATE
AB	ANCHOR BOLT
AC	ASPHALTIC CONCRETE
A/C	AIR CONDITIONING
ACC	ACCESSIBLE
ACOUS	ACOUSTICAL
ACS PNL	ACCESS PANEL
ACST	ACOUSTIC
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITES ACT
ADDL	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJUSTABLE
ADMIN	ADMINISTRATION
AFF	ABOVE FINISH(ED) FLOOR
AGGR	AGGREGATE
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ALUM	ALUMINUM
ALW	ALLOWANCE
ANOD	ANODIZED
APPROX	APPROXIMATE (~)
ARCH	ARCHITECT (ARCHITECTURAL)
ASPH	ASPHALT
BD	BOARD
BFF	BELOW FINISHED FLOOR
BITUM	BITUMINOUS
BLDG	BUILDING
BLK(G)	BLOCK (BLOCKING)
BM	BEAM
BO	BOTTOM OF
BOT	BOTTOM
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
B/W	BETWEEN
C	CONDUIT
CAB(S)	CABINET(S)
CB	CATCH BASIN
CBB	CEMENTITIOUS (BACKER) BOARD
CD	CONTRACT DOCUMENTS
CER	CERAMIC
CG	CORNER GUARD
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CLR ANOD	CLEAR ANODIZED
CLRM	CLASSROOM
CMU	CONCRETE MASONRY UNIT
CO(S)	CLEAN-OUT(S)
COL	COLUMN
COMM	TELECOMMUNICATION
CONC	CONCRETE
CONF	CONFERENCE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR
CPT	CARPET
CSK	COUNTER SUNK
CT	CERAMIC TILE
CTR	CENTER
D	DEPTH
DBL	DOUBLE
DEMO	DEMOLITION
DET(S)	DETAIL(S)
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM(S)	DIMENSION(S)
DISP	DISPENSER
DN	DOWN
DR	DOOR
DR OPNG	DOOR OPENING
DS	DOWNSPOUT
DTL	DETAIL
DWG(S)	DRAWING(S)
(E)	EXISTING (EXIST.)
EA	EACH
ED	EXIT DEVICE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV(S)	ELEVATION(S)
EMER	EMERGENCY
ENCL	ENCLOSURE
ENL	ENLARGE (ENLARGED)
ENT	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXH	EXHAUST
EXP	EXPANSION
EXP BT	EXPANSION BOLT
EXT	EXTERIOR
EXTIR	EXTINGUISHER
FA	FIRE ALARM
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FFE	FURN. FIXT. & EQUIPMENT
FHC	FIRE HOSE CABINET
FHMS	FLAT HEAD MACHINE SCREW
FHWS	FLAT HEAD WOOD SCREW
FIN	FINISH
FIN FLR	FINISHED FLOOR
FIXT	FIXTURE
FLOUR	FLOURESCENT
FLEX	FLEXIBLE
FLR	FLOOR
FLRG	FLOORING
FO	FACE OF
FP	FIRE PROTECTION
FR	FIRE RATED
FRIG	REFRIGERATOR
FRMG	FRAMING
FT	FOOT OR FEET
FTG	FOOTING
FURN	FURNITURE
GA	GAGE
GALV	GALVANIZED
GB	GRAB BAR
GEN	GENERAL
GFRC	GLASS-FIBER-REINF. CONC.
GL	GLASS
GND	GROUND
GR	GROSS (UNIT)
GSM	GALVANIZED SHEET METAL
GYP	GYPSUM
HB	HOSE BIBB
HC	HOLLOW CORE
HDR	HEADER
HDW	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HNDRL	HANDRAIL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
IMP(S)	IMPROVEMENT(S)
IN	INCH
INCL	INCLUDING/INCLUDED
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JST	JOIST
JT	JOINT
KD	KNOCK-DOWN
KIT	KITCHEN
L	LENGTH
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVORATORY
LB	LAG BOLT
LF	LINEAR FEET
LNGE	LOUNGE
LSC	LAY IN SUSPENDED CEILING
LTG	LIGHTING
MAINT	MAINTENANCE
MATL(S)	MATERIAL(S)
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER (MANUF.)
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
MTG	MEETING
MTL	METAL
MTLP	METAL PARTITION
(N)	NEW
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NPS	NOMINAL PIPE SIZE
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OCC	OCCUPANT(S)
OFD	OVERFLOW DRAIN
OFF	OFFICE
OF/CI	OWNER FURNISHED & CONTRACTOR INSTALLED
OH	OVERHEAD
OL	OCCUPANT LOAD
OPNG	OPENING
P	PAINT
PA	PUBLIC ADDRESS
PA	PLANTING AREA
PERIM	PERIMETER
PFN	PREFINISH(ED)
PI	PAPER INSERT
PH	PANIC HARDWARE
PHS	PHILLIPS HEAD SCREW
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
POLY	POLYCARBONATE
POT	[ACCESSIBLE] PATH OF TRAVEL
PR	PAIR
PRCST	PRECAST
PREFAB	PREFABRICATED
PREP	PREPARATION
PT	PRESSURE TREATED
PTD	PAINTED
PTD	PAPER TOWEL DISPENSER
PTD/R	PAPER TOWEL DISPENSER & RECEP.
PTN(S)	PARTITION(S)
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
R	RADIUS
RR	RESTROOM
R&R	REMOVE AND REPLACE
RBR	RUBBER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCING STEEL BARS
REF	REFERENCE
REINF	REINFORCED
RELOC	RELOCATE/RELOCATABLE
REQD	REQUIRED
REV	REVISION
RM	ROOM
RO	ROUGH OPENING
RWD	REDWOOD
RWL	RAIN WATER LEADER
(SC)	SEALED CONCRETE
SAT	SUSPENDED ACOUSTICAL TILE
SALV	SALVAGE
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SCW	SOLID CORE WOOD
SD	SOAP DISPENSER
SD	SMOKE DETECTOR
SECT	SECTION
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DWG(S)
SHT	SHEET
SIM	SIMILAR
SL	SLOPE
SLD	SEE LANDSCAPE DRAWINGS
SLNT	SEALANT
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREWS
SND	SANITARY NAPKIN DISPENSER
SNR	SANITARY NAPKIN RECEPTACLE
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SQ	SQUARE
SS	SANITARY SEWER
SSD	SEE STRUCTURAL DRAWINGS
SST	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STDNT	STUDENT
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENSION (SUSPENDED)
SVCE	SERVICE
SYM	SYMBOL
(T)	TEMPERED
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TAC	TACTILE
TEL	TELEPHONE
TER	TERRAZZO
THK	THICK
THRES	THRESHOLD
TMPD	TEMPERED
TO	TOP OF
TOC	TOP OF CONCRETE
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TRN	TRANSPARENT
TS	TUBE STEEL
TSCD	TOILET SEAT COVER DISPENSER
TWS	TACKABLE WALL SURFACE
TYP	TYPICAL
UNFIN	UNFINISHED
UNI	UNIVERSITY
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VWC	VINYL WALL COVERING
W	WIDTH
W/	WITH
W/O	WITHOUT
WC	WALL COVERING
WD	WOOD

SYMBOL LEGEND

ROOM IDENTIFIER W/ ROOM NO. & AREA	ROOM NAME 101 150 SF
WALL TYPE	XXXXX
GLAZING TYPE	X1
DOOR #	XX
KEYNOTE	02.41.19.01
CENTERLINE	℄
CASEWORK	000 - 88 88 88 — WOODWORK INSTITUTE #; DIMENSIONS IN INCHES (W. x HT. x DEPTH)
ADA CLEAR SPACE	60x60; 60 DIA.
CLG. HEIGHT	+ 8' - 0"
BREAK LINE	
GRID BUBBLE	0
LEVEL OR DATUM	
ENLARGED VIEW	1 / A101, SIM — DETAIL #, SHEET #
EXTERIOR ELEVATION INDICATOR	1 / A-201 — DETAIL #, SHEET #
INTERIOR ELEVATION INDICATOR	1, 1, 1, 1 / A101 — DETAIL #, SHEET #
DETAIL CALLOUT	1 / A101, SIM — DETAIL #, SHEET #
SECTION CALLOUT	1 / A101, SIM — DETAIL #, SHEET #
NORTH INDICATOR	N — TRUE NORTH, PLAN NORTH

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ARCHITECT STAMP

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No. C-29766
RENEWAL DATE
JUNE 30, 2023
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

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(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

PROJECT NO.: **21095.01**

SHEET TITLE:

GENERAL NOTES, ABBREVIATIONS, & SYMBOL LEGEND

SHEET NO.:

G-002

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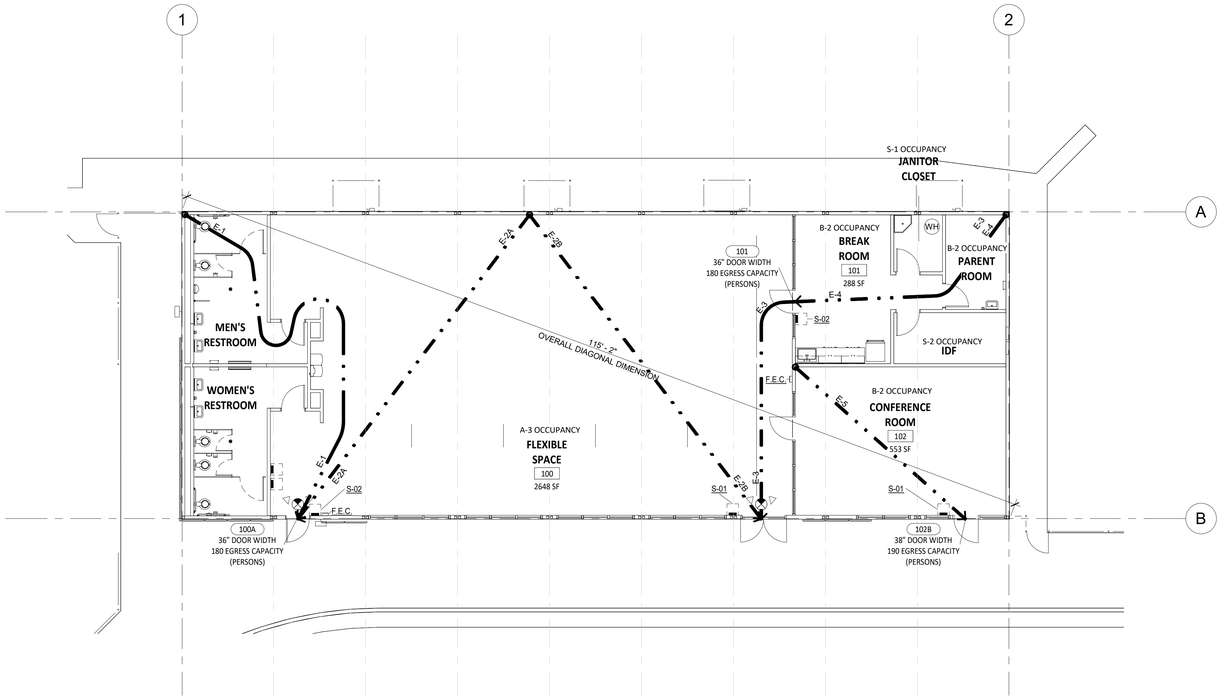
OCCUPANCY LOAD CALCULATION (CBC 2019)

ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	GROSS FLOOR AREA	OCCUPANT LOAD FACTOR (PER TABLE 1004.5)	OCCUPANT LOAD (PERSONS)	NO. OF EXITS REQUIRED BASED ON OCC. LOAD (PER TABLE 1006.2.1)
100	FLEXIBLE SPACE	A-3	2648 SF	15 SF	177	
101	BREAK ROOM	B	288 SF	15 SF	20	
101A	JANITOR CLOSET	S-1	53 SF	300 SF	1	
101B	PARENT ROOM	B	106 SF	15 SF	8	
101C	IDF	S-1	106 SF	300 SF	1	
102	CONFERENCE ROOM	B	553 SF	15 SF	37	
103	WOMEN'S RESTROOM		229 SF	0 SF	0	
104	MEN'S RESTROOM		229 SF	0 SF	0	
TOTAL					244	



MEANS OF EGRESS (1)
SCALE: 1/8" = 1'-0"

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX.
2. SEE GENERAL NOTES, ABBREVIATIONS & SYMBOL LEGEND SHEET.

CODE ANALYSIS

OCCUPANCY CLASSIFICATION:	A-3	(NO CHANGE)
CONSTRUCTION CLASSIFICATION:	V-B	(NO CHANGE)
BUILDING AREA:	3,840 SQ. FT.	(NO CHANGE)
(E) FIRE ALARM	A# 03-109501	

NON SPRINKLER

NO CHANGE IN OCCUPANCY, A-3, A# 03-109501

EGRESS TRAVEL DISTANCE SCHEDULE

MARK	TRAVEL DISTANCE	MAXIMUM ALLOWABLE EGRESS TRAVEL DISTANCE (PER TABLE 1017.2 CBC 2019)	MAXIMUM COMMON PATH OF EGRESS (PER TABLE 1006.2.1)
E-1	64'	200'	75'
E-2A	50'	200'	75'
E-2B	50'	200'	75'
E-3	64'	200'	75'
E-4	34'	75' (COMMON PATH)	75'
E-5	30'	200'	75'

SIGNAGE LEGEND (EGRESS)

MARK	TYPE
S-01	TACTILE EXIT SIGN
S-02	TACTILE EXIT ROUTE SIGN

SYMBOL LEGEND

	EGRESS PATH, SEE SCHED. FOR EGRESS TRAVEL DISTANCE
	ILLUMINATED EXIT SIGN, U.O.N.
	SIGNAGE, U.O.N.
S-XX	SIGNAGE TAG (SEE SIGN LEGEND)
E-XX	EGRESS PATH TAG (SEE EGRESS TRAVEL DIST. SCHED.)

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PROJECT NO.: **21095.01**

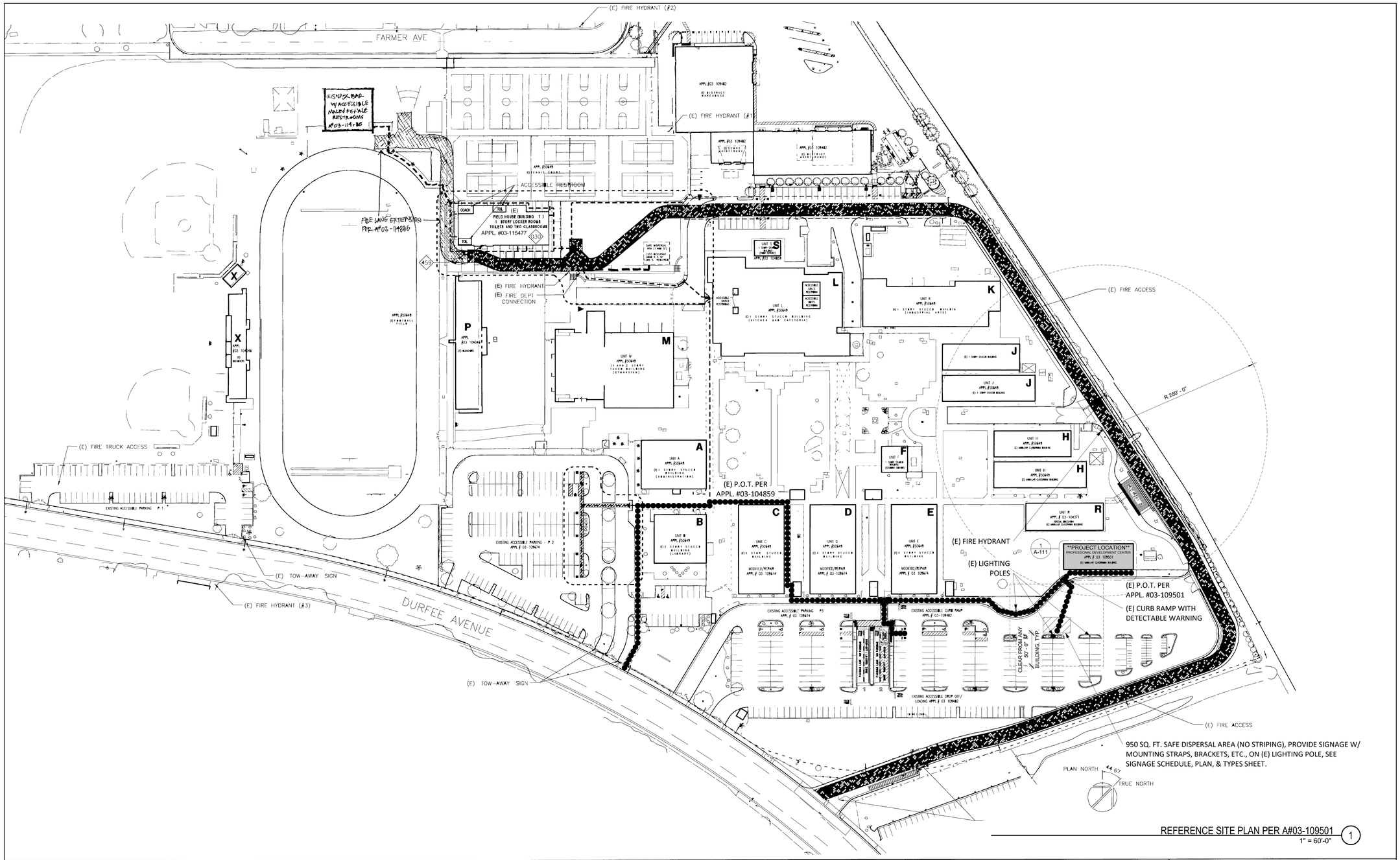
SHEET TITLE:

CODE ANALYSIS & MEANS OF EGRESS

SHEET NO.:

G-003

5/9/2023 1:55:12 PM



REFERENCE SITE PLAN PER A#03-109501 (1)
1" = 60'-0"

ACCESSIBILITY NOTES PER A#03-109501

1 ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2 IF BEVELED AT 1:2 MAX SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4 MAX AND AT LEAST 48 IN WIDTH
2 ACCESSIBLE PATH OF TRAVEL SURFACE IS STABLE FIRM AND SLIP RESISTANT CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED CONTRACTOR TO VERIFY ALL SPOT ELEVATIONS
3 ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80 MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4 PROJECTION FROM WALL AND ABOVE 27 AND LESS THAN 80 CONTRACTOR TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED

"**Design Professional in General Responsible Charge Statement:** The POT identified in these construction documents meets the requirements of the current applicable California Building Code (CBC) accessibility provisions for **path of travel requirements for alterations, 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 with the CBC have been identified and the corrective work necessary to bring them into compliance has been included within the scope of this project's work through details, drawings and specifications incorporated into these construction documents. Any 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 indicated in these construction documents.

During construction, if POT items within the scope of the project represented as CBC compliant are found to be nonconforming beyond reasonable construction tolerances, the items shall be brought into compliance with the CBC as a part of this project by means of a construction change document."

KEYNOTE LEGEND

(E) EXISTING
X H HEIGHT OF (E) FENCE OR YARD WALL
(E) BUILDING FOOTPRINT
(E) ACCESSIBLE HI-LO DRINKING FOUNTAIN

LEGEND

PROPERTY LINE
(E) CHAIN LINK FENCING
ACCESSIBLE PATH OF TRAVEL SEE ACCESSIBILITY NOTES #1 – #3
(E) LOCATION OF ACCESS DIRECTIONAL SIGN
EXISTING WALK WAY

ACCESSIBLE PARKING ANALYSIS(E) (A#03-109501)

PARKING SPACES	NUMBER OF PARKING SPACES		
	P1	P2	P3
STANDARD PARKING	70	138	200
TYPICAL ACCESSIBLE	2	7	10
VAN ACCESSIBLE	1	1	2
TOTAL ACCESSIBLE	3	8	12

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	12/07/2022	DSA SUBMITTAL
	05/05/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

PROJECT NO.: 21095.01

SHEET TITLE:

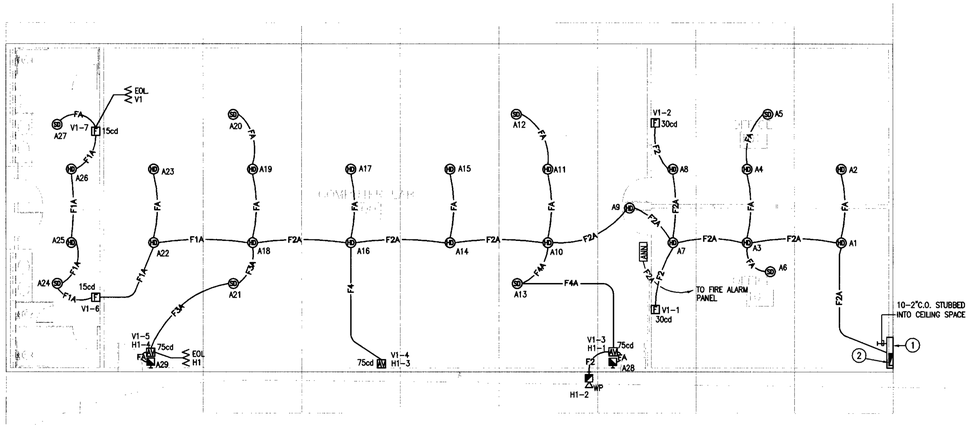
SITE PLAN AS-APPROVED 03-109501 FOR REFERENCE USE ONLY

SHEET NO.:

A-001

REFERENCE NOTES:

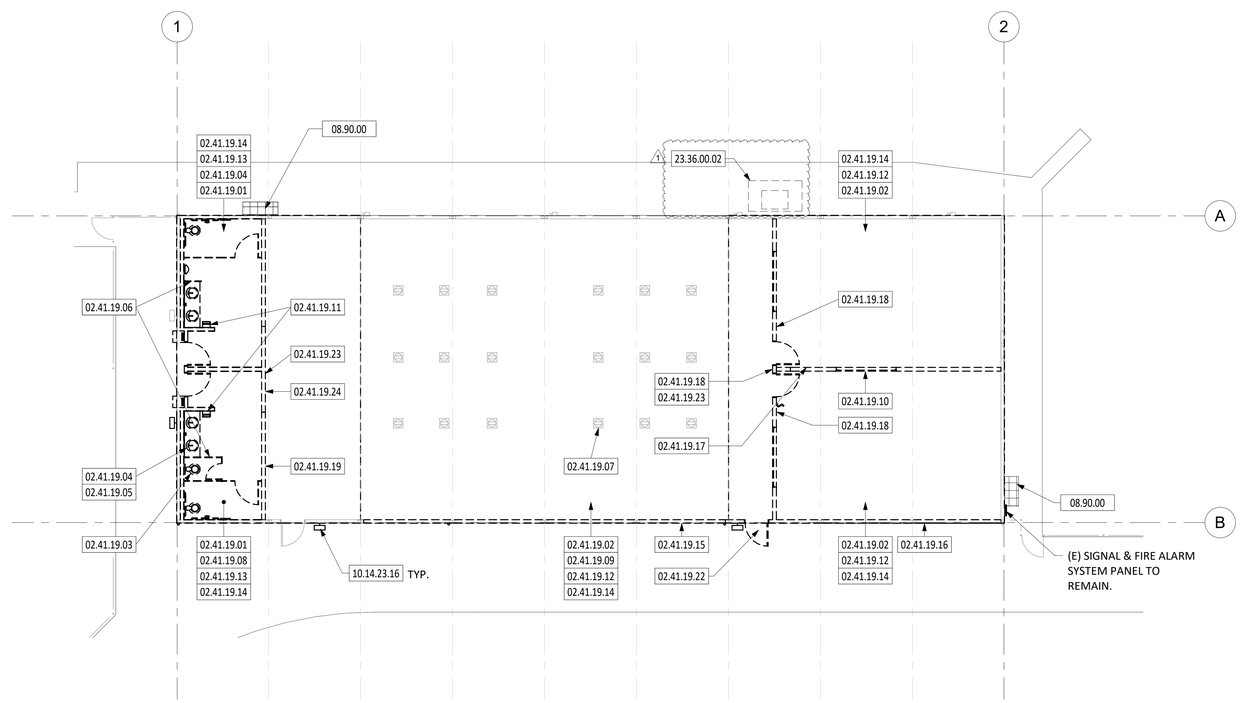
1. NEW FLUSH MOUNTED 48"W X 48H" X 8"D ENCLOSURE FOR SIGNAL/COMMUNICATIONS & FIRE ALARM SYSTEMS.
2. NEW FIRE ALARM CONTROL PANEL.



(E) FIRE ALAARM PLAN PER A# 03-109501 (2)

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

N



DEMOLITION FLOOR PLAN (1)

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

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. REMOVE AND REINSTALL PER DISTRICT DIRECTION, U.O.N., ALL MOUNTED ACCESSORIES, DEVICES, INCLUDING ALL EXPOSED CONDUIT, SURFACE RACEWAYS, ETC., ON WALLS, CEILINGS, ETC., NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
4. REMOVE & REINSTALL ALL (E) FIRE EXTINGUISHERS, CABINETS, ETC., V.I.F. PRIOR TO BID.
5. REMOVE & REINSTALL ALL (E) CARD READERS, U.O.N., V.I.F. PRIOR TO BID, S.E.D.
6. REMOVE & REINSTALL ALL (E) FIRE ALARM DEVICES, ETC., U.O.N., S.E.D.
7. REMOVE & REINSTALL ALL (E) THERMOSTATS, U.O.N., S.M.D., S.E.D.
8. REMOVE & REINSTALL ALL (E) DATA OUTLETS, WIRELESS ACCESS POINTS, ETC., U.O.N., S.E.D.
9. REMOVE AND SALVAGE ALL (E) FURNITURE, SYSTEMS FURNITURE, ETC., CONTRACTOR SHALL COORDINATE W/ DISTRICT, NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
10. REMOVE AND SALVAGE ALL (E) LARGE DISPLAY SCREEN(S)/ MONITOR(S), ETC., CONTRACTOR SHALL COORDINATE W/ DISTRICT, NOT SHOWN FOR CLARITY, V.I.F PRIOR TO BID.
11. REMOVE ALL (E) VISUAL DISPLAY UNITS, INCLUDING MARKERBOARDS, SMARTBOARDS, ETC., NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
12. (E) FIRE ALARM TO REMAIN AND PROTECT IN PLACE. ADJUST DEVICE PER NEW PLAN LAYOUT. TEST FIRE ALARM AFTER WORK IS COMPLETED TO ENSURE SYSTEM IS WORKING PER CODE.
13. ALL NEW ELECTRICAL CONDUITS AND BOXES TO BE INSIDE THE WALL. FINISH WALL TO MATCH ADJACENT FINISH. 1

KEYNOTES

02.41.19.01	R&R (E) FLOORING & WALL TILE W/ (N).
02.41.19.02	R&R (E) FLOORING, WALL BASE, & ACCESSORIES, TYP. U.O.N.
02.41.19.03	R&R (E) WATER CLOSET(S), TYP.
02.41.19.04	R&R (E) SINKS (AS SHOWN), (2) MIRRORS, & SOAP DISPENSER.
02.41.19.05	REMOVE (E) COUNTERTOP, TYP.
02.41.19.06	R&R (E) TOILET PARTITION(S) & SCREEN(S), TYP.
02.41.19.07	(E) RECESSED FLOOR OUTLETS TO REMAIN, TYP. U.O.N.
02.41.19.08	R&R (E) RESTROOM ACCESSORIES, TYP. U.O.N., NOT ALL SHOWN FOR CLARITY, V.I.F PRIOR TO BID
02.41.19.09	(E) PRIMARY & SECONDARY STRUCTURE TO REMAIN, TYP. U.O.N.
02.41.19.10	REMOVE (E) WINDOW, TYP. (AS SHOWN)
02.41.19.11	REMOVE (E) PAPER TOWEL DISPENSER
02.41.19.12	REMOVE (E) VINYL COVERED WALL BOARD, TYP.
02.41.19.13	REMOVE (E) FIBER-REINFORCED POLYMER PANEL, TYP.
02.41.19.14	R&R (E) GYP. BD., TYP.
02.41.19.15	REMOVE & SALVAGE (E) DISPLAY CASE
02.41.19.16	REMOVE (E) DIMENSIONAL LETTER SIGNAGE. SAFE TO RE-INSTALL, SEE EXT. ELEV. FOR NEW LOCATION.
02.41.19.17	REMOVE & REINSTALL (E) FIRST AID CABINET, EQUIPMENT, ETC.
02.41.19.18	REMOVE & REINSTALL (E) CLOCK
02.41.19.19	REMOVE & SALVAGE (E) SHELVING
02.41.19.22	REMOVE & REINSTALL (E) ACCESS CONTROL DEVICES, TYP., V.I.F. PRIOR TO BID, S.E.D.
02.41.19.23	REMOVE & SALVAGE (E) FIRE EXTINGUISHERS, TYP., V.I.F. PRIOR TO BID
02.41.19.24	REMOVE & REINSTALL (E) 'EMERGENCY' CABINET, EQUIPMENT, ETC.
08.90.00	CRAWL SPACE
10.14.23.16	ROOM IDENTIFICATION PANEL SIGNAGE SEE A-550.
23.36.00.02	DEMO CHAIN LINK ENCLOSURE WITH HVAC CONCRETE PAD.

LEGEND

- EXISTING WALL TO REMAIN, U.O.N.
- REMOVE (E) WALL
- REMOVE & REPLACE ALL (E) INT. FIN. MATERIAL(S) & SUBSTRATE(S) BACK TO (E) STUDS TO REMAIN, REMOVE & REINSTALL ALL (E) ACCESSORIES, DEVICES, ETC., TO REMAIN, U.O.N., V.I.F. PRIOR TO BID.
- REMOVE EXISTING DOOR, FRAME, & HARDWARE, U.O.N.
- (E) DOOR, FRAME, & HARDWARE TO REMAIN, U.O.N., SEE DR. SCHED.
- REMOVE ALL LAYERS OF (E) FLOORING & WALL BASE
- REMOVE (E) SIGNAGE
- REMOVE & REPLACE (E) COMPOSITE SLAB, S.S.D., S.P.D.

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ARCHITECT STAMP

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YISAN TAI
No. C-29766
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STATE OF CALIFORNIA

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PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

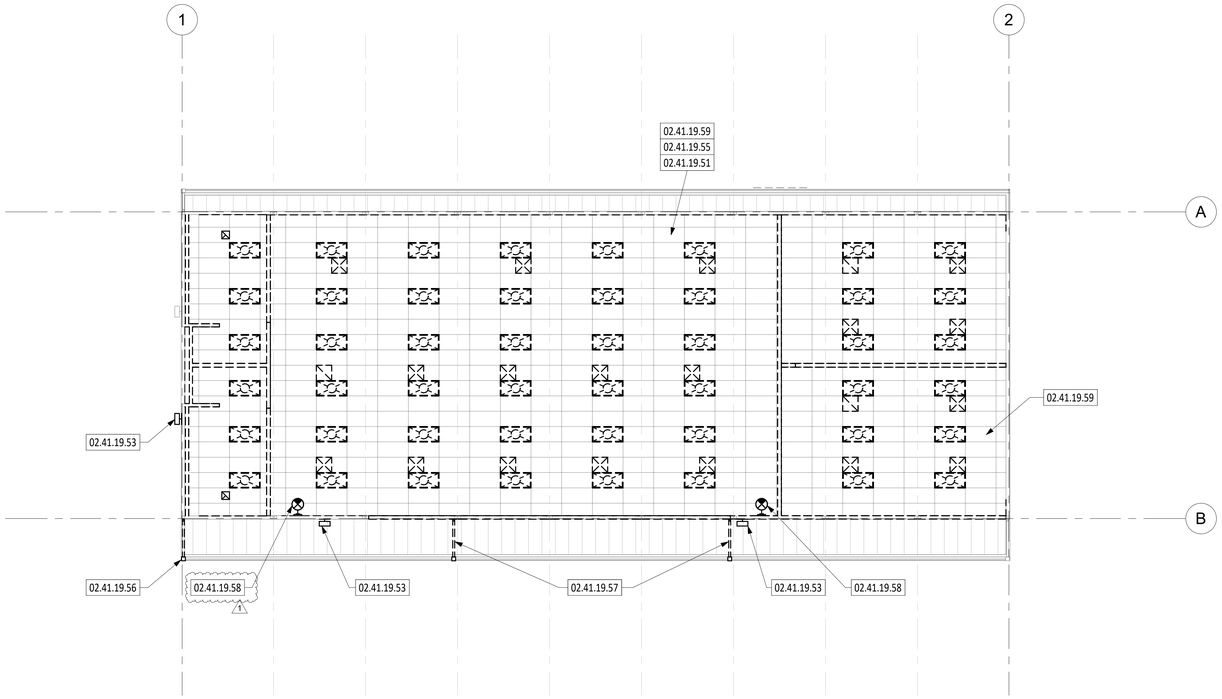
SHEET TITLE:

DEMOLITION FLOOR PLAN

SHEET NO.:

A-011

10/6/2023 1:28:32 PM



DEMOLITION REFLECTED CEILING PLAN (1)

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

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. REMOVE AND REINSTALL PER DISTRICT DIRECTION, U.O.N., ALL MOUNTED ACCESSORIES, DEVICES, INCLUDING ALL EXPOSED CONDUIT, SURFACE RACEWAYS, ETC., ON WALLS, CEILINGS, ETC., NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
4. REMOVE & REINSTALL ALL (E) FIRE EXTINGUISHERS, CABINETS, ETC., V.I.F. PRIOR TO BID.
5. REMOVE & REINSTALL ALL (E) CARD READERS, U.O.N., V.I.F. PRIOR TO BID, S.E.D.
6. REMOVE & REINSTALL ALL (E) FIRE ALARM DEVICES, ETC., U.O.N., S.E.D.
7. REMOVE & REINSTALL ALL (E) THERMOSTATS, U.O.N., S.M.D., S.E.D.
8. REMOVE & REINSTALL ALL (E) DATA OUTLETS, WIRELESS ACCESS POINTS, ETC., U.O.N., S.E.D.
9. REMOVE AND SALVAGE ALL (E) FURNITURE, SYSTEMS FURNITURE, ETC., CONTRACTOR SHALL COORDINATE W/ DISTRICT, NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
10. REMOVE AND SALVAGE ALL (E) LARGE DISPLAY SCREEN(S)/ MONITOR(S), ETC., CONTRACTOR SHALL COORDINATE W/ DISTRICT, NOT SHOWN FOR CLARITY, V.I.F PRIOR TO BID.
11. REMOVE ALL (E) VISUAL DISPLAY UNITS, INCLUDING MARKERBOARDS, SMARTBOARDS, ETC., NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
12. (E) FIRE ALARM TO REMAIN AND PROTECT IN PLACE. ADJUST DEVICE PER NEW PLAN LAYOUT. TEST FIRE ALARM AFTER WORK IS COMPLETED TO ENSURE SYSTEM IS WORKING PER CODE.
13. ALL NEW ELECTRICAL CONDUITS AND BOXES TO BE INSIDE THE WALL. FINISH WALL TO MATCH ADJACENT FINISH.

KEYNOTES

02.41.19.51	REMOVE (E) CEILING, TYP. U.O.N.
02.41.19.53	REMOVE (E) EXTERIOR WALL LIGHT FIXTURE, S.E.D.
02.41.19.55	R&R (E) SMOKE/CO DETECTOR(S), TYP. U.O.N., NOT SHOWN FOR CLARITY, S.E.D.
02.41.19.56	REMOVE & CAP (E) DOWNSPOUT
02.41.19.57	REMOVE & REINSTALL (E) DOWNSPOUT(S) TO COMPLETE (N) WORK, TYP. U.O.N.
02.41.19.58	REMOVE & REPLACE (E) ILLUMINATED EXIT SIGN, TYP. S.E.D.
02.41.19.59	REMOVE & SALVAGE (E) PROJECTION SCREEN, PROJECTOR, PROJECTOR MOUNT, HARDWARE, ETC.

LEGEND

EXISTING WALL TO REMAIN, U.O.N.

REMOVE & REPLACE (E) ILLUMINATED EXIT SIGN, U.O.N., SEE REFLECTED CEILING PLAN SHEET, S.E.D.

SUPPLY AIR DIFFUSER

2' x 4' TROFFER LIGHT

NOTE: SEE ALSO DEMOLITION FLOOR PLAN SHEET A-011 .

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	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

SHEET TITLE:

DEMOLITION REFLECTED CEILING PLAN

SHEET NO.:

A-021

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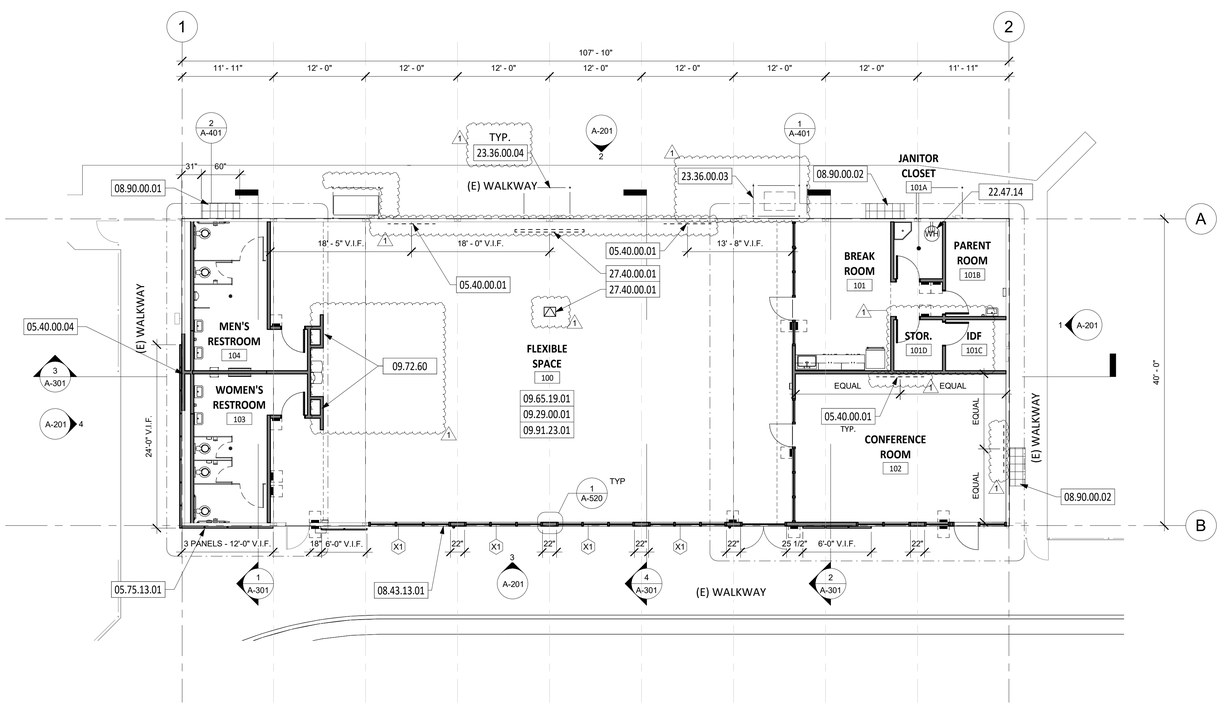

FLOOR PLAN 1

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

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. PROVIDE BACKING AT ALL LOCATIONS INDICATED. SEE BACKING DETAIL 14/S2.1.
4. PROVIDE TYPE A1 PARTITIONS, TYP. U.O.N., SEE PARTITION TYPES SHEET.
5. NOT ALL ACCESSORIES, DEVICES, ETC., ARE SHOWN FOR CLARITY, S.M.D., S.P.D, S.E.D.
6. SEE TYPICAL FIXTURE & ACCESSORY LOCATIONS SHEET FOR MORE INFORMATION.
7. SUSPENDED CEILING TO BE INSTALLED AND CONFORM WITH MANUFACTURER RECOMMENDATIONS AND SPECIFICATIONS.

KEYNOTES

05.40.00.01	O.F.C.I. LARGE DISPLAY SCREEN/ MONITOR. MOUNT WITH BRACKET, METAL BACKING, ELEC. OUTLET, & DATA, AT 60" TO CENTER (5'0"). A.F.F. (U.O.N., V.I.F. PRIOR TO INSTALLATION), SEE 8/A-520, S.E.D., SEE 14/S2.1.
05.40.00.04	(N) EXTERIOR WALL INFILL. SEE DET. 2/S2.2
05.75.13.01	NEW DECORATIVE ALUMINUM PANEL. SEE SHEET A-502. TYP.
08.43.13.01	ALUMINUM-FRAMED STOREFRONT & GLAZING, TYP.
08.90.00.01	(E) CRAWL SPACE ACCESS.
08.90.00.02	(E) CRAWL SPACE VENTILATION.
09.29.00.01	GYP. BD., PAINT, TYP. U.O.N.
09.65.19.01	RESILIENT TILE FLOORING, FLOOR/ WALL BASE, & ACCESSORIES, TYP. U.O.N.
09.72.00.02	WRITABLE , PROJECTABLE, & MAGNETIC WALL COVERING.
09.72.60	TACKABLE WALL COVERING
09.91.23.01	PAINT EACH EXPOSED SURFACE AT WALLS, STRUCTURE, DECKING, EQUIPMENT, DUCTING, PIPING, INSULATION, CONDUIT, SURFACE RACEWAYS, ETC., THROUGHOUT, TYP. U.O.N.
22.47.14	WATER HEATER
23.36.00.03	NEW CONCRETE PAD FOR CU-1. SEE DETAIL 11/S2.2 . NEW CHAIN LINK ENCLOSURE TO MATCH EXISTING ENCLOSURES. COORDINATE SIZE WITH EQUIPMENT.
23.36.00.04	(E) HVAC PAD AND CLF ENCLOSURE. TYP.
27.40.00.01	O.F.C.I. CLASSROOM PROJECTOR

LEGEND

- EXISTING WALL TO REMAIN, U.O.N., SEE FINISH SCHED.
- FIN. MATL. & SUBSTRATE, REINSTALL ALL (E) ACCESSORIES, DEVICES, ETC., V.I.F. PRIOR TO BID.
- (N) WALL, SEE PLAN FOR PARTITION TYPE.
- EXISTING DOOR TO REMAIN
- NEW DOOR, FRAME, & HARDWARE.
- FLOORING, SEE FIN. SCHED. & PLAN SHEET.
- SINK/ LAVATORY (SIM.), S.P.D.
- SIGNAGE, SEE SIGN SCHED., PLAN, & TYPES SHEET.
- FIRE EXTINGUISHER CABINET
- (E) ELEC. PANEL TO REMAIN, S.E.D.

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YISAN TAI
No. C-29766
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PROJECT OWNER:

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	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

SHEET TITLE:

FLOOR PLAN

SHEET NO.:

A-111

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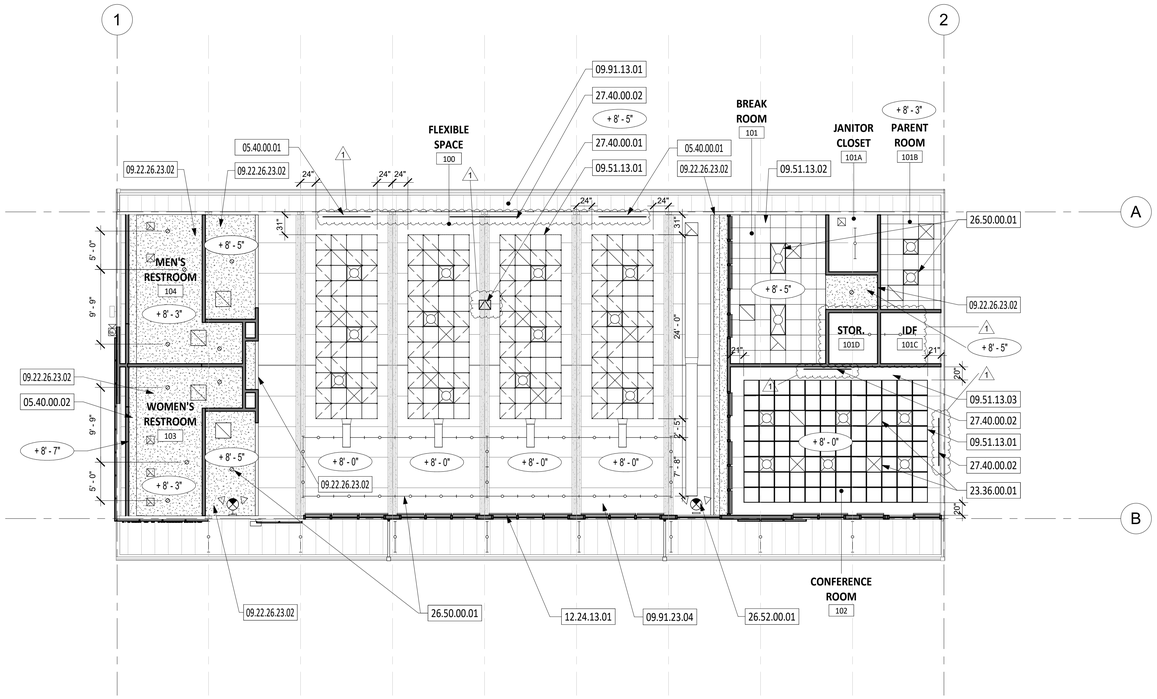

REFLECTED CEILING PLAN (1)

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

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. PROVIDE BACKING AT ALL LOCATIONS INDICATED. SEE BACKING DETAIL 14/S2.1.
4. PROVIDE TYPE A1 PARTITIONS, TYP. U.O.N., SEE PARTITION TYPES SHEET.
5. NOT ALL ACCESSORIES, DEVICES, ETC., ARE SHOWN FOR CLARITY, S.M.D., S.P.D, S.E.D.
6. SEE TYPICAL FIXTURE & ACCESSORY LOCATIONS SHEET FOR MORE INFORMATION.
7. SUSPENDED CEILING TO BE INSTALLED AND CONFORM WITH MANUFACTURER RECOMMENDATIONS AND SPECIFICATIONS. (1)

KEYNOTES

05.40.00.01	O.F.C.I. LARGE DISPLAY SCREEN/ MONITOR. MOUNT WITH BRACKET, METAL BACKING, ELEC. OUTLET, & DATA, AT 60" TO CENTER (5'0"). A.F.F. (U.O.N., V.I.F. PRIOR TO INSTALLATION), SEE 8/A-520, S.E.D., SEE 14/S2.1.
05.40.00.02	GYPSUM CEILING BOARD W/ COLD-FORMED METAL FRAMING (SOFFIT), PAINT, S.S.D, SEE A-500.
09.22.26.23.02	GYPSUM CEILING BOARD, PAINT, S.S.D.
09.51.13.01	ACOUSTIC SUSPENDED CLOUD CEILING, TYP. SEE A-500.
09.51.13.02	ACOUSTICAL PANEL CEILING, TYP. SEE A-500.
09.51.13.03	OPEN TO STRUCTURE ABOVE. TYP.
09.91.13.01	PAINT (E) METAL ROOF, GUTTERS, FASCIAS, SOFFITS, ETC., TYP.
09.91.23.04	EXPOSED CEILING WITH (N) PAINT.
12.24.13.01	MANUAL ROLLER WINDOW SHADE, TYP.
23.36.00.01	AIR TERMINAL UNIT, TYP., S.M.D.
26.50.00.01	LIGHTING, TYP., S.E.D.
26.52.00.01	EMERGENCY LIGHTING & ILLUMINATED EXIT SIGN COMBO, TYP., SEE LEGEND, S.E.D.
27.40.00.01	O.F.C.I. CLASSROOM PROJECTOR
27.40.00.02	O.F.C.I. PROJECTION SCREEN

LEGEND (N.T.S.)

- EXISTING WALL TO REMAIN, U.O.N., SEE FIN. SCHED.
- WALL MOUNTED EMERGENCY LIGHTING & ILLUMINATED EXIT SIGN COMBO, U.O.N., S.E.D.
- SUSPENDED EMERGENCY LIGHTING & ILLUMINATED EXIT SIGN COMBO, MOUNTED TO DECK/CEILING, S.E.D.
- LIGHTING, S.E.D.
- 2' x 2' ACOUSTICAL PANEL CEILING
- GYPSUM CEILING BOARD W/ METAL SUSPENSION SYSTEM, TYP. U.O.N., PAINT
- SUPPLY, S.M.D.
- RETURN, S.M.D.
- EXHAUST, S.M.D.

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	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

SHEET TITLE:
REFLECTED CEILING PLAN

SHEET NO.:
A-121

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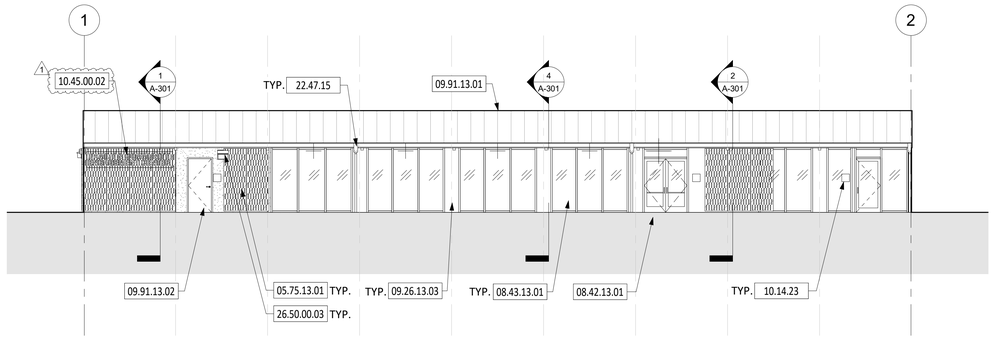
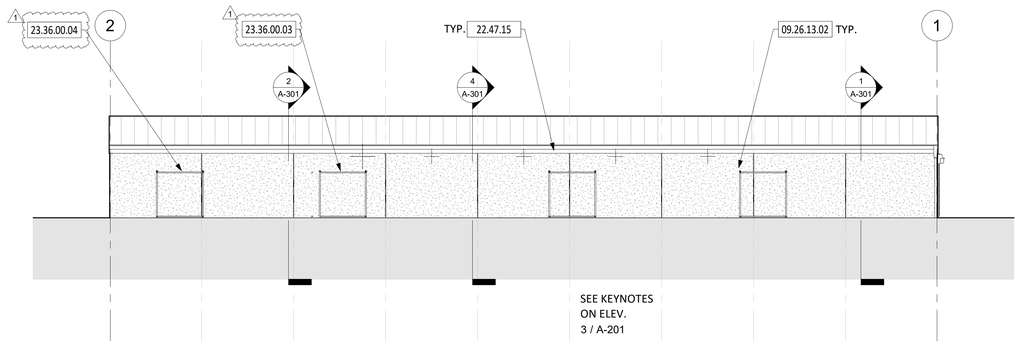


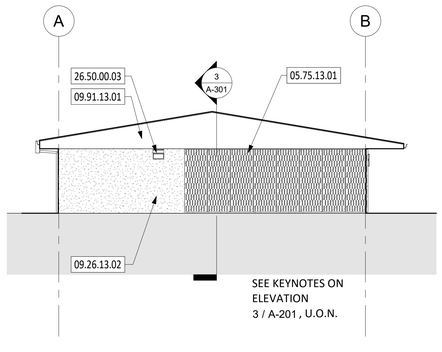
EXTERIOR ELEVATION - SOUTH (3)

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



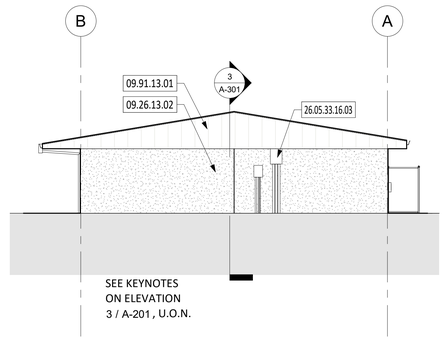
EXTERIOR ELEVATION - NORTH (2)

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



EXTERIOR ELEVATION - WEST (4)

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



EXTERIOR ELEVATION - EAST (1)

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

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. SEE SHEET A-515 FOR MORE INFORMATION ABOUT TYPICAL FIXTURE & ACCESSORY LOCATIONS.
4. PROTECT IN PLACE EXTERIOR ELEMENTS ATTACHED TO BUILDING.
5. EXISTING CLF ENCOLUSER FOR THE HVAC TO REMAIN.
6. INTERIOR..
7. EXTERIOR BUILDING NAME TO REMAIN PROTECT WHEN EXTERIOR PAINTING.
8. PREP EXTERIOR PLASTER PANEL SYSTEM TO RECIEVE NEW PAINT. FILL-IN ALL CRACKS AND VOIDS WITH PLASTER SEALANT.

KEYNOTES

05.75.13.01	NEW DECORATIVE ALUMINUM PANEL. SEE SHEET A-502. TYP.
08.42.13.01	ALUMINUM-FRAMED ENTRANCE STOREFRONT. TYP.
08.43.13.01	ALUMINUM-FRAMED STOREFRONT & GLAZING, TYP.
09.26.13.02	(E) PLASTER PANEL SYSTEM, TYP.
09.26.13.03	(E) GPR WITH PLASTER FIN.
09.91.13.01	PAINT (E) METAL ROOF, GUTTERS, FASCIAS, SOFFITS, ETC., TYP.
09.91.13.02	PAINT EXTERIOR WALLS, DOORS, FRAMES, DOWNSPOUTS, ETC., TYP.
10.14.23	NEW SIGNAGE. SEE SHEET A-681 AND A-550.
10.45.00.02	16 GA. METAL FRAME WITH LASER CUT LETTERING ATTACHED TO METAL PANELS.
22.47.15	(E) GUTTER AND D.S., TYP.
23.36.00.03	NEW CONCRETE PAD FOR CU-1. SEE DETAIL 11/S2.2 . NEW CHAIN LINK ENCLOSURE TO MATCH EXISTING ENCLOSURES. COORDINATE SIZE WITH EQUIPMENT.
23.36.00.04	(E) HVAC PAD AND CLF ENCLOSURE. TYP.
26.05.33.16.03	(E) CONDUITS AND BOXES TO REMAIN IN PLACE.
26.50.00.03	(E) LIGHT TO REMAIN.

LEGEND

- GLAZING, SEE GLAZING SCHEDULE & TYPES SHEET
- (E) PANEL SYSTEM WITH PLASTER FINSIH, NEW PAINT
- (E) METAL SEAM ROOF & FACIA

AUTHORITY APPROVAL:

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ARCHITECT STAMP

LICENSED ARCHITECT
YISAN TAI
No. C-29766
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

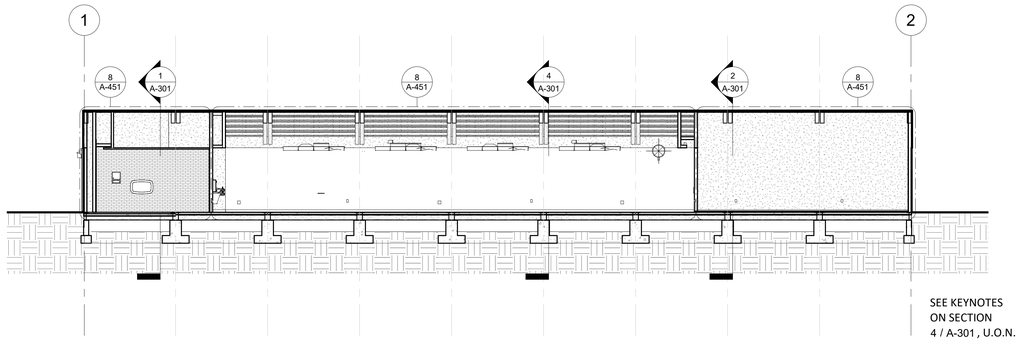
SHEET TITLE:

EXTERIOR ELEVATIONS

SHEET NO.:

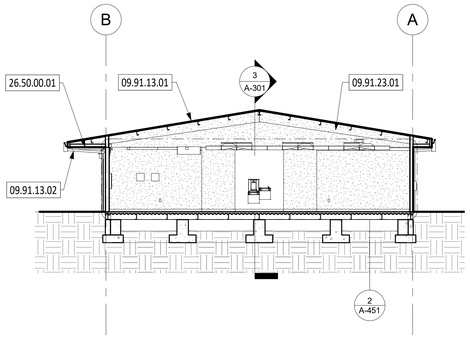
A-201

10/6/2023 1:28:40 PM



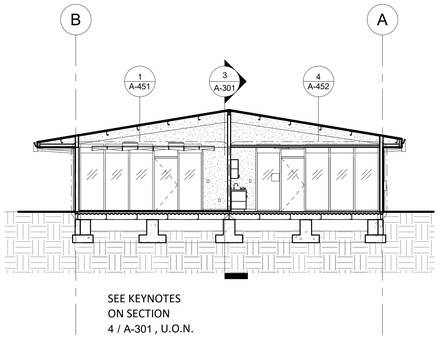
LONGITUDINAL SECTION 3

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



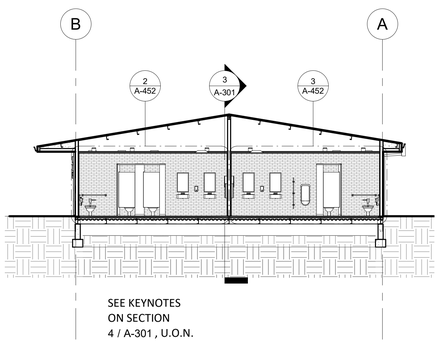
TRANSVERSE SECTION 4

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



TRANSVERSE SECTION 2

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



TRANSVERSE SECTION 1

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

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. SEE SHEET A-515 FOR MORE INFORMATION ABOUT TYPICAL FIXTURE & ACCESSORY LOCATIONS.
4. PROTECT IN PLACE EXTERIOR ELEMENTS ATTACHED TO BUILDING.
5. EXISTING CLF ENCOLUSER FOR THE HVAC TO REMAIN.
6. INTERIOR..
7. EXTERIOR BUILDING NAME TO REMAIN PROTECT WHEN EXTERIOR PAINTING.
8. PREP EXTERIOR PLASTER PANEL SYSTEM TO RECIEVE NEW PAINT. FILL-IN ALL CRACKS AND VOIDS WITH PLASTER SEALANT.

KEYNOTES

09.91.13.01	PAINT (E) METAL ROOF, GUTTERS, FASCIAS, SOFFITS, ETC., TYP.
09.91.13.02	PAINT EXTERIOR WALLS, DOORS, FRAMES, DOWNSPOUTS, ETC., TYP.
09.91.23.01	PAINT EACH EXPOSED SURFACE AT WALLS, STRUCTURE, DECKING, EQUIPMENT, DUCTING, PIPING, INSULATION, CONDUIT, SURFACE RACEWAYS, ETC., THROUGHOUT, TYP. U.O.N.
26.50.00.01	LIGHTING, TYP., S.E.D.

LEGEND

GLAZING, SEE GLAZING SCHEDULE & TYPES SHEET

GYP. BD., PAINT

CERAMIC WALL TILE, INCLUDING CEMENTITIOUS BACKER BOARD.

AUTHORITY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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ARCHITECT STAMP

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emuhsd.org

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	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

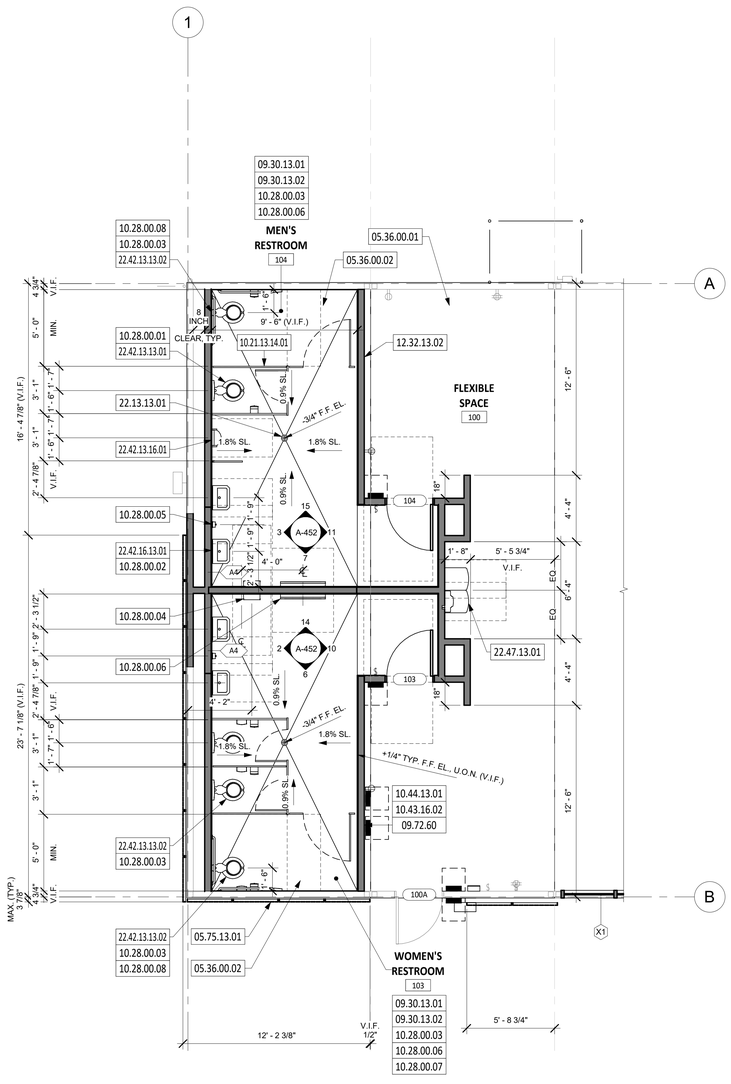
SHEET TITLE:

BUILDING SECTIONS

SHEET NO.:

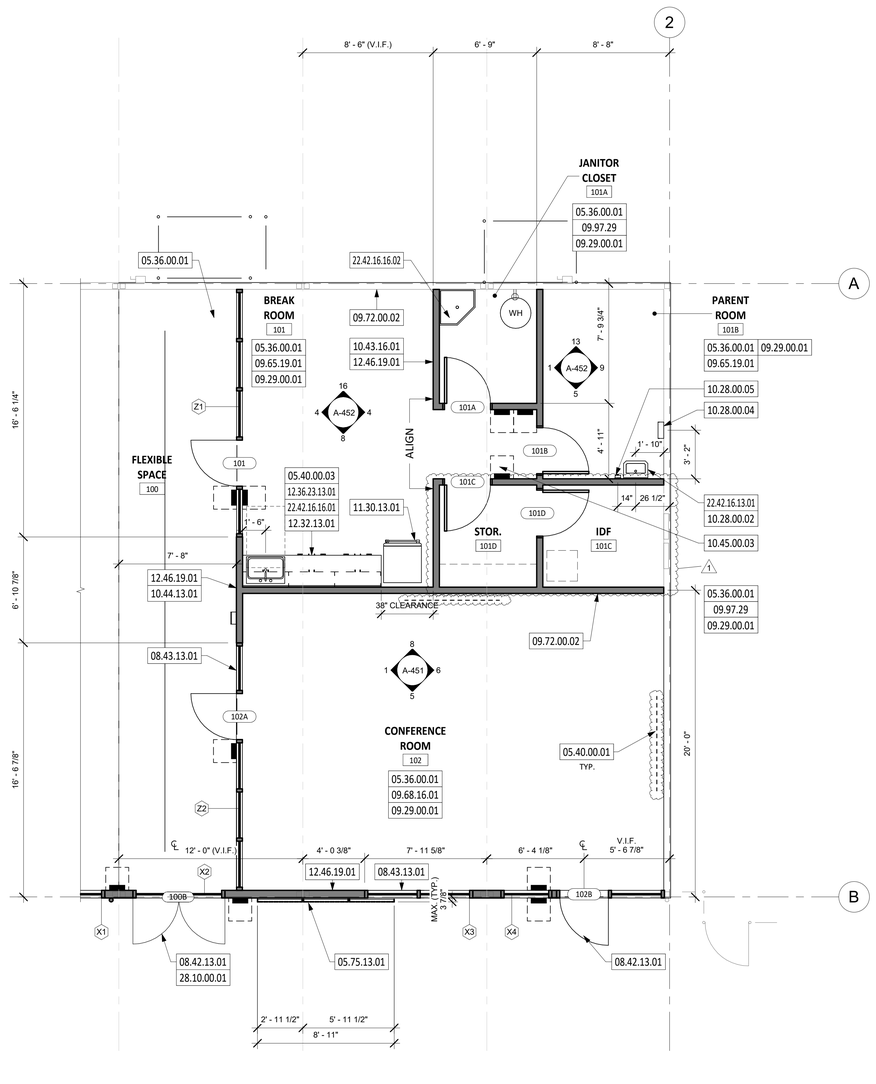
A-301

5/9/2023 1:54:47 PM



ENLARGED FLOOR PLAN - WEST (2)

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



ENLARGED FLOOR PLAN - EAST (1)

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

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. PROVIDE BACKING AT ALL LOCATIONS INDICATED BY MANUFACTURER'S WRITTEN INSTRUCTIONS, S.S.D.
4. PROVIDE TYPE A1 PARTITIONS, TYP. U.O.N., SEE PARTITION TYPES SHEET.
5. NOT ALL ACCESSORIES, DEVICES, ETC., ARE SHOWN FOR CLARITY, S.M.D., S.P.D, S.E.D.
6. FIXTURE & ACCESSORY DIMENSIONS ARE TO CENTERLINE, TYP.
7. WASTE RECEPTACLES PROVIDED BY OWNER, TYP.
8. SEE TYPICAL FIXTURE & ACCESSORY LOCATIONS SHEET FOR MORE INFORMATION.
9. ALL INTERIOR WALLS ARE TO BE TYPE A1, UNLESS OTHERWISE NOTED.

KEYNOTES

05.36.00.01	REPLACE (E) COMPOSITE METAL DECKING, S.S.D.
05.36.00.02	COMPOSITE METAL DECKING W/ DEPRESSED SLAB & SLOPING CONCRETE TOPPING AT BAY(S) WITH FLOOR DRAIN(S), TYP., S.S.D.
05.40.00.01	O.F.C.I. LARGE DISPLAY SCREEN/ MONITOR. MOUNT WITH BRACKET, METAL BACKING, ELEC. OUTLET, & DATA, AT 60" TO CENTER (5'0"). A.F.F. (U.O.N., V.I.F. PRIOR TO INSTALLATION), SEE 8/A-520, S.E.D., SEE 14/S2.1.
05.40.00.03	METAL BACKING, S.S.D.
05.75.13.01	NEW DECORATIVE ALUMINUM PANEL. SEE SHEET A-502. TYP.
08.42.13.01	ALUMINUM-FRAMED ENTRANCE STOREFRONT. TYP.
08.43.13.01	ALUMINUM-FRAMED STOREFRONT & GLAZING, TYP.
09.29.00.01	GYP. BD., PAINT, TYP. U.O.N.
09.30.13.01	CERAMIC WALL TILE, INCLUDING CEMENTITIOUS BACKER BOARD.
09.30.13.02	CERAMIC TILE FLOORING
09.65.19.01	RESILIENT TILE FLOORING, FLOOR/ WALL BASE, & ACCESSORIES, TYP. U.O.N.
09.68.16.01	CARPET FLOORING, RESILIENT FLOOR/ WALL BASE, & ACCESSORIES
09.72.00.02	WRITABLE , PROJECTABLE, & MAGNETIC WALL COVERING.
09.72.60	TACKABLE WALL COVERING
09.97.29	CONCRETE FLOOR SEALING
10.21.13.14.01	STAINLESS-STEEL TOILET COMPARTMENTS & SCREEN(S) W/ METAL BACKING AT EA. MOUNTING POINT PER MANUFACTURER'S WRITTEN INSTRUCTIONS (S.S.D.), TYP. (AS SHOWN).
10.28.00.01	TOILET TISSUE DISPENSER & TOILET SEAT-COVER DISPENSER (W/ METAL BACKING AT METAL FRAMING, S.S.D.), TYP. AT EA. WATER CLOSET LOCATION.
10.28.00.02	MIRROR W/ METAL BACKING, TYP. AT EA. LAVATORY LOCATION., S.S.D. SEE DETAIL 6/A-515
10.28.00.03	REPLACE (E) RESTROOM ACCESSORIES (W/ METAL BACKING AT METAL FRAMING, S.S.D), TYP. U.O.N., V.I.F. PRIOR TO BID.
10.28.00.04	PAPER TOWEL DISPENSER W/ METAL BACKING, TYP. (AS SHOWN), S.S.D. REFERENCE A-515.
10.28.00.05	SOAP DISPENSER W/ METAL BACKING, TYP. (AS SHOWN), S.S.D. REFERECE A-515.
10.28.00.06	
10.28.00.07	SANITARY NAPKIN DISPOSAL (W/ METAL BACKING AT METAL FRAMING), TYP. AT EA. WATER CLOSET LOCATION IN WOMEN'S R.R.
10.28.00.08	(2) GRAB BAR(S) W/ METAL BACKING, TYP. AT METAL FRAMING, S.S.D. SEE DETAIL 7/A-515.
10.43.16.01	REINSTALL (E) FIRST AID CABINET, EQUIPMENT, ETC.
10.43.16.02	REINSTALL (E) 'EMERGENCY' CABINET, EQUIPMENT, ETC.
10.44.13.01	FIRE PROTECTION CABINET & EXTINGUISHER. SEE A-515.
10.45.00.03	ROOM ID SIGNAGE. TYP. SEE A-550.
11.30.13.01	REFRIGERATOR PROVIDED BY DISTRICT
12.32.13.01	UPPER & LOWER CABINETS, INCLUDING MTL. BACKING, & COUNTERTOP, S.S.D, SEE A-501.
12.32.13.02	REINSTALL (E) SHELVING W/ METAL BACKING. S.S.D.
12.36.23.13.01	PLASTIC-LAMINATE-CLAD COUNTERTOP
12.46.19.01	REINSTALL (E) CLOCK
22.13.13.01	FLOOR DRAIN, TYP., S.P.D.
22.42.13.13.01	WATER CLOSET, S.P.D.
22.42.13.13.02	REPLACE (E) WATER CLOSET(S), TYP., S.P.D.
22.42.13.16.01	URINAL, INCLUDING CARRIER SYSTEM, S.P.D.
22.42.16.13.01	LAVATORY, INCLUDING CARRIER SYSTEM, TYP. (AS SHOWN), S.P.D.
22.42.16.16.01	SINK & FAUCET, S.P.D.
22.42.16.16.02	SERVICE SINK, S.P.D.
22.47.13.01	HIGH/ LOW DRINKING FOUNTAINS W/ WATER BOTTLE FILLER, INCLUDING CARRIER SYSTEM, S.P.D. SEE A-515.
28.10.00.01	REINSTALL (E) ACCESS CONTROL DEVICES, TYP., V.I.F. PRIOR TO BID, S.E.D.

LEGEND (N.T.S.)

- EXISTING WALL TO REMAIN, U.O.N., SEE FINISH SCHED.
- FIN. MATL. & SUBSTRATE, REINSTALL ALL (E) ACCESSORIES, DEVICES, ETC., V.I.F. PRIOR TO BID.
- (N) WALL, SEE PLAN FOR PARTITION TYPE.
- EXISTING DOOR TO REMAIN
- NEW DOOR, FRAME, & HARDWARE.
- FLOORING, SEE FIN. SCHED. & PLAN SHEET.
- SINK/ LAVATORY (SIM.), S.P.D.
- SIGNAGE, SEE SIGN SCHED., PLAN, & TYPES SHEET.
- FIRE EXTINGUISHER CABINET
- (E) ELEC. PANEL TO REMAIN, S.E.D.

AUTHORITY APPROVAL:

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ARCHITECT STAMP

LICENSED ARCHITECT
YISAN TAI
No. C-29766
RENEWAL DATE
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CONSULTANT:

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PROJECT OWNER:

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	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

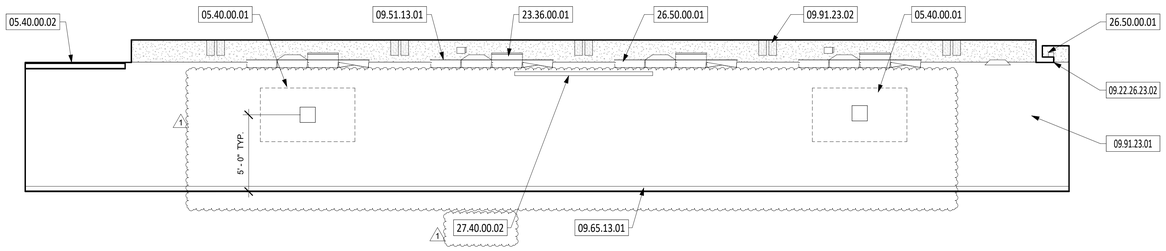
SHEET TITLE:

ENLARGED PLANS

SHEET NO.:

A-401

10/6/2023 1:28:47 PM



FLEX. SPACE - LKG. N. 4
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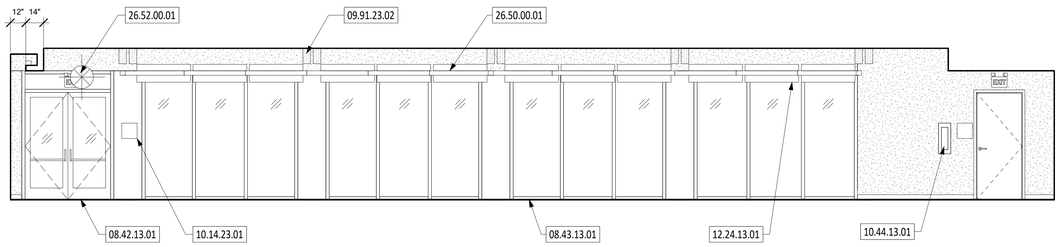

SEE KEYNOTES ON ELEVATION 4 / A-451 , U.O.N.

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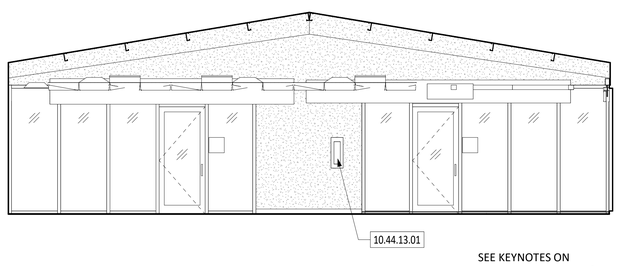

SEE KEYNOTES ON ELEVATION 4 / A-451 & 3 / A-451 , U.O.N.

FLEX. SPACE - LKG. E. 7
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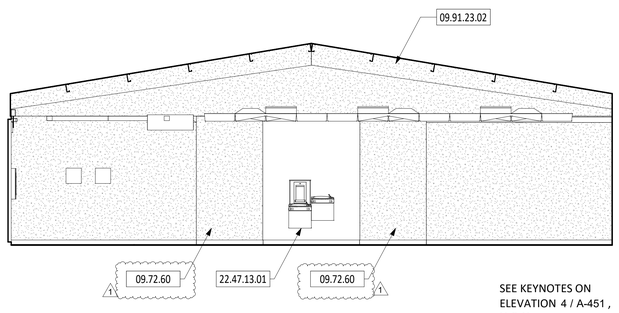

SEE KEYNOTES ON ELEVATION 4 / A-451 , U.O.N.

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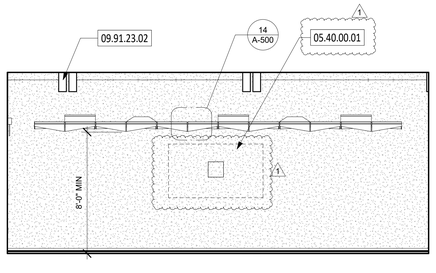

SEE KEYNOTES ON ELEVATION 4 / A-451 , U.O.N.

CONF. RM. - LKG. N. 8
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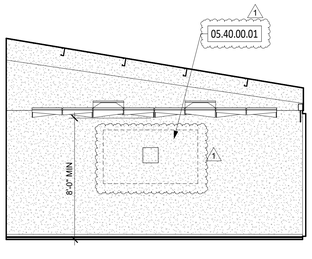

SEE KEYNOTES ON ELEVATION 4 / A-451 , U.O.N.

CONF. RM. - LKG. E. 6
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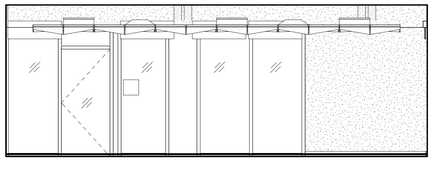
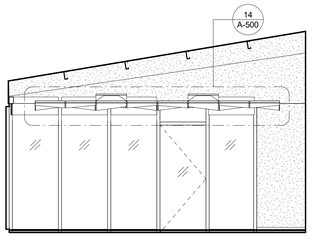


SEE KEYNOTES ON ELEVATION 4 / A-451 & 3 / A-451 , U.O.N.

CONF. RM. - LKG. S. 5
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 4 / A-451 & 3 / A-451 , U.O.N.

CONF. RM. - LKG. W. 1
SCALE: 1/4" = 1'-0"

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. SEE SHEET A-515 FOR MORE INFORMATION ABOUT TYPICAL FIXTURE & ACCESSORY LOCATIONS.
4. PROTECT IN PLACE EXTERIOR ELEMENTS ATTACHED TO BUILDING.
5. EXISTING CLF ENCOLUSER FOR THE HVAC TO REMAIN.
6. INTERIOR..
7. EXTERIOR BUILDING NAME TO REMAIN PROTECT WHEN EXTERIOR PAINTING.
8. PREP EXTERIOR PLASTER PANEL SYSTEM TO RECIEVE NEW PAINT. FILL-IN ALL CRACKS AND VOIDS WITH PLASTER SEALANT.

KEYNOTES

05.40.00.01	O.F.C.I. LARGE DISPLAY SCREEN/ MONITOR. MOUNT WITH BRACKET, METAL BACKING, ELEC. OUTLET, & DATA, AT 60" TO CENTER (5'0"). A.F.F. (U.O.N., V.I.F. PRIOR TO INSTALLATION), SEE 8/A-520, S.E.D., SEE 14/S2.1.
05.40.00.02	GYPSUM CEILING BOARD W/ COLD-FORMED METAL FRAMING (SOFFIT), PAINT, S.S.D, SEE A-500.
08.42.13.01	ALUMINUM-FRAMED ENTRANCE STOREFRONT. TYP.
08.43.13.01	ALUMINUM-FRAMED STOREFRONT & GLAZING, TYP.
09.22.26.23.02	GYPSUM CEILING BOARD, PAINT, S.S.D.
09.51.13.01	ACOUSTIC SUSPENDED CLOUD CEILING, TYP. SEE A-500.
09.65.13.01	RESILIENT BASE & ACCESSORIES, TYP. U.O.N.
09.72.60	TACKABLE WALL COVERING
09.91.23.01	PAINT EACH EXPOSED SURFACE AT WALLS, STRUCTURE, DECKING, EQUIPMENT, DUCTING, PIPING, INSULATION, CONDUIT, SURFACE RACEWAYS, ETC., THROUGHOUT, TYP. U.O.N.
09.91.23.02	(E) STRUCT, NEW PAINT FINISH. TYP.
10.14.23.01	PANEL SIGNAGE, TYP. U.O.N.
10.44.13.01	FIRE PROTECTION CABINET & EXTINGUISHER. SEE A-515.
12.24.13.01	MANUAL ROLLER WINDOW SHADE, TYP.
22.47.13.01	HIGH/ LOW DRINKING FOUNTAINS W/ WATER BOTTLE FILLER, INCLUDING CARRIER SYSTEM, S.P.D. SEE A-515.
23.36.00.01	AIR TERMINAL UNIT, TYP., S.M.D.
26.50.00.01	LIGHTING, TYP., S.E.D.
26.52.00.01	EMERGENCY LIGHTING & ILLUMINATED EXIT SIGN COMBO, TYP., SEE LEGEND, S.E.D.
27.40.00.02	O.F.C.I. PROJECTION SCREEN

LEGEND (N.T.S.)

GLAZING, SEE GLAZING SCHEDULE & TYPES SHEET

GYP. BD., PAINT

CERAMIC WALL TILE, INCLUDING CEMENTITIOUS BACKER BOARD.

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	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

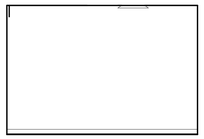
SHEET TITLE:

INTERIOR ELEVATIONS

SHEET NO.:

A-451

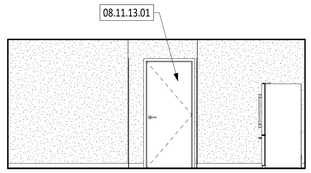
10/6/2023 1:28:52 PM



SEE KEYNOTES ON ELEVATION 4 / A-452, U.O.N.

BREAK RM. - LKG. N. (16)

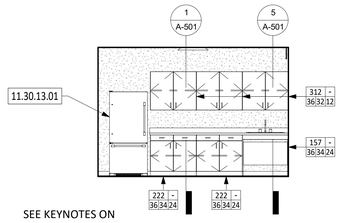
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 4 / A-452, U.O.N.

BREAK RM. - LKG. E. (12)

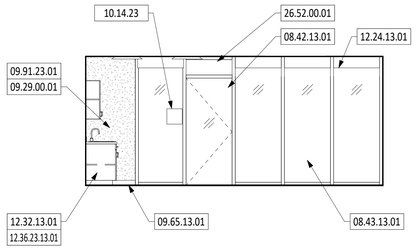
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 4 / A-452, U.O.N.

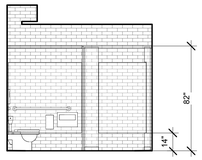
BREAK RM. - LKG. S. (8)

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



BREAK RM. - LKG. W. (4)

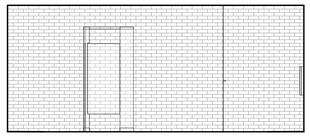
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

MEN'S RR - LKG. N. (15)

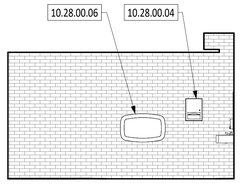
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

MEN'S RR - LKG. E. (11)

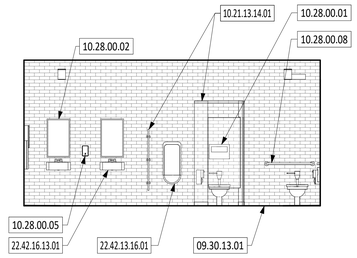
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

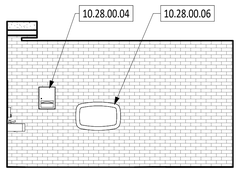
MEN'S RR - LKG. S. (7)

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



MEN'S RR - LKG. W. (3)

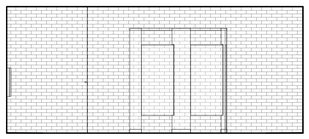
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

WOMEN'S RR - LKG. N. (14)

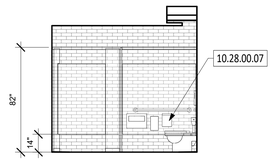
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

WOMEN'S RR - LKG. E. (10)

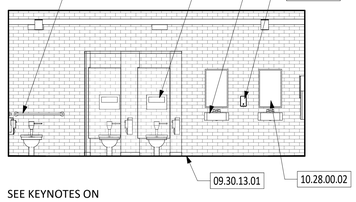
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

WOMEN'S RR - LKG. S. (6)

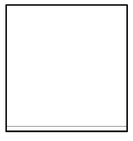
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 3 / A-452, U.O.N.

WOMEN'S RR - LKG. W. (2)

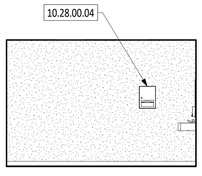
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 1 / A-452, U.O.N.

PARENT RM. - LKG. N. (13)

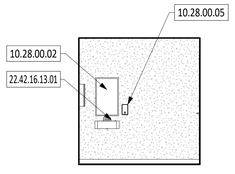
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 1 / A-452, U.O.N.

PARENT RM. - LKG. E. (9)

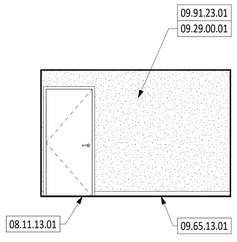
SCALE: 1/4" = 1'-0"



SEE KEYNOTES ON ELEVATION 1 / A-452, U.O.N.

PARENT RM. - LKG. S. (5)

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



PARENT RM. - LKG. W. (1)

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

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. SEE SHEET A-515 FOR MORE INFORMATION ABOUT TYPICAL FIXTURE & ACCESSORY LOCATIONS.
4. PROTECT IN PLACE EXTERIOR ELEMENTS ATTACHED TO BUILDING.
5. EXISTING CLF ENCOLUSER FOR THE HVAC TO REMAIN.
6. INTERIOR..
7. EXTERIOR BUILDING NAME TO REMAIN PROTECT WHEN EXTERIOR PAINTING.
8. PREP EXTERIOR PLASTER PANEL SYSTEM TO RECIEVE NEW PAINT. FILL-IN ALL CRACKS AND VOIDS WITH PLASTER SEALANT.

KEYNOTES

08.11.13.01	HOLLOW METAL DOOR AND FRAME, PAINT
08.42.13.01	ALUMINUM-FRAMED ENTRANCE STOREFRONT. TYP.
08.43.13.01	ALUMINUM-FRAMED STOREFRONT & GLAZING, TYP.
09.29.00.01	GYP. BD., PAINT, TYP. U.O.N.
09.30.13.01	CERAMIC WALL TILE, INCLUDING CEMENTITIOUS BACKER BOARD.
09.65.13.01	RESILIENT BASE & ACCESSORIES, TYP. U.O.N.
09.91.23.01	PAINT EACH EXPOSED SURFACE AT WALLS, STRUCTURE, DECKING, EQUIPMENT, DUCTING, PIPING, INSULATION, CONDUIT, SURFACE RACEWAYS, ETC., THROUGHOUT, TYP. U.O.N.
10.14.23	NEW SIGNAGE. SEE SHEET A-681 AND A-550.
10.21.13.14.01	STAINLESS-STEEL TOILET COMPARTMENTS & SCREEN(S) W/ METAL BACKING AT EA. MOUNTING POINT PER MANUFACTURER'S WRITTEN INSTRUCTIONS (S.S.D.), TYP. (AS SHOWN).
10.28.00.01	TOILET TISSUE DISPENSER & TOILET SEAT-COVER DISPENSER (W/ METAL BACKING AT METAL FRAMING, S.S.D.), TYP. AT EA. WATER CLOSET LOCATION.
10.28.00.02	MIRROR W/ METAL BACKING, TYP. AT EA. LAVATORY LOCATION., S.S.D. SEE DETAIL 8/A-515
10.28.00.04	PAPER TOWEL DISPENSER W/ METAL BACKING, TYP. (AS SHOWN), S.S.D. REFERENCE A-515.
10.28.00.05	SOAP DISPENSER W/ METAL BACKING, TYP. (AS SHOWN), S.S.D. REFERECE A-515.
10.28.00.06	BABY CHANGING STATION W/ METAL BACKING, TYP. AT EA. R.R., S.S.D. SEE A-515.
10.28.00.07	SANITARY NAPKIN DISPOSAL (W/ METAL BACKING AT METAL FRAMING), TYP. AT EA. WATER CLOSET LOCATION IN WOMEN'S R.R.
10.28.00.08	(2) GRAB BAR(S) W/ METAL BACKING, TYP. AT METAL FRAMING, S.S.D. SEE DETAIL 7/A-515.
11.30.13.01	REFRIGERATOR PROVIDED BY DISTRICT
12.24.13.01	MANUAL ROLLER WINDOW SHADE, TYP.
12.32.13.01	UPPER & LOWER CABINETS, INCLUDING MTL. BACKING, & COUNTERTOP, S.S.D, SEE A-501.
12.36.23.13.01	PLASTIC-LAMINATE-CLAD COUNTERTOP
22.42.13.16.01	URINAL, INCLUDING CARRIER SYSTEM, S.P.D.
22.42.16.13.01	LAVATORY, INCLUDING CARRIER SYSTEM, TYP. (AS SHOWN), S.P.D.
22.42.16.16.01	SINK & FAUCET, S.P.D.
26.52.00.01	EMERGENCY LIGHTING & ILLUMINATED EXIT SIGN COMBO, TYP., SEE LEGEND, S.E.D.

LEGEND (N.T.S.)

- GLAZING, SEE GLAZING SCHEDULE & TYPES SHEET
- GYP. BD., PAINT
- CERAMIC WALL TILE, INCLUDING CEMENTITIOUS BACKER BOARD.

AUTHORITY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

CSDA DESIGN GROUP

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YISAN TAI
No. C-29766
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

PROJECT NO.: **21095.01**

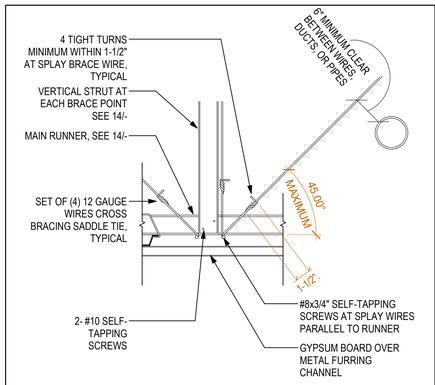
SHEET TITLE:

INTERIOR ELEVATIONS

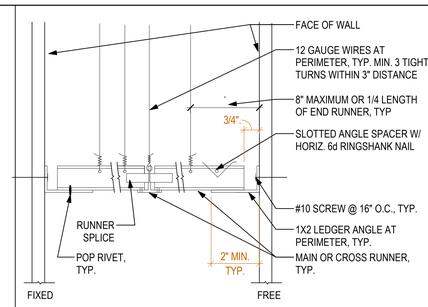
SHEET NO.:

A-452

5/9/2023 1:55:00 PM

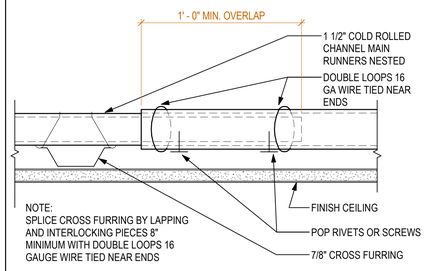


STRUT AT SUSPENDED GYPSUM BOARD CEILING (20)
N.T.S.



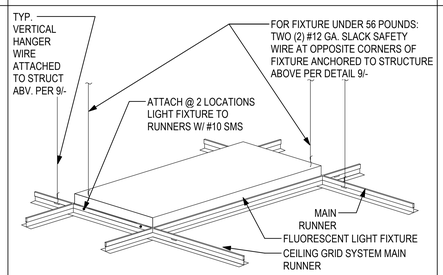
NOTES:
1. FASTENERS AT HORIZONTAL STRUT RUNNER TO BE PLACED AT ENDS OF STRUT WITH HEAD TOWARD CENTERLINE OF SPAN OF STRUT.
2. IF WALLS RUN DIAGONAL TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHALL BE FREE, AND A MINIMUM OF 3/4" CLEAR OF WALL.

TYP. ACOUSTIC CEILING SECTION (12)
1/4" = 1'-0"



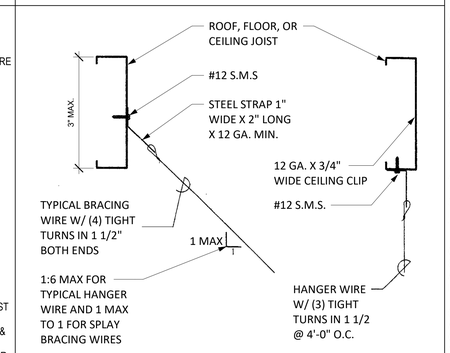
NOTE:
SPLICE CROSS FURRING BY LAPPING AND INTERLOCKING PIECES 8" MINIMUM WITH DOUBLE LOOPS 16 GAUGE WIRE TIED NEAR ENDS

SUSPENDED GYP. BOARD CEILING CHANNEL SPLICE (19)
1 1/2" = 1'-0"



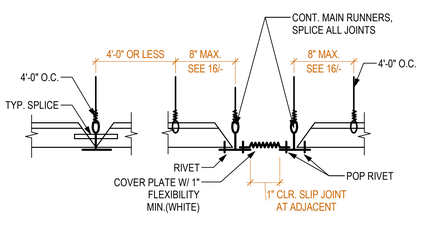
NOTES:
1. THIS DETAIL APPLIES ONLY TO LIGHT FIXTURES, AIR TERMINALS, & SERVICES UNDER 56 POUNDS. LIGHT FIXTURES, AIR TERMINALS & SERVICES WEIGHING 56 POUNDS OR MORE MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN 4 TAUT 12 GAUGE SAFETY WIRES, CAPABLE OF SUPPORTING 4 TIMES THE WEIGHT OF THE UNIT, EACH ATTACHED TO THE UNIT & THE STRUCTURE ABOVE.
PROVIDE EARTHQUAKE CLIPS AS FOLLOWS: ONE EACH SIDE FOR FIXTURE WITH MAIN RUNNER AT SIDE OR TWO EACH END FOR FIXTURE WITH MAIN RUNNER AT END.
2. ATTACH ALL LIGHT FIXTURE TO CEILING GRID TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE.

LIGHT FIXTURE IN LAY-IN CEILING (15)
1/2" = 1'-0"



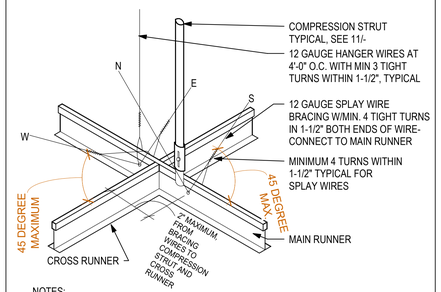
NOTE: IN LIEU OF STRAPS & S.M.S. USE JIFFY SCREW (PA-036) OR I-LG 750 SD (ICBO #5367) OR EQUAL OR I-LAG 750 OR EQUAL SD (ICBO #5367)

GRID CONNECTION DETAILS (11)
3" = 1'-0"



NOTE:
1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (E) INCHES OF THE SUPPORT OF WITHIN ONE-FOURTH (1/4) OF THE LENGTH OF THE END TEE. WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING ARE PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS (E) INCHES OR LESS.

ACOUSTIC CEILING SLIP JOINT/EXPANSION JOINT (18)
N.T.S.



NOTES:
1. ALL SPLAY BRACE WIRES AND VERTICAL HANGER WIRES TO BE ANCHORED TO STRUCTURE ABOVE, SEE DETAILS 9 & 11/A-500 FOR CONNECTIONS.
2. PROVIDE MINIMUM 6" CLEARANCE BETWEEN WIRES AND UNBRACED DUCTS, PIPES, CONDUITS, ETC.

TYPICAL SUSPENDED CEILING BRACING (14)
N.T.S.

1. GENERAL REQUIREMENTS: CBC SECTION 1616A.1.20 (1616.10.16*) REQUIRES THE DESIGN AND INSTALLATION TO BE IN COMPLIANCE WITH ASTM C635, C636, AND E580, SECTION 5, AS AMENDED BY 2019 CBC SECTION 1616A.1.20 (1616.10.16*).

NOTE: AMENDMENTS IN CBC SECTION 1616A.1.20 (16161.10.16*) REPLACE ASCE 7, SECTION 13.5.6.
THE REQUIREMENTS IN THIS IR APPLY TO FLAT AND LEVEL CEILING SYSTEMS WHOSE TOTAL WEIGHT, INCLUDING CEILING MOUNTED AIR TERMINALS, SERVICES AND LIGHT FIXTURES, DOES NOT EXCEED FOUR (4) PSF. HEAVIER SYSTEMS, SYSTEMS THAT ARE NOT FLAT AND LEVEL, AND THOSE SUPPORTING LATERAL LOADS FROM PARTITIONS ARE BEYOND THE SCOPE OF THIS IR AND WILL REQUIRE SPECIAL DESIGN AND DETAILS.

2. SUSPENSION SYSTEM COMPONENTS: SHALL COMPLY WITH ASTM C635 AND SECTION 5.1 OF ASTM E580.

2.1 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635.
2.2 CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVANIZED) CARBON STEEL CONFORMING TO ASTM A641. WIRE SHALL BE #12 GAGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM TENSILE STRENGTH = 70 KSI.
2.3 MAIN RUNNERS, CROSS RUNNERS, SPLICES, EXPANSION DEVICES, AND INTERSECTION CONNECTORS SHALL BE DESIGNED TO CARRY A MEAN ULTIMATE TEST LOAD OF NOT LESS THAN 180 LBS. IN COMPRESSION AND TENSION PER ASTM E580 SECTION 5.1.2.

3. SUSPENSION SYSTEM INSTALLATION: SHALL COMPLY WITH ASTM C636 AND SECTION 5.2 OF ASTM E580.

3.1 #12 GAGE HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING A 4 FOOT BY 4 FOOT GRID SPACING AND SHALL BE ATTACHED TO MAIN RUNNERS.
3.2 PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LEAST, FOR THE PERIMETER OF THE CEILING AREA (SEE FIGURE 2). PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
3.3 CEILING GRID MEMBERS SHALL BE ATTACHED TO TWO (2) ADJACENT WALLS PER ASTM E580, SECTION 5.2.3. CEILING GRID MEMBERS SHALL BE AT LEAST 3/4 INCH CLEAR OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD BE FREE, AND A MINIMUM OF 3/4 INCH CLEAR OF WALL.
3.4 THE WIDTH OF THE PERIMETER SUPPORTING CLOSURE ANGLE SHALL BE NOT LESS THAN TWO INCHES. GRID SYSTEMS WITH SPECIALTY OR PROPRIETARY ANGLES AND SUPPORT CLIPS MAY BE ACCEPTABLE IN ACCORDANCE WITH SECTION 11 BELOW.
3.5 AT THE PERIMETER OF THE CEILING AREA, WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL SPREADER STRUT OR A #16 GAGE WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNER MAY BE USED AND PLACED WITHIN EIGHT (8) INCHES OF THE WALL. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNER IS EIGHT (8) INCHES OR LESS, THIS INTERLOCK IS NOT REQUIRED.

4. NOT USED.

5. LATERAL FORCE BRACING: LATERAL FORCE BRACING IS REQUIRED PER THIS SECTION FOR ALL CEILING AREAS. THE SPACING OF THE BRACING ASSEMBLIES MUST BE SHOWN ON THE CONSTRUCTION DOCUMENTS.
EXCEPTION: LATERAL FORCE BRACING MAY BE OMITTED FOR SUSPENDED ACOUSTICAL CEILING SYSTEMS WITH A CEILING AREA OF 144 SQUARE FEET OR LESS, WHEN PERIMETER SUPPORT, IN ACCORDANCE WITH SECTION 3.3 OF THIS IR OR WITH ASTM E580 SECTIONS 5.2.2 AND 5.2.3, ARE PROVIDED AND PERIMETER WALLS ARE DESIGNED TO CARRY THE CEILING LATERAL FORCES.

5.1 PROVIDE LATERAL FORCE BRACING ASSEMBLIES CONSISTING OF A COMPRESSION STRUT AND FOUR (4) #12 GAGE SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER
(SEE FIGURE 1).
5.2 LATERAL FORCE BRACING ASSEMBLIES SHALL BE SPACED PER TABLE 1 FOR ALL VALUES OF THE COMPONENT IMPORTANCE FACTOR (IP) OF THE CEILING.

TABLE 1 LATERAL FORCE BRACE ASSEMBLY SPACING

Sds LESS THAN OR EQUAL TO 1.15	12'X12'	FULL BUILDING HEIGHT

5.3 THE SLOPE OF BRACING WIRES SHALL NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND WIRES SHALL BE TAUT. SPLICES IN WIRES ARE NOT PERMITTED WITHOUT DSA APPROVAL.
5.4 COMPRESSION STRUTS SHALL BE ADEQUATE TO RESIST THE VERTICAL COMPONENT INDUCED BY THE BRACING WIRES, AND SHALL NOT BE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB.

6. ATTACHMENT OF HANGER AND BRACING WIRES:
6.1 FASTEN HANGER WIRES WITH NOT LESS THAN THREE (3) TIGHT TURNS IN THREE (3) INCHES. HANGER WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION OF THE MEMBER WITHIN THE LOOPS (SEE ASTM E580, SECTION 5.2.7.2).
6.2 FASTEN BRACING WIRES WITH FOUR (4) TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF ONE AND ONE-HALF (1-1/2) INCHES
6.3 HANGER OR BRACING WIRE ANCHORED TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHOR ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE WIRE.
6.4 SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST SIX (6) INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT, ETC.
6.5 HANGER WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO TYPICAL HANGER SPACING (SEE FIGURE 3A, DETAIL F). PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS, OR DISCONTINUOUS AREAS.
6.6 HANGER WIRES THAT ARE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES. PERIMETER HANGER WIRES AT MAIN RUNNERS THAT ARE POSITIVELY ATTACHED TO THE PERIMETER CLOSURE ANGLE, COUNTER-SLOPING IS OPTIONAL.
NOTE: SEE ASTM C636, FIGURE 1, FOR COUNTER-SLOPING METHODS.
6.7 WHEN CONNECTION DETAILS DIFFER FROM THOSE IN THE ATTACHED FIGURES, ATTACHMENT OF BRACING WIRES TO THE STRUCTURE ABOVE AND TO THE MAIN RUNNERS SHALL BE ADEQUATE FOR THE LOAD IMPOSED. THE WEIGHT (WP) SHALL BE TAKEN AS NOT LESS THAN FOUR (4) PSF FOR CALCULATING SEISMIC FORCES (FP).
6.8 WHEN DRILLED-IN CONCRETE ANCHORS OR POWER ACTUATED FASTENERS ARE USED IN REINFORCED CONCRETE FOR HANGER WIRES, 1 OUT OF 10 WIRE/ANCHOR ASSEMBLIES MUST BE FIELD TESTED FOR 200 LBS. IN TENSION. WHEN DRILLED-IN CONCRETE ANCHORS ARE USED FOR BRACING WIRES, 1 OUT OF 2 WIRE/ANCHOR ASSEMBLIES MUST BE FIELD TESTED FOR 440 LBS. IN TENSION IN THE DIRECTION OF THE WIRE. POWER ACTUATED FASTENERS IN CONCRETE ARE NOT PERMITTED FOR BRACING WIRES.
NOTE: DRILLED-IN ANCHORS OR POWER ACTUATED FASTENERS REQUIRE DSA APPROVAL PRIOR TO USE IN PRESTRESSED CONCRETE.

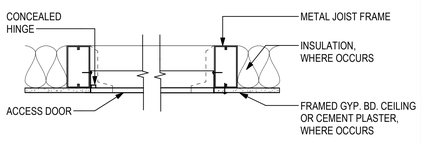
7. CEILING FIXTURES, TERMINALS, AND DEVICES: ALL FIXTURES, TERMINALS, AND OTHER DEVICES SHALL BE MOUNTED IN A MANNER THAT WILL NOT COMPROMISE CEILING PERFORMANCE IN ACCORDANCE WITH SECTION 13.5.6.2.2(5) OF ASCE 7-10 AS AMENDED BY 2019 CBC SECTION 1616A.1.20 (1616.10.16*) AND ASTM E580 SECTIONS 5.3 AND 5.4.

7.1 CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR DEVICES.
7.2 LIGHT FIXTURES:
7.2.1 ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH LIGHT FIXTURE, PER ASTM E580, SECTION 5.3.1.
7.2.2 LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
7.2.3 LIGHT FIXTURES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LBS. MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
7.2.4 LIGHT FIXTURES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE WIRES ATTACHED TO THE HOUSING AND TO THE STRUCTURE ABOVE. THE FOUR (4) TAUT #12 GAGE WIRES, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, MUST BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE UNIT.
7.2.5 ALL FOUR FOOT X FOUR FOOT LIGHT FIXTURES MUST HAVE SLACK SAFETY WIRES AT EACH CORNER UNLESS SUPPORTED PER SECTION 7.2.4.
7.2.6 SURFACE-MOUNTED FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES MADE OF MATERIAL WITH A MINIMUM #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SUSPENSION WIRE SHALL BE ATTACHED TO EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.
7.2.7 SUPPORT PENDANT-MOUNTED LIGHT FIXTURES DIRECTLY FROM THE STRUCTURE ABOVE WITH HANGER WIRES OR CABLES PASSING THROUGH EACH PENDANT HANGER AND CAPABLE OF SUPPORTING TWO (2) TIMES THE WEIGHT OF THE FIXTURE. SEE IR 16-9 FOR ADDITIONAL REQUIREMENTS FOR PENDENT MOUNTED FIXTURES.
7.2.8 RIGID CONDUIT SHALL NOT BE USED FOR ATTACHMENT OF THE FIXTURES.

7.3 SERVICES WITHIN THE CEILING:
7.3.1 ALL FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE COMPONENT. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH COMPONENT. **CEILING TILES MUST BE UL LISTED.**
7.3.2 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LB. SHALL HAVE ONE (1) #12 GAGE SLACK SAFETY WIRE ATTACHED TO THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
7.3.3 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 20 LB. BUT LESS THAN OR EQUAL TO 56 LB. SHALL HAVE TWO (2) #12 GAGE SLACK SAFETY WIRES ATTACHED TO THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
7.3.4 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 LB. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR (4) TAUT #12 GAGE WIRES ATTACHED TO THE TERMINAL OR SERVICE AND TO THE STRUCTURE ABOVE. THE FOUR (4) TAUT #12 GAGE WIRES, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, MUST BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE UNIT.

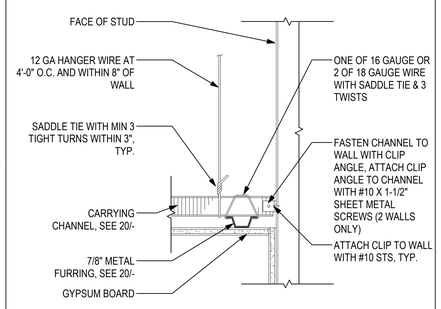
7.4 OTHER DEVICES WITHIN THE CEILING:
7.4.1 ALL LIGHTWEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID PER SECTION 7.3.1 OF THIS IR. IN ADDITION, DEVICES WEIGHING MORE THAN 10 LBS. SHALL HAVE A # 12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE PER SECTION 7.2.2 OF THIS IR. DEVICES WEIGHING MORE THAN 20 LBS. SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE PER SECTION 7.3.4 OF THIS IR.

SUSPENDED CEILING NOTES - IR 25-2.13 (2)
N.T.S.



NOTE:
1. S.S.D. FOR TYPICAL OPENING FRAMING DETAILS.
2. CEILING ACCESS GRAPHICALLY SHOWN ON DRAWINGS BUT EXACT LOCATION TO BE COORDINATED ON THE FIELD. CEILING ACCESS MUST BE PROVIDED IN HARD LID CEILING AND EXTERIOR SOFFITS, COORDINATE IN FIELD AS REQUIRED FOR ACCESS IN ADDITION TO WHAT IS SHOWN IN CEILING PLAN.

CEILING ACCESS PANEL (17)
1 1/2" = 1'-0"



SUSPENDED GYP. BOARD CEILING WALL ATTACHMENT (13)
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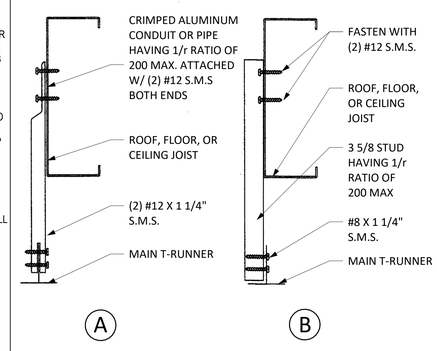
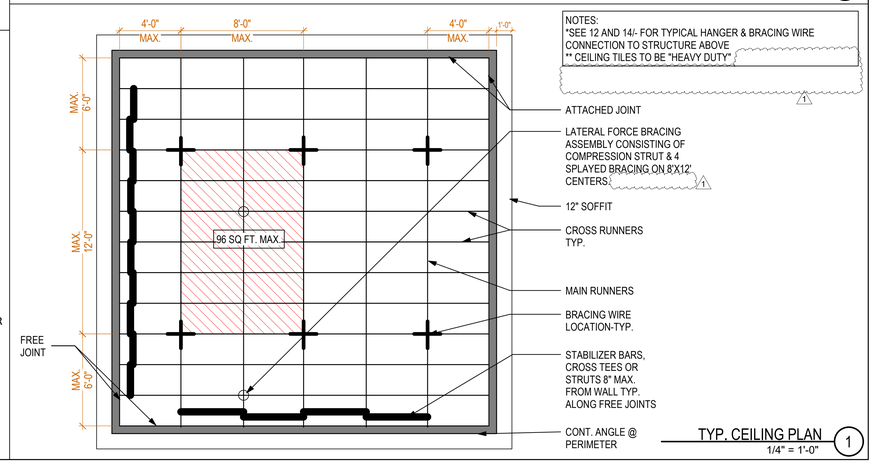


COMPRESSION STRUT DETAIL (9)
12" = 1'-0"



TYP. CEILING PLAN (1)
1/4" = 1'-0"

10/6/2023 1:29:00 PM

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emuhsd.org

PROJECT NAME:
EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
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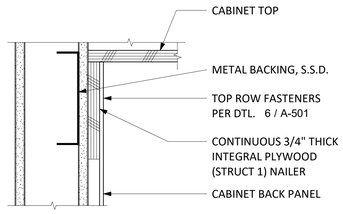
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

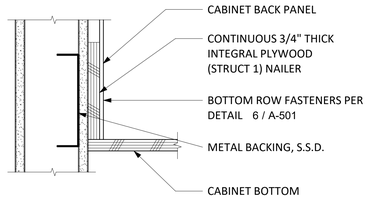
SHEET TITLE:
DETAILS - CEILING

SHEET NO.:
A-500



CABINET WALL-MOUNT DETAIL (TOP) 4

SCALE: 3" = 1'-0"



CABINET WALL-MOUNT DETAIL (BOT.) 3

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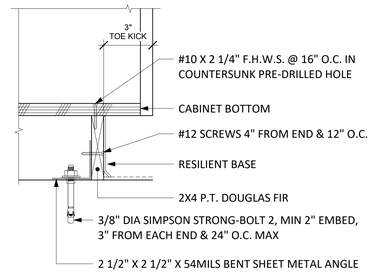
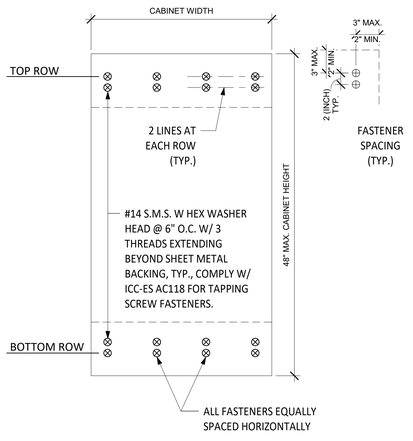


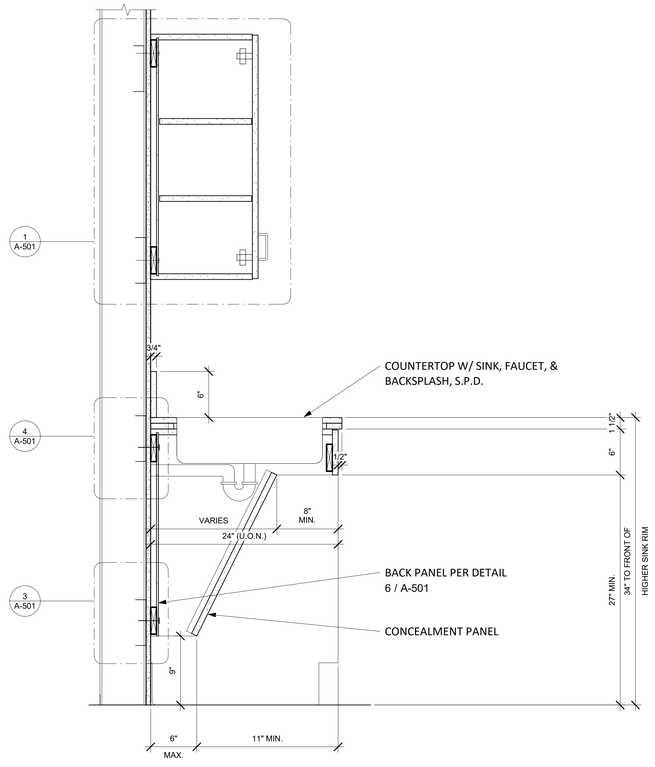
BASE CABINET FLOOR ANCHOR DETAIL 2

SCALE: 3" = 1'-0"



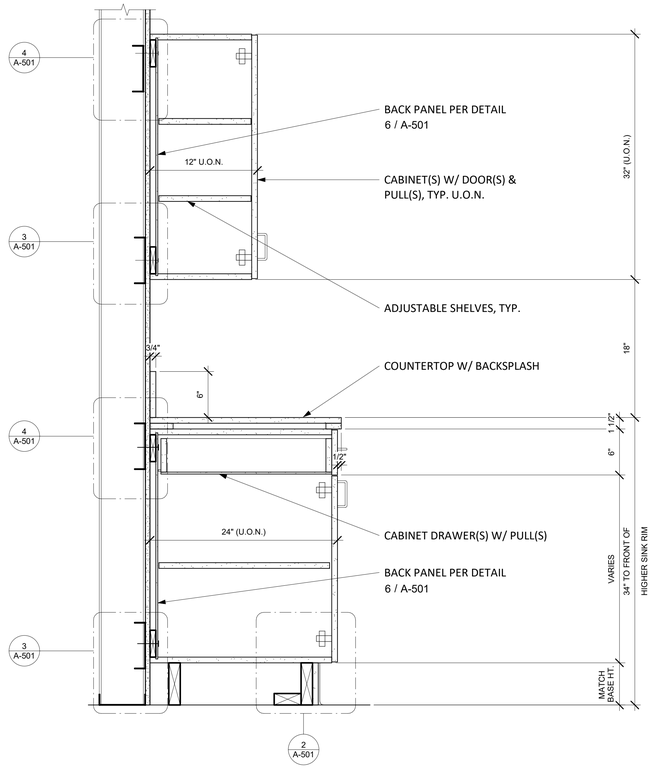
BACK PANEL FASTENER LOCATIONS 6

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



CASEWORK SECTION AT SINK 5

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



CASEWORK SECTION 1

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

5/9/2023 1:55:01 PM

AUTHORITY APPROVAL

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No. C-29766
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STATE OF CALIFORNIA

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emuhsd.org

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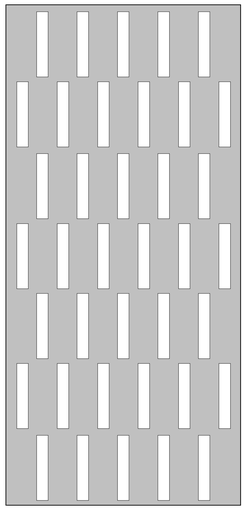
PROJECT NO.: **21095.01**

SHEET TITLE:

TYPICAL CASEWORK

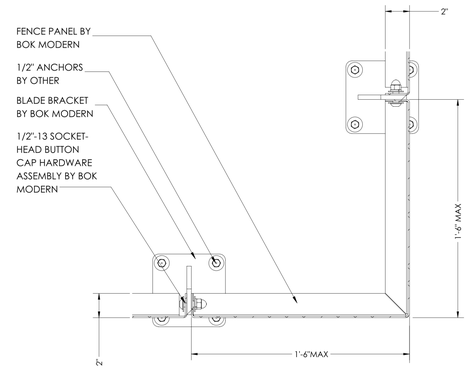
SHEET NO.:

A-501



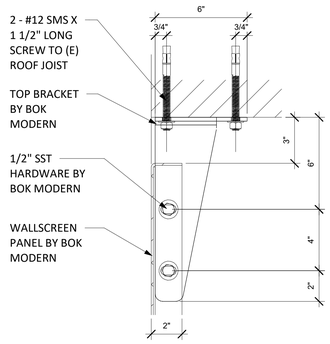
ALUM. SCREEN DESIGN PATTERN 9

SCALE: 3" = 1'-0"



PLAN DETAIL AT OUTSIDE CORNER 6

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

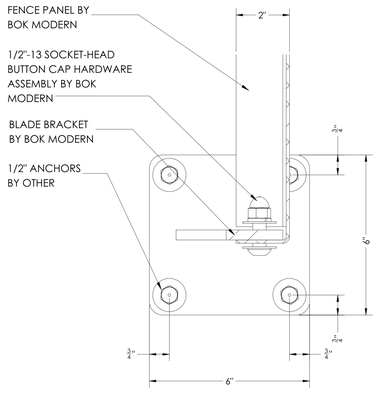


TOP BRACKET CONNECTION 3

SCALE: 3" = 1'-0"

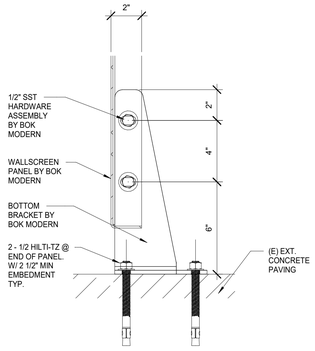
96" X 48" PANEL 8

SCALE: N.T.S.



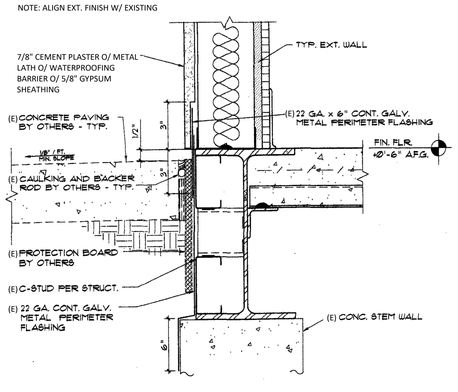
PLAN DETAIL AT END BLADE 5

SCALE: 3" = 1'-0"



BOTTOM BRACKET PANEL CONNECTION 2

SCALE: 3" = 1'-0"

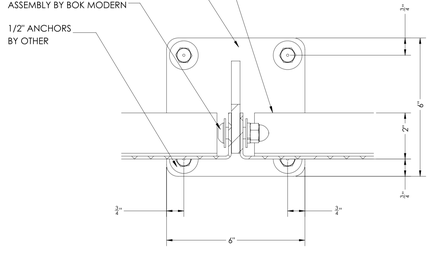


EXTERIOR WALL DETAIL 10

SCALE: N.T.S.

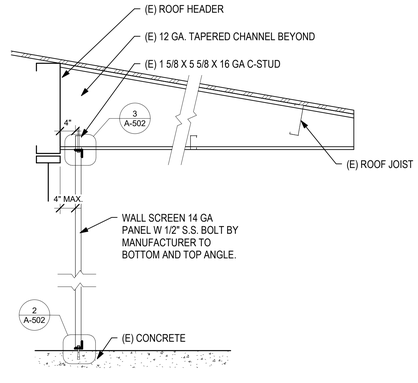
96" X 24" PANEL 7

SCALE: N.T.S.



PLAN DETAIL AT TYP BLADE 4

SCALE: 3" = 1'-0"



WALLSCREEN DETAIL 1

SCALE: 3/4" = 1'-0"

5/10/2023 9:02:20 AM

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MARK	DATE	DESCRIPTION
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

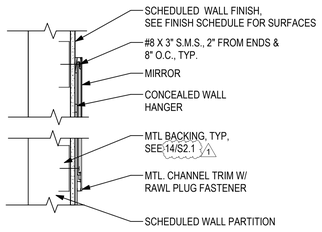
PROJECT NO.: **21095.01**

SHEET TITLE:

EXTERIOR DETAILS

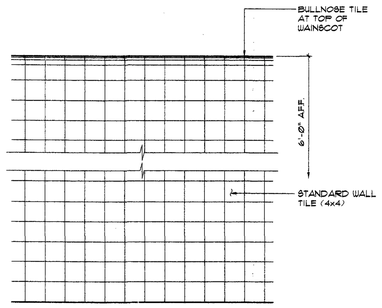
SHEET NO.:

A-502



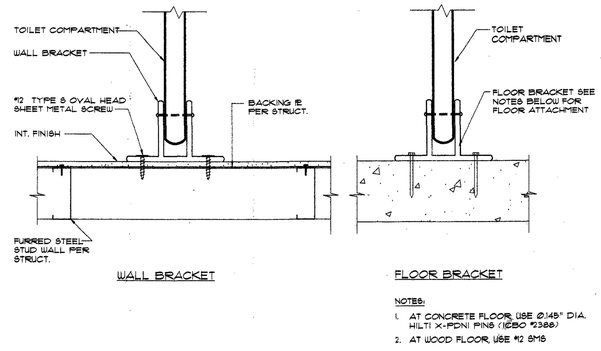
TYPICAL MIRROR MOUNTING 6

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



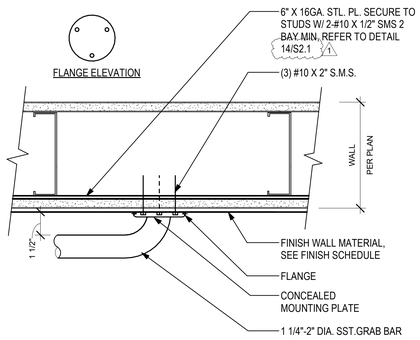
WAINSCOT ELEVATION 4

SCALE: 3" = 1'-0"



WALL & BRACKET 2

SCALE: 3" = 1'-0"



TYPICAL GRAB BAR MOUNTING 7

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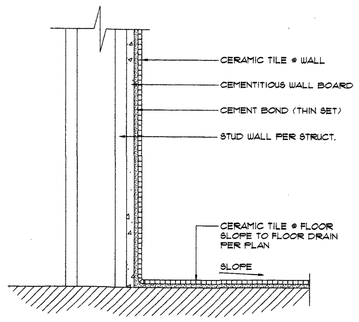
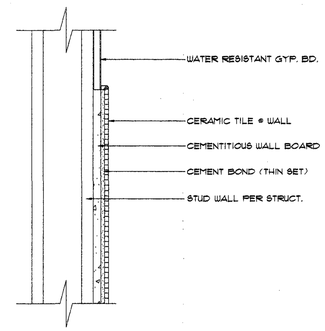


TILE BASE 5

SCALE: 3" = 1'-0"



TILE WAINSCOT 3

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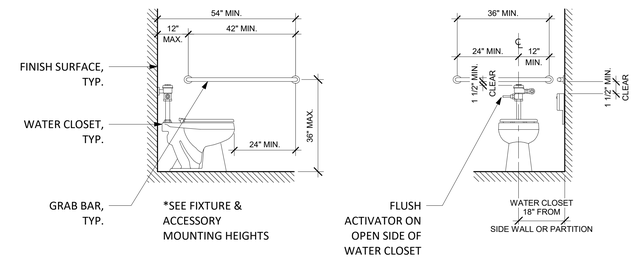
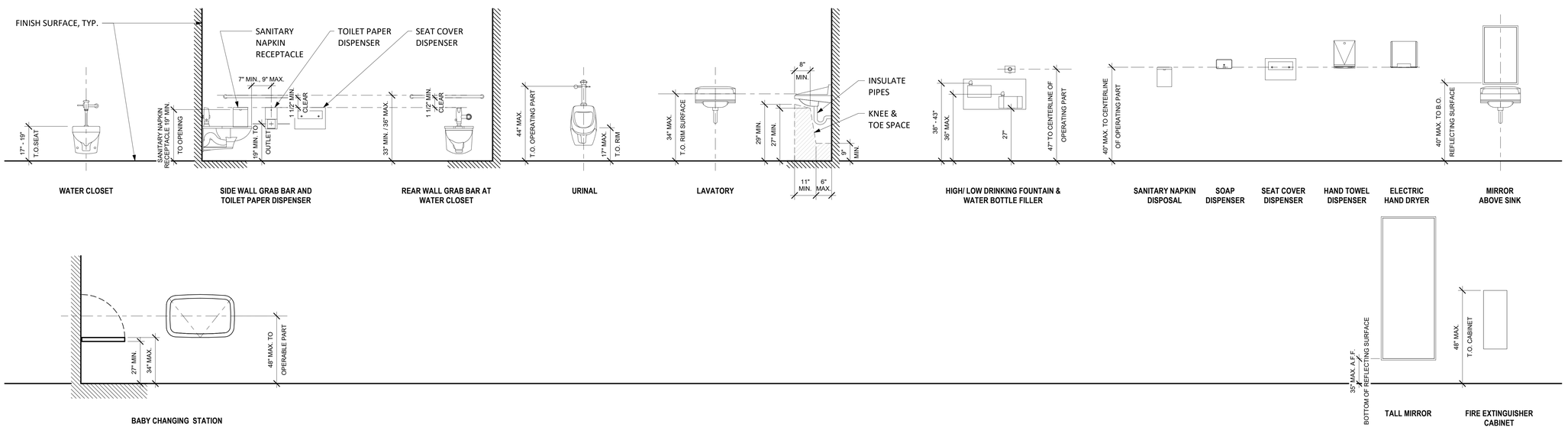


WATER CLOSET & GRAB BAR LOCATIONS 1

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

*FIXTURE & ACCESSORY MOUNTING HEIGHTS, U.O.N.



10/6/2023 1:29:03 PM

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YSAN TAI
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	10/06/2023	ADDENDUM 01

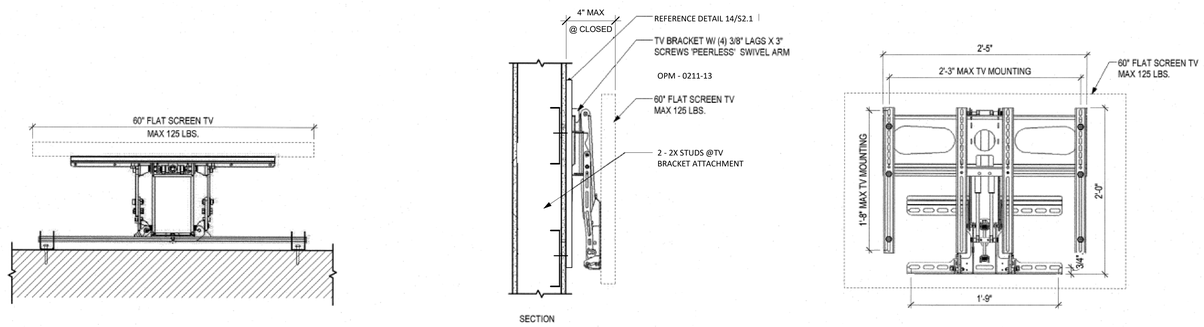
PROJECT NO.: **21095.01**

SHEET TITLE:

TYPICAL FIXTURE & ACCESSORY LOCATIONS

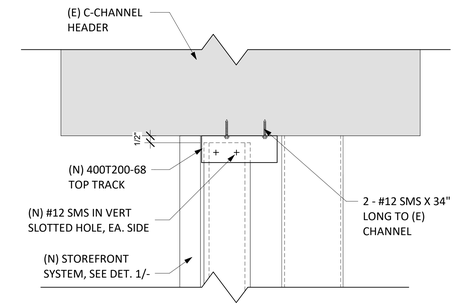
SHEET NO.:

A-515



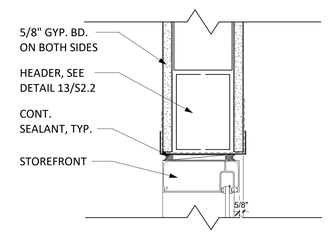
TV WALL BRACKET 8

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



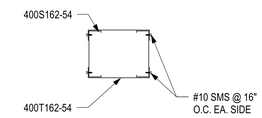
TOP OF BOX STUD CONNECTION 4

SCALE: 3" = 1'-0"



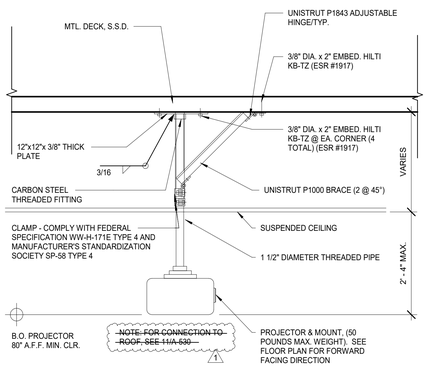
INT. STOREFRONT HEADER DETAIL 7

SCALE: 3" = 1'-0"



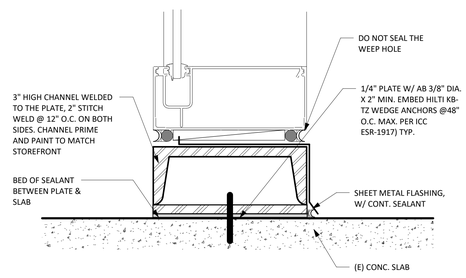
BOX STUD AT STOREFRONT 3

SCALE: 3" = 1'-0"



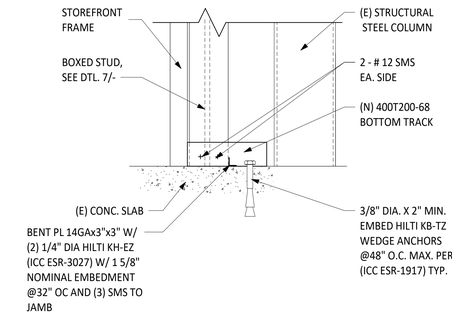
PROJECTOR MOUNTED PARALLEL TO MTL DECK 13

SCALE: 1" = 1'-0"



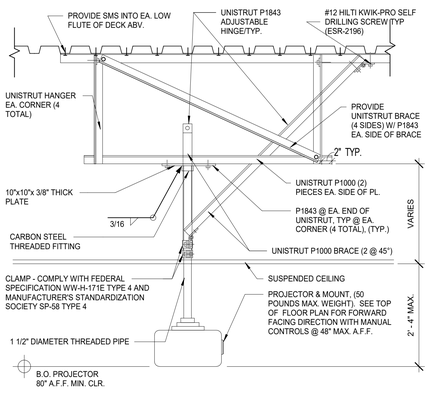
EXT. STOREFRONT SILL DETAIL 6

SCALE: 6" = 1'-0"



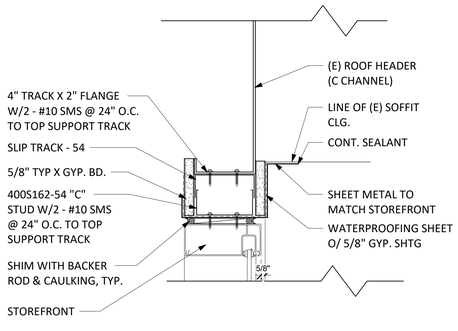
BOTTOM TRACK 2

SCALE: 3" = 1'-0"



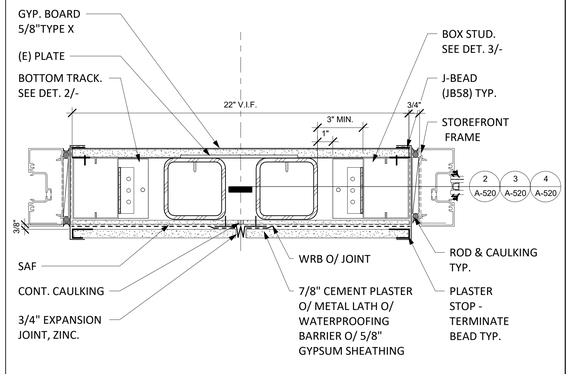
PROJECTOR MOUNTED PERP.TO MTL DECK 12

SCALE: 1" = 1'-0"



EXT. STOREFRONT HEAD TO (E) SLIP TRACK 5

SCALE: 3" = 1'-0"



EXTERIOR STOREFRONT DETAIL 1

SCALE: 3" = 1'-0"

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PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
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MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

SHEET TITLE:

STOREFRONT & DOOR DETAILS

SHEET NO.:

A-520

10/6/2023 1:29:04 PM

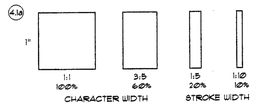
① CHARACTER TYPE. CHARACTERS ON SIGNS SHALL BE RAISED 1/32 INCH (0.794 mm) MINIMUM AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE COMPLYING WITH 1117B.5.6. (SEE NOTE 5 BELOW)

② CHARACTER SIZE. RAISED CHARACTERS SHALL BE MINIMUM OF 5/8 INCH (15.9 mm) AND A MAXIMUM OF 2 INCHES (51 mm) HIGH. 1" HIGH IS PREFERRED.

③ 1117B.5.2 FINISH AND CONTRAST. CHARACTERS, SYMBOLS AND THEIR BACKGROUNDS SHALL HAVE A NON-GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND, EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND. 70% MINIMUM CONTRAST.

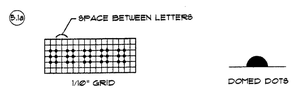
④ 1117B.5.3 PROPORTIONS. CHARACTERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10.

④.1 ALL LETTERS MEASURED MUST BE UPPERCASE. AFTER CHOOSING A TYPESTYLE TO TEST, BEGIN BY PRINTING THE LETTERS "I", "X" AND "O" AT 1 INCH HIGH. PLACE THE TEMPLATE'S 1:1 SQUARE OVER "X" OR "O", WHICHEVER IS MORE NARROW. IF THE CHARACTER IS NOT WIDER THAN 1 INCH, NOR NARROWER THAN 3:5 RECTANGLE, THE PROPORTIONS IS CORRECT. USE THE 1:5 RECTANGLE TO DETERMINE IF THE STROKE OF THE I IS TOO BROAD, AND THE 1:10 RECTANGLE TO SEE IF IT IS TOO NARROW. IF ALL THE TESTS ARE PASSED, THE TYPESTYLE IS COMPLIANT WITH PROPORTION CODES.



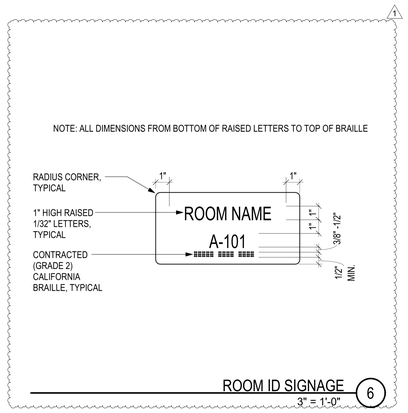
⑤ 1117B.5.6 BRAILLE. CALIFORNIA CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS. DOTS SHALL BE 1/10 INCH (2.54 mm) ON CENTERS IN EACH CELL WITH 2/10 INCH (5.08 mm) SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF THE DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED IN MINIMUM OF 1/40 INCH (0.635 mm) ABOVE THE BACKGROUND. PROVIDE ROUNDED OR DOMED CALIFORNIA BRAILLE DOTS. EACH DISTINCT & SEPARATE. DOT WITH STRAIGHT SIDES & FLAT TOPS ARE NOT READABLE FOR MANY BRAILLE USERS.

⑤.1 THE BRAILLE MEASUREMENT TEMPLATE IS USED BY PLACING THE GRID OVER A SECTION DOTS TO CHECK DISTANCE BETWEEN BRAILLE CELLS AS INDICATED BY THE ARCH. EACH BOX IS 1/2 INCH IN HEIGHT AND WIDTH.

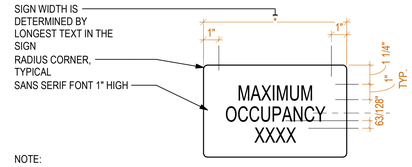


⑤.2 BRAILLE SHALL BE CENTERED UNDER TEXT.

SIGNAGE KEYNOTES (18)
3" = 1'-0"



ROOM ID SIGNAGE (6)
3" = 1'-0"



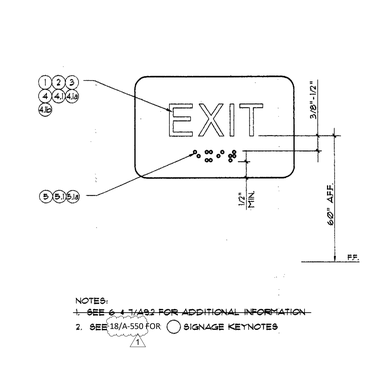
NOTE:

1. TEXT SHALL BE CENTERED HORIZONTALLY AND VERTICALLY ON SIGN.
2. CONTRACTOR SHALL COORDINATE WITH SHEET G-003 FOR OCCUPANCY LOAD.

MAX OCCUPANCY PER ROOM:

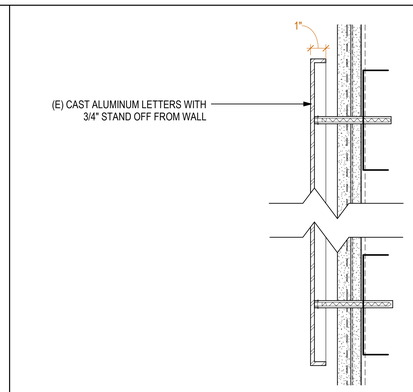
MULTIPURPOSE ROOM [126]: 1464
MAKER SPACE [104]: 78
CAFETERIA [110]: 136
CAFETERIA [E-1]: 172
STAFF LOUNGE [236]: 57

MAXIMUM OCCUPANCY (16)
3" = 1'-0"

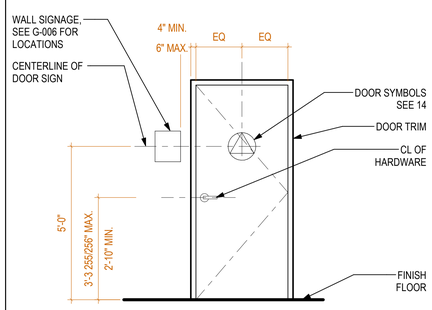


NOTES:
~~1. SEE 6 & 7/A9.2 FOR ADDITIONAL INFORMATION~~
2. SEE 18/A-550 FOR ◯ SIGNAGE KEYNOTES

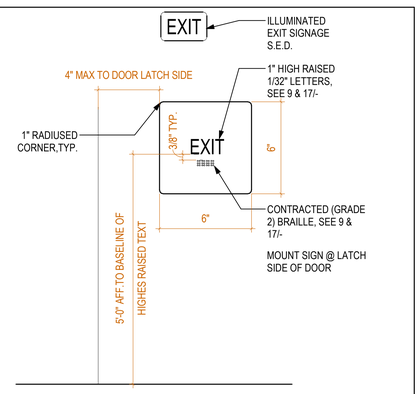
EXIT SIGN (3)
3" = 1'-0"



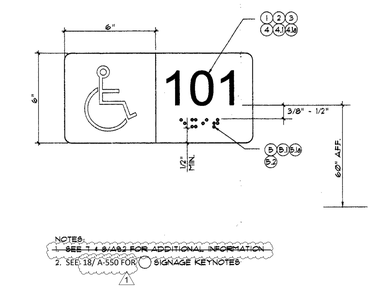
STAND OFF LETTERING - VERTICAL CONNECTION (4)
3" = 1'-0"



TOILET SIGNAGE MOUNTING DIAGRAM1 (11)
1/2" = 1'-0"



TACTILE EXIT SIGNAGE (8)
3" = 1'-0"



NOTES:
~~1. SEE 7 & 8/A9.2 FOR ADDITIONAL INFORMATION~~
2. SEE 18/ A-550 FOR ◯ SIGNAGE KEYNOTES

ACCESSIBLE SIGNAGE (2)
3" = 1'-0"

1. CHARACTER TYPE: CHARACTERS ON SIGNS SHALL BE RAISED 1/32 INCH (0.794 mm) MINIMUM AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED (GRADE 2) BRAILLE COMPLYING WITH SECTION 1117B.5.6.(SEE NOTE 5 BELOW).

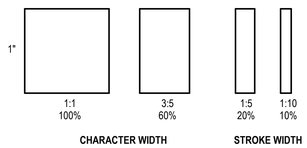
2. CHARACTER SIZE: RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8" INCH (15.9 mm) AND A MAXIMUM OF 2 INCHES (51 mm) HIGH.

3. FINISH & CONTRAST: CHARACTERS, SYMBOLS, AND THEIR BACKGROUNDS SHALL HAVE A NONGLARE FINISH. CHARACTERS AND SYMBOLS, SHALL CONTRAST WITH THEIR BACKGROUNG, EITHER LIGHT ON DARK BACKGROUND OR DARK ON LIGHT BACKGROUND. (CBC 1117B.5.2)

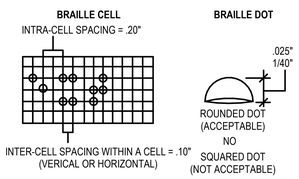
4. PROPORTIONS: RAISED CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MIN. AND 110% MAX. OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15% MAX. OF THE HEIGHT OF THE CHARACTER.

ALL LETTERS MEASURED MUST BE UPPERCASE. AFTER CHOOSING A TYPESTYLE TO TEST, BEGIN BY PRINTING LETTER I, X, AND O AT 1 INCH HIGH. PLACE THE TEMPLATES 1:1 SQUARE OVER THE X OR O, WHICHEVER IS NARROWER. IF THE CHARACTER IS NOT WIDER THAN 1 INCH, NOR NARROWER THAN THE 3:5 RECTANGLE, THE PROPORTIONS ARE CORRECT. USE THE 1:5 RECTANGLE TO DETERMINE IF THE STROKE OF THE I IS TOO BROAD, AND THE 1:10 RECTANGLE TOO SEE IF IT IS TOO NARROW. IF ALL THE TESTS ARE PASSED, THE TYPESTYLE IS COMPLIANT WITH THE PROPORTION CODE.

TEMPLATE FOR CHECKING CHARACTER AND STROKE WIDTH TO HEIGHT PROPORTIONS:



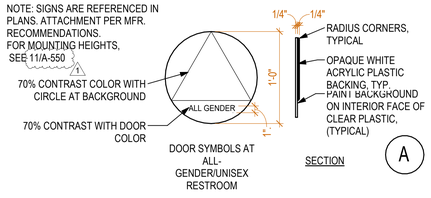
5. BRAILLE: CALIFORNIA GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS. DOTS SHALL BE 1/10 INCH (2.54 mm) ON CENTERS IN EACH CELL WITH 2/10 INCH (5.08 mm) SPACE BETWEEN CELLS, MEASURED IN THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40 INCH (.0635 mm) ABOVE THE BACKGROUND. 1117B.5.6.

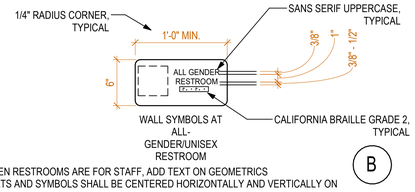


ONLY USE ROUNDED OR DOMED CALIFORNIA BRAILLE DOTS, EACH DISTINCT AND SEPARATE. DOTS WITH STRAIGHT SIDES AND FLAT TOPS ARE PERMITTED.

CHARACTER, BRAILLE CELL & DOT (17)
3" = 1'-0"

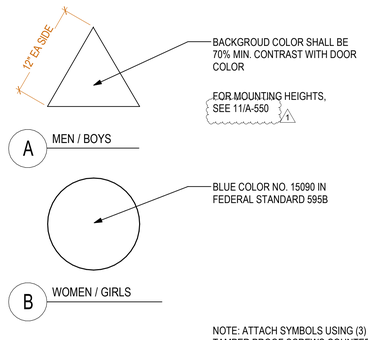
NOTE: SIGNS ARE REFERENCED IN PLANS. ATTACHMENT PER MFR. RECOMMENDATIONS. FOR MOUNTING HEIGHTS, SEE 11/A-550





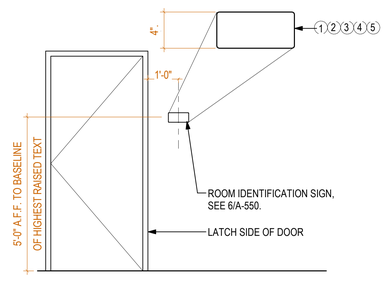
NOTE:
1. WHEN RESTROOMS ARE FOR STAFF, ADD TEXT ON GEOMETRICS
2. TEXTS AND SYMBOLS SHALL BE CENTERED HORIZONTALLY AND VERTICALLY ON SIGN

ALL GENDER/UNISEX TOILET SYMBOLS (13)
1 1/2" = 1'-0"



NOTE: ATTACH SYMBOLS USING (3) THREE TAMPER PROOF SCREWS COUNTERSUNK, PAINTED TO MATCH SIGN AND ADHESIVE. SYMBOLS SHALL BE CENTERED ON THE DOOR, TYPICAL.

ACCESSIBLE TOILET ROOM DOOR SYMBOLS (14)
1 1/2" = 1'-0"



① CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8" INCH (15.9 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "T". (CBC 11B-703.2.5)

② BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH CBC SECTIONS 11B-703.3 AND 703.4. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS, AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS. (CBC 11B-703.3.1) BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH (9.5 MM) MINIMUM AND 1/2 INCH (12.7 MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH (9.5 MM) MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS. (CBC 11B-703.3.2)

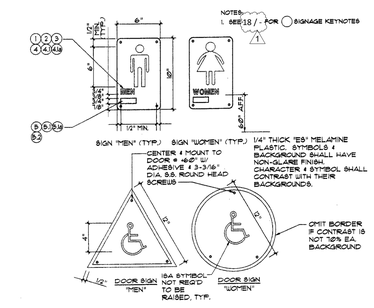
③ WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN. BY 18" MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHERE PROVIDED, SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL BE LOCATED AT THE ENTRANCE TO, AND OUTSIDE OF THE ROOM OR SPACE. WHERE PROVIDED, SIGNS IDENTIFYING EXITS SHALL BE LOCATED AT THE EXIT DOOR WHEN APPROACHED IN THE DIRECTION OF EGRESS TRAVEL. (CBC 11B-703.4.2) 4.2)

④ TATILE CHARACTERS ON SIGNS SHALL BE LOCATED 48" MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURAFACE, MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. (CBC 11B-703.4.1)

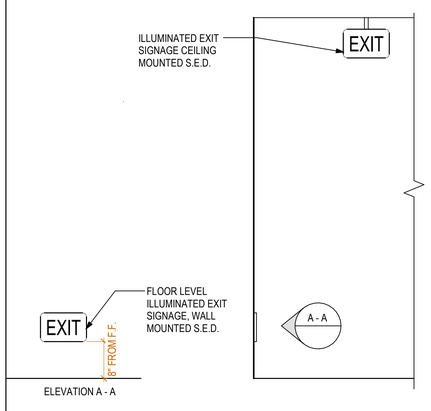
⑤ THE INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO, AND USABLE BY, PHYSICALLY DISABLED PERSONS. THE SYMBOL SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL APROXIMATE FS 15090 IN FEDERAL STANDARD 595C. (CBC 11B-703.7.2.1)

⑥ THE ISA SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR AT SANITARY FACILITIES THAT ARE ACCESSIBLE.

I.S.A. ROOM SIGNAGE MOUNTING DIAGRAM (9)
1/2" = 1'-0"



ACCESSIBLE RESTROOM SIGNAGE (1)
3" = 1'-0"



ILLUMINATED EXIT SIGNAGE (5)
3" = 1'-0"

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LISTEN COLLABORATE CREATE

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YSAN TAI
No. C-29766
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

PROJECT OWNER:

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emuhsd.org

PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

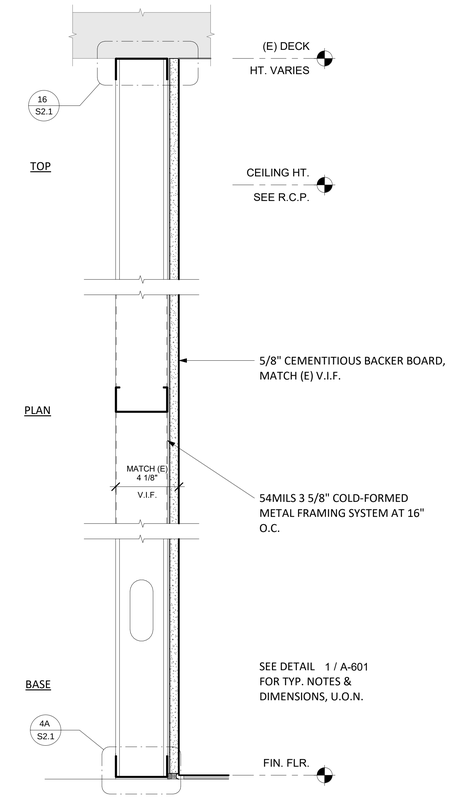
SHEET TITLE:

SIGNAGE DETAILS

SHEET NO.:

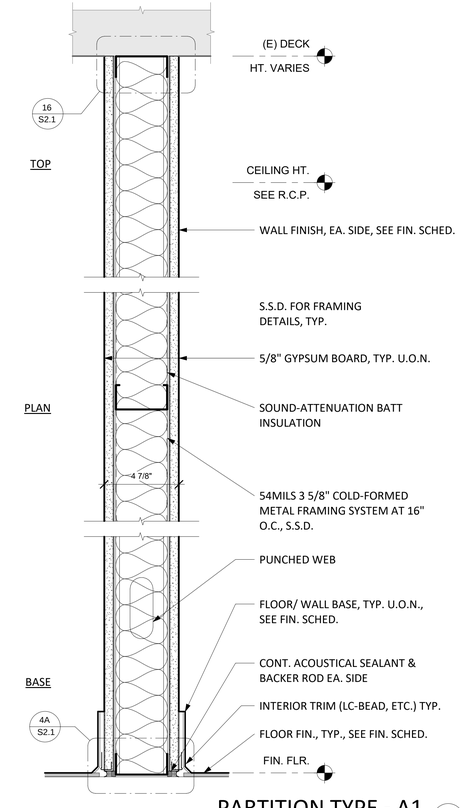
A-550

10/6/2023 1:29:06 PM



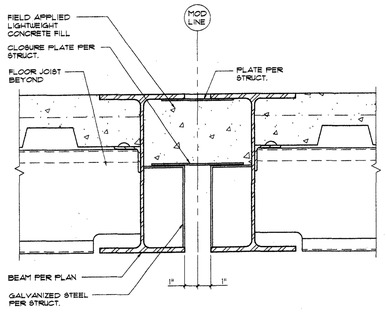
PARTITION TYPE - A4 (4)

SCALE: 3" = 1'-0"



PARTITION TYPE - A1 (1)

SCALE: 3" = 1'-0"



STITCH 2" @ FLOOR (2)

SCALE: 3" = 1'-0"

AUTHORITY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

CSDA DESIGN GROUP

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ARCHITECT STAMP

LICENSED ARCHITECT
YISAN TAI
No. C-29766
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

PROJECT NO.: **21095.01**

SHEET TITLE:

PARTITION TYPES

SHEET NO.:

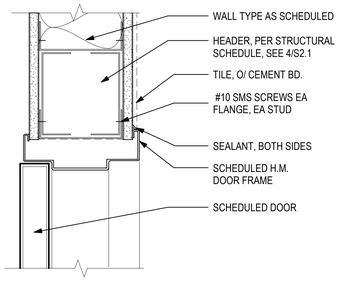
A-601

5/9/2023 1:55:02 PM

DOOR AND FRAME SCHEDULE

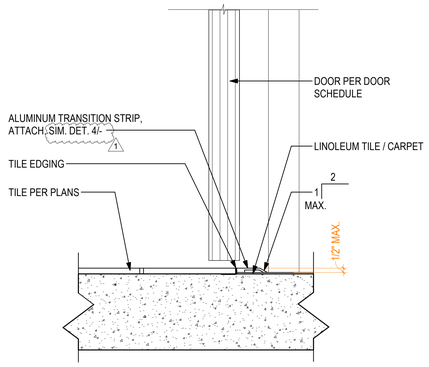
DOOR AND FRAME SCHEDULE

	ROOM NAME	ROOM NAME	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR MATL.	DOOR TYPE	DOOR FINISH	FRAME (SEE DOOR SIZE) MATL.	FRAME TYPE	FRAME FINISH	DETAIL HEAD	DETAIL JAMB	DETAIL SILL	HARDWARE GROUP/ [BLANK] IF N/A OR (E) TO REMAIN, U.O.N.	REMARKS
NEW															
100B	FLEXIBLE SPACE	[EXTERIOR]	72"	84"		N/I					5/A-520	1/A-520	4/-	02	(2) 36" PAIR, PROVIDE EXIT DEVICE AT EACH LEAF, CARD READER
101	BREAK ROOM	FLEXIBLE SPACE	36"	84"	ALUM.	FG1	PVDF	ALUM.	ALUM.	PVDF	7/A-520	1/A-520	N/A	04	CARD READER
101A	JANITOR CLOSET	BREAK ROOM	36"	84"	H.M.	F	PAINT	H.M.	W	PAINT	8/-	2/-	N/A	05	PROVIDE 6" X 30" VISION LIGTH WITH TEMPERED GLASS.
101B	PARENT ROOM	BREAK ROOM	36"	84"	H.M.	F	PAINT	H.M.	W	PAINT	8/-	2/-	N/A	06	CARD READER; PROVIDE 6" X 30" VISION LIGTH WITH TEMPERED GLASS.
101C	STOR.	BREAK ROOM	36"	84"	H.M.	F	PAINT	H.M.	W	PAINT	8/-	2/-	N/A	07	CARD READER; PROVIDE 6" X 30" VISION LIGTH WITH TEMPERED GLASS.
101D	STOR.	IDF	36"	84"	H.M.	F	PAINT	H.M.	W	PAINT	8/-	2/-	N/A	07	CARD READER
102A	CONFERENCE ROOM	FLEXIBLE SPACE	36"	84"	ALUM.	FG1	PVDF	ALUM.	ALUM.	PVDF	7/A-520	1/A-520	N/A	04	CARD READER
102B	CONFERENCE ROOM	[EXTERIOR]	38"	84"	ALUM.	O	PVDF	ALUM.	ALUM.	PVDF	5/A-520	1/A-520	4/-	03	CARD READER
103	WOMEN'S RESTROOM	FLEXIBLE SPACE	36"	84"	H.M.	F	PAINT	H.M.	W	PAINT	8/-	2/-	7/-	08	
104	MEN'S RESTROOM	FLEXIBLE SPACE	36"	84"	H.M.	F	PAINT	H.M.	W	PAINT	8/-	2/-	7/-	08	
EXISTING															
100A	FLEXIBLE SPACE	[EXTERIOR]	36"	84"	(E)	(E)	PAINT	(E)	(E)	PAINT	N/A	N/A	4/-	01	EXIT DEVICE, CARD READER

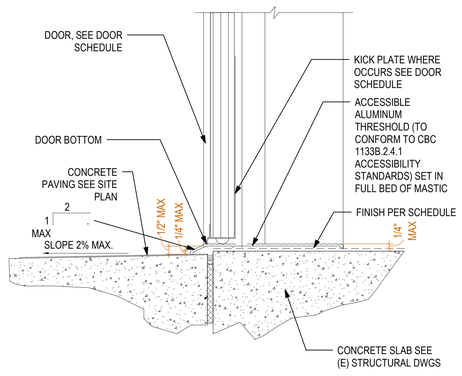


NOTE:
1. WALL WIDTH VARIES, GENERAL CONTRACTOR SHALL COORDINATE DOOR FRAME THROAT (WIDTH) WITH WALL TYPES AS CALLED OUT IN THE PLANS, INCLUDING RATED WALL ASSEMBLIES, TYP.

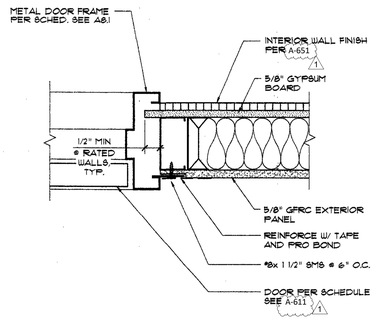
INTERIOR DOOR HEAD AT STUD WALL (8)
SCALE: 3" = 1'-0"



THRESHOLD -VCT/CARPET TO TILE (7)
SCALE: 3" = 1'-0"

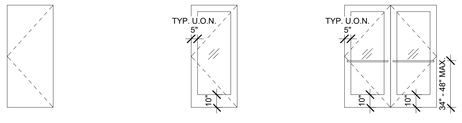


THRESHOLD - EXTERIOR TO FINISH MATERIAL (4)
SCALE: 3" = 1'-0"



EXTERIOR DOOR JAMB (3)
SCALE: 3" = 1'-0"

DOOR TYPES



F
FLUSH (SINGLE)

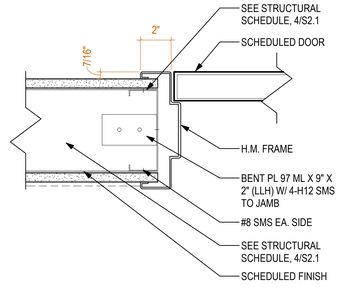
FG1
FULL GLASS (SINGLE)
(SAFETY GLASS)

FG2
FULL GLASS (DOUBLE)
(SAFETY GLASS)

FRAME TYPES

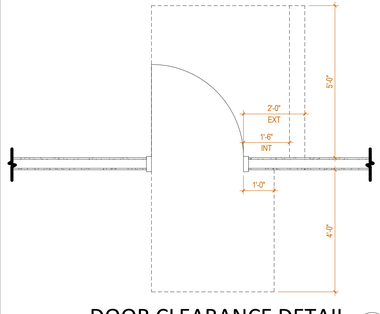
W
WELD FRAME

ALUM.
SEE GLAZING SCHEDULE AND TYPES SHEET



NOTE: COORDINATE DOOR FRAME THROAT WITH WALL TYPES AS CALLED OUT IN THE PLANS, TYP.

TYP. DOOR JAMB AT STUD WALL (2)
SCALE: 3" = 1'-0"



DOOR CLEARANCE DETAIL (1)
SCALE: 1/2" = 1'-0"

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. FINISH EACH SURFACE OF DOORS AND FRAMES PER SCHEDULE.

ABBREVIATIONS (ADDL. ON SHT. G-002)

A.F.F.	ABOVE FINISH(ED) FLOOR
ALUM.	ALUMINUM
CLG.	CEILING
(E)	EXISTING
FIN. FLR.	FINISH FLOOR
H.M.	HOLLOW METAL
HT.	HEIGHT
K.D.	KNOCK-DOWN
MATL.	MATERIAL(S)
(N)	NEW
N/A	NOT APPLICABLE
PFN.	PREFINISH(ED)
PVDF	POLYVINYLIDENE FLUORIDE
S.C.	SOLID CORE
SCHED.	SCHEDULE
(T)	TEMPERED
TRN.	TRANSPARENT
W.C.	WALL COVERING
WD.	WOOD

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	08/23/2023	DSA APPROVED
	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

SHEET TITLE:
DOOR SCHEDULE & TYPES

SHEET NO.:
A-611

10/6/2023 1:29:08 PM

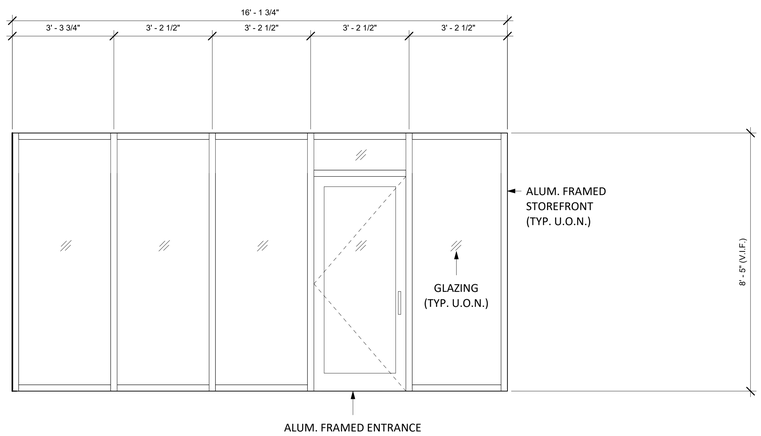
GLAZING TYPE SCHEDULE

GLAZING TYPE SCHEDULE						
			DETAIL			
TYPE	MATERIAL	FINISH	HEAD	JAMB	SILL	REMARKS
X1	ALUMINUM	PVDF				
4						
X2	ALUMINUM	PVDF	6/A-520	7/A-520		
1						
X3	ALUMINUM	PVDF				
1						
X4	ALUMINUM	PVDF				
1						
Z1	ALUMINUM	ANODIZE				
1						
Z2	ALUMINUM	ANODIZE				
1						

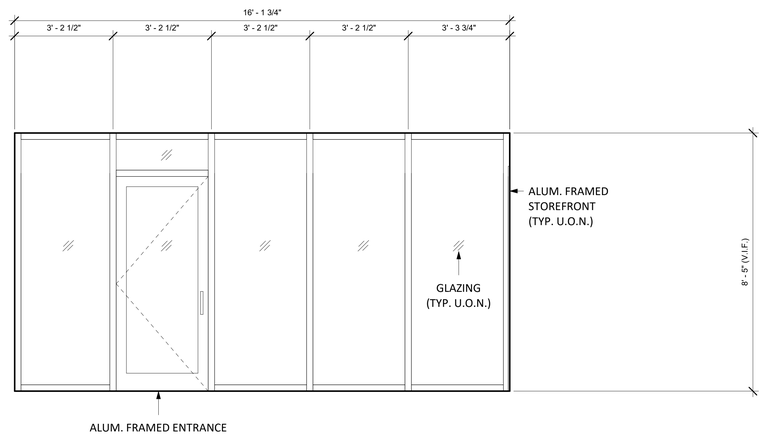
SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. PROVIDE SAFETY GLAZING, TYP.
4. PROVIDE FRONT GLAZING PLANE FOR EXTERIOR APPLICATIONS, TYP.
5. PROVIDE CENTER GLAZING PLANE FOR INTERIOR APPLICATIONS, TYP.

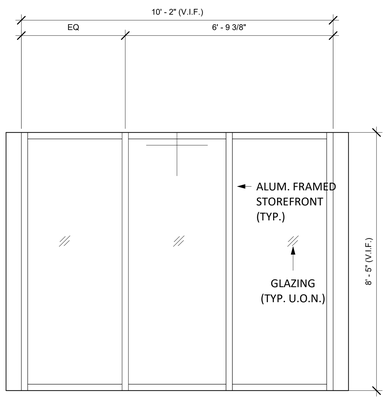
GLAZING TYPES



GLAZING TYPE - Z1 (5)
SCALE: 1/2" = 1'-0"



GLAZING TYPE - Z2 (2)
SCALE: 1/2" = 1'-0"



GLAZING TYPE - X1 (6)
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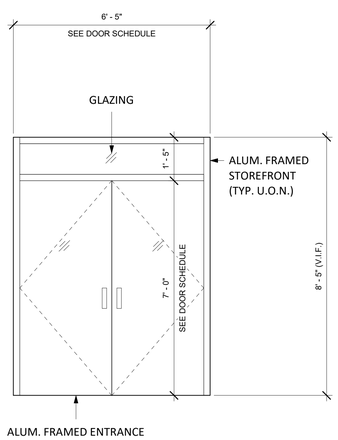

GLAZING TYPE - X2 (4)
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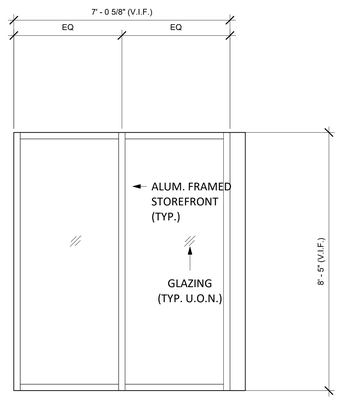
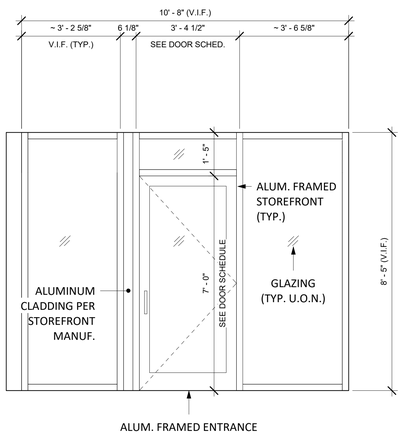


GLAZING TYPE - X3 (3)
SCALE: 1/2" = 1'-0"



GLAZING TYPE - X4 (1)
SCALE: 1/2" = 1'-0"

5/9/2023 1:55:05 PM

AUTHORITY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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PROJECT NO.: **21095.01**

SHEET TITLE:

GLAZING SCHEDULE & TYPES

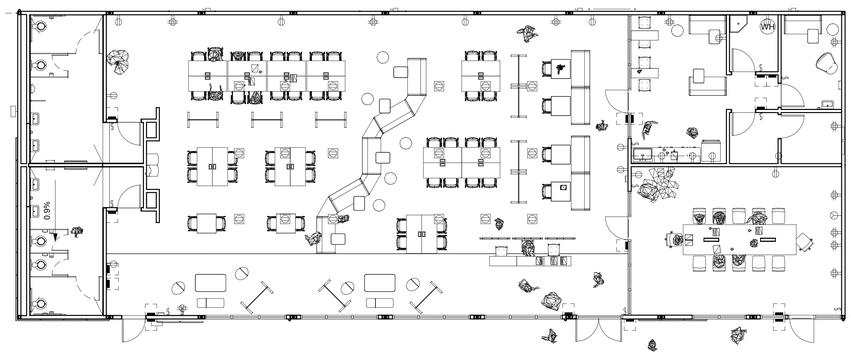
SHEET NO.:

A-615

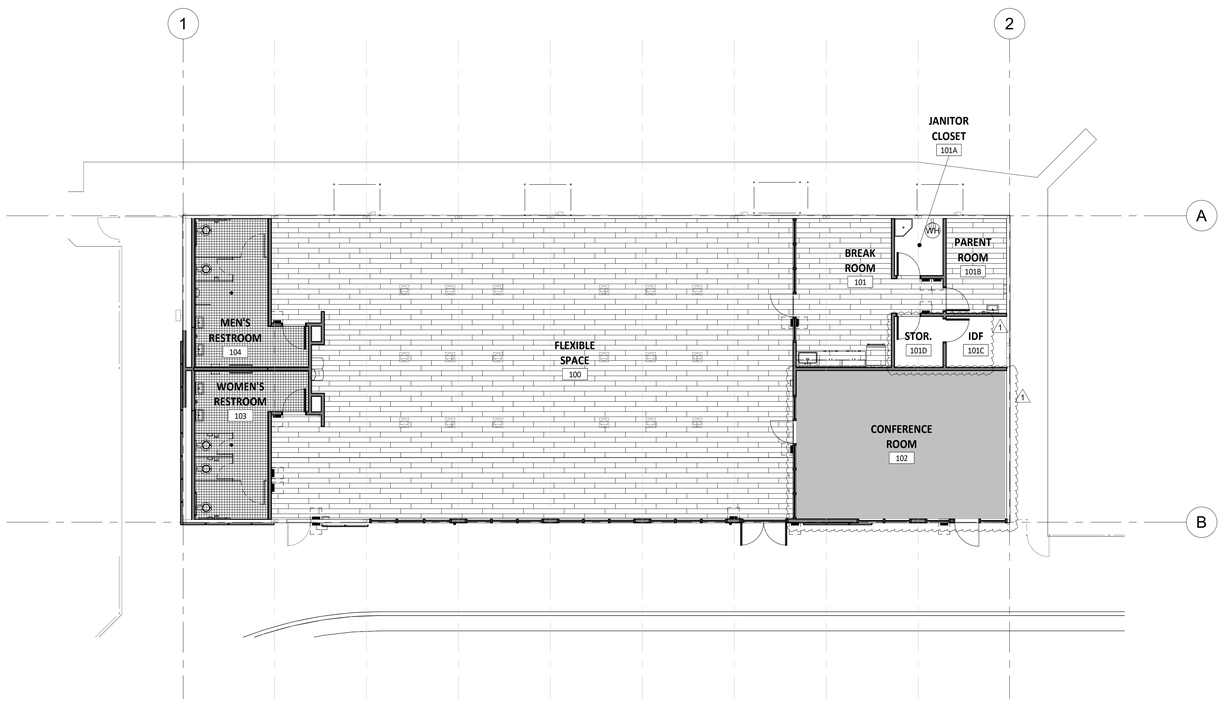
FINISH SCHEDULE

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR TYPE	FLOOR BASE	WALL NORTH	WALL EAST	WALL SOUTH	WALL WEST	CEILING	NOTES
100	FLEXIBLE SPACE	RESILIENT - LVT	4" RB	PAINT	PAINT	PAINT	PAINT	SUSP. CLOUDS	ACCENT WALL(S)
101	BREAK ROOM	RESILIENT - LVT	4" RB	PAINT	PAINT	PAINT	PAINT	A.C.T.	ACCENT WALL
101A	JANITOR CLOSET	FLR. SEALER	4" RB	PAINT	PAINT	PAINT	PAINT	N/A	
101B	PARENT ROOM	RESILIENT - LVT	4" RB	PAINT	PAINT	PAINT	PAINT	A.C.T.	ACCENT WALL
101C	IDF	FLR. SEALER	4" RB	PAINT	PAINT	PAINT	PAINT	N/A	
101D	STOR.	FLR. SEALER	4" RB	PAINT	PAINT	PAINT	PAINT	N/A	
102	CONFERENCE ROOM	CARPET	4" RB	PAINT	PAINT	PAINT	PAINT	SUSP. CLOUDS	ACCENT WALL
103	WOMEN'S RESTROOM	CERAMIC TILE	CERAMIC BASE	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	PAINT	
104	MEN'S RESTROOM	CERAMIC TILE	CERAMIC BASE	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	PAINT	



FURNITURE PLAN - FOR INFORMATION ONLY (2)
1/8" = 1'-0"



FINISH PLAN (1)
SCALE: 1/8" = 1'-0"

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.
3. PAINT ALL (E) PAINTED SURFACES, TYP. U.O.N., V.I.F. PRIOR TO BID.
4. PAINT ALL EXPOSED CONDUIT, SURFACE RACEWAYS, ETC., TO MATCH ADJACENT SURFACES, TYP. U.O.N., NOT SHOWN FOR CLARITY, V.I.F. PRIOR TO BID.
5. PAINT ALL EXPOSED DECK, STRUCTURE, EQUIPMENT, DUCTS, PIPES, INSULATION, CONDUIT, RACEWAYS, WIRING, ETC., U.O.N.
6. 5/8" CEMENTITIOUS BACKER BOARD AT ALL CERAMIC WALL TILE LOCATIONS.

FINISH COLORS

LVT - RESILIENT TILE FLOORING - TYPE 7
B.O.D.: MOHAWK GROUP
COLOR: 948 FIGURED'

LVT - RESILIENT TILE FLOORING - TYPE 6
B.O.D.: MOHAWK GROUP
COLOR: 868 GROOVE

LVT - RESILIENT TILE FLOORING - TYPE 5
B.O.D.: MOHAWK GROUP
COLOR: 741 PARALLEL

TILE CARPETING
B.O.D.: MOHAWK GROUP
PATTERN: 853 PRE-REQ

RESILIENT BASE & ACCESSORIES - TYPE 1
B.O.D.: TARKETT
COLOR: 22 PEARL CB

RESILIENT BASE & ACCESSORIES - TYPE 2
B.O.D.: TARKETT
COLOR: 44 BROWN B

CEMENT PLASTERING
B.O.D. QUIKRETE
FINISH: SEE EXTERIOR PAINTING

CERAMIC TILING - TYPE 1
B.O.D. DALTILE
SIZE: 4" x 12" (APPROXIMATELY)
COLOR: ARCTIC WHITE 0190 (1)
SHEEN: SEMI-GLOSS

CERAMIC TILING - TYPE 2
B.O.D. DALTILE
SIZE: 1" HEXAGON
COLOR: ARCTIC WHITE D617
SHEEN: MATTE

ACOUSTICAL PANEL CEILINGS - TYPE 1
B.O.D.: ARMSTRONG
PRODUCT: CALLA
COLOR: WHITE

ACOUSTICAL PANEL CEILINGS - TYPE 2
B.O.D.:CREASE
PRODUCT: TURF
COLOR: M05 TALC

DECORATIVE PERFORATED PANELS
B.O.D.: BOK MODERN
MATERIAL: ALUMINUM
FINISH: KYNAR
PATTERN: A04 (ROTATED 90 DEGREES)
COLOR: TBD

HOLLOW METAL DOORS AND FRAMES
B.O.D.: STEELCRAFT
FINISH: SEE INTERIOR PAINTING

ALUMINUM FRAMED ENTRANCES AND STOREFRONTS (TYPE 1)
B.O.D.: KAWNEER
FINISH: PVDF (PERMAFLUOR)
COLOR: BLACK

ALUMINUM FRAMED ENTRANCES AND STOREFRONTS (TYPE 2)
B.O.D.: KAWNEER
FINISH: ANODIZE
COLOR: BLACK #29 AA-M10C21A44

GLAZING - TYPE 1
B.O.D.: VITRO ARCH. GLASS
PRODUCT: SOLARBAN 70

GLAZING - TYPE 2
B.O.D.: VITRO ARCH. GLASS
PRODUCT: STARPHIRE

WALL COVERINGS
B.O.D.: KOROSEAL
PRODUCT: WALLTALKERS
TYPE: PROJECTABLE MAG-RITE

TACKABLE WALL COVERINGS
B.O.D.: KOROSEAL
PRODUCT: WALLTALKERS
TYPE: TAC-WALL
COLOR: 86 ACORN

ROLLER WINDOW SHADES
B.O.D.: MECHOSHADE
FINISH: WHITE 0891
OPENNESS FACTOR: 0-1%

STAINLESS STEEL TOILET COMPARTMENTS
B.O.D.: HADRIAN
FINISH: EMBOSSED STAINLESS STEEL

MANUFACTURER WOOD-VENEER-FACED CASEWORK
COLOR: TBD

PLASTIC-LAMINATE-CLAD COUNTERTOPS
B.O.D.: WILSONART
PATTERN: 5014K-19 BATTLESHIP
FINISH: #19 LENO WEAVE - PREMIUM

EXTERIOR PAINTING - TYPE 1
B.O.D.: KELLY-MOORE PAINTS
COLOR: TBD
SHEEN: SEMI-GLOSS

EXTERIOR PAINTING - TYPE 2
B.O.D.: KELLY-MOORE PAINTS
COLOR: TBD
SHEEN: EGGSHELL

INTERIOR PAINTING - TYPE 1
B.O.D.: KELLY-MOORE PAINTS
COLOR: TBD
SHEEN: SEMI-GLOSS

INTERIOR PAINTING - TYPE 2
B.O.D.: KELLY-MOORE PAINTS
COLOR: TBD
SHEEN: EGGSHELL

METAL ROOF COATING
B.O.D.: GACO

LEGEND

- CARPET TILE
- LVT
- 2" HEXAGON CERAMIC TILE

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	10/06/2023	ADDENDUM 01

PROJECT NO.: **21095.01**

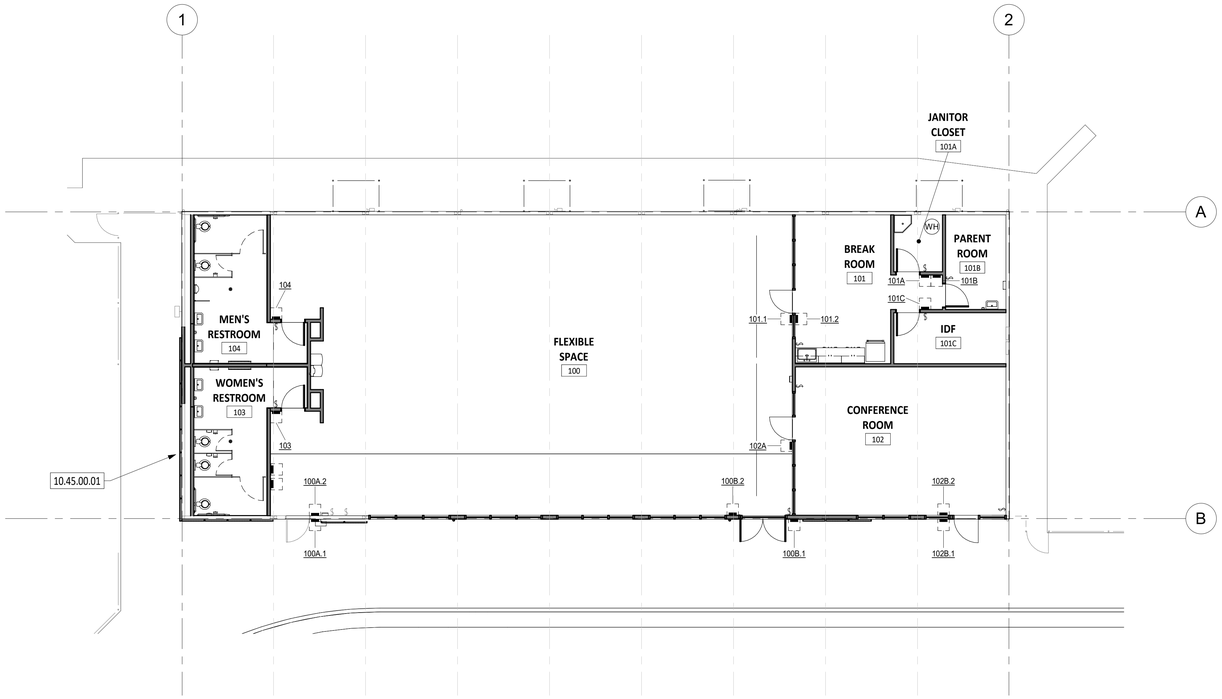
SHEET TITLE:

FINISH SCHEDULE & PLAN

SHEET NO.:

A-651

10/6/2023 1:33:28 PM



SIGNAGE PLAN (1)

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

N

SHEET NOTES

1. SEE SHEET G-001 FOR SHEET INDEX, ETC.
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY WORK.

SIGNAGE SCHEDULE

MARK	ROOM ID NUMBER	DETAIL	COMMENTS
100A.1	SECONDARY ENTRANCE	2/A-550	
101.1	BREAK ROOM	2/A-550	
101A	STORAGE	2/A-550	
101B	PARENT ROOM	2/A-550	
101C	IDF	2/A-550	
102A	CONFERENCE ROOM	2/A-550	
102B.1	CONFERENCE ROOM	2/A-550	
103	WOMENS	1, 13, 14/A-550	
104	MENS	1, 13, 14/A-550	
9			
ACCESSIBLE BUILDING ENTRANCE SIGN			
100B.1	MAIN ENTRANCE	2/A-550	
1			
TACTILE EXIT ROUTE SIGN			
100A.2	N/A	8/A-550	
101.2	N/A	8/A-550	
2			
TACTILE EXIT SIGN			
100B.2	N/A	3/A-550	
102B.2	N/A	3/A-550	
4			

GENERAL SIGNAGE NOTES

11B-703.2 RAISED CHARACTERS. RAISED CHARACTERS SHALL COMPLY WITH SECTION 11B-703.2 AND SHALL BE DUPLICATED IN BRAILLE COMPLYING WITH SECTION 11B-703.3. RAISED CHARACTERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 11B-703.4.

11B-703.2.1 DEPTH. RAISED CHARACTERS SHALL BE 1/32" INCH (0.8 MM) MINIMUM ABOVE THEIR BACKGROUND.

11B-703.2.2 CASE. CHARACTERS SHALL BE UPPERCASE.

11B-703.2.3 STYLE. CHARACTERS SHALL BE SANS SERIF. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

11B-703.2.4 CHARACTER PROPORTIONS. CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".

11B-703.2.5 CHARACTER HEIGHT. CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8 INCH (15.9 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I".

11B-703.2.6 STROKE THICKNESS. STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

11B-703.2.7 CHARACTER SPACING. CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8 INCH (3.2 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16 INCH (1.6 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8 INCH (3.2 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH (9.5 MM) MINIMUM.

11B-703.2.8 LINE SPACING. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT.

11B-703.2.9 FORMAT. TEXT SHALL BE IN A HORIZONTAL FORMAT.

11B-703.3 BRAILLE. BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4.

11B-703.3.1 DIMENSIONS AND CAPITALIZATION. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE IIB-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.

11B-703.3.2 POSITION. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTILINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH (9.5 MM) MINIMUM AND 1/2 INCH (12.7 MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH (9.5 MM) MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

11B-703.4 INSTALLATION HEIGHT AND LOCATION. SIGNS WITH TACTILE CHARACTERS SHALL COMPLY WITH SECTION 11B-703.4.

11B-703.4.1 HEIGHT ABOVE FINISH FLOOR OR GROUND. TACTILE CHARACTERS OR SIGNS SHALL BE LOCATED 48 INCHES (1219) MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60 INCHES (1524 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.

11B-703.4.2 LOCATION. WHERE A TACTILE SIGN IS PRO VIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (457 MM) MINIMUM BY 18 INCHES (457 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHERE PROVIDED, SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL BE LOCATED AT THE ENTRANCE TO, AND OUTSIDE OF THE ROOM OR SPACE. WHERE PROVIDED, SIGNS IDENTIFYING EXITS SHALL BE LOCATED AT THE EXIT DOOR WHEN APPROACHED IN THE DIRECTION OF EGRESS TRAVEL.

EXCEPTION: IN ALTERATIONS WHERE SIGN INSTALLATION LOCATIONS IDENTIFIED IN SECTION 11B-703.4.2 ARE OBSTRUCTED OR OTHERWISE UNAVAILABLE FOR SIGN INSTALLATION, SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.

LEGEND

SIGNAGE W/ 18"x18" CLEAR FLOOR OR GROUND SPACE CENTERED ON TACTILE CHARACTERS BEYOND THE ARC OF ANY DOOR SWING.

(E) SIGNAGE TO REMIAN

XXXX SIGNAGE TAG (SEE SIGN SCHED.)

AUTHORITY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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YISAN TAI
No. C-29766
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANT STAMP

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PROJECT NAME:

EMUHSD PARENT DEVELOPMENT CENTER IMPROVEMENTS

1001 DURFEE AVE
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MARK	DATE	DESCRIPTION
	~~07/15/22~~	~~DESIGN DEVELOPMENT~~
	12/07/2022	DSA SUBMITTAL
	05/08/2023	DSA RESUBMITTAL
	08/23/2023	DSA APPROVED

PROJECT NO.: **21095.01**

SHEET TITLE:

SIGNAGE SCHEDULE, PLAN, & TYPES

SHEET NO.:

A-681

5/9/2023 1:55:08 PM

GENERAL REQUIREMENTS

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, PROJECT BOUNDARIES AND EXISTING CONDITIONS AT THE SITE PRIOR TO COMMENCEMENT OF WORK AND IMMEDIATELY NOTIFY STRUCTURAL ENGINEER OF RECORD (SEOR) AND ARCHITECT OF RECORD (AOR) OF ANY DISCREPANCY. THE CONTRACTOR SHALL CHECK DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON OTHER CONTRACT DOCUMENTS.

2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STRUCTURAL ENGINEER OF RECORD (SEOR) OF ANY CONFLICTS BETWEEN THE STRUCTURAL DRAWINGS AND OTHER CONSTRUCTION DOCUMENTS OR EXISTING CONDITIONS NOT SHOWN OR DIFFERENT FROM THOSE SHOWN ON CONTRACT DOCUMENT PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL NOT ORDER MATERIAL, FABRICATE ELEMENTS, OR CONSTRUCT ANY PORTION OF STRUCTURE THAT IS IN CONFLICT UNTIL RESOLUTION IS MADE. IN THE EVENT OF CONFLICTS, INCONSISTENCIES AND DISCREPANCIES BETWEEN OR AMONG THE CONTRACT DOCUMENTS THE AOR/SEOR DECIDE WHICH OF THE CONFLICTING REQUIREMENTS WILL GOVERN BASED UPON THE MOST STRINGENT OF THE REQUIREMENTS. THE CONTRACTOR SHALL PERFORM THE WORK CONSISTENT WITH THE AOR/SEOR'S DECISION WITHOUT ADJUSTMENT OF THE CONTRACT SUM OR CONTRACT TIME.

3. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED BY CONTRACTOR AGAINST ARCHITECTURAL DIMENSIONS. WHERE DIMENSIONS ARE UNCLEAR OR OMITTED, REQUEST CLARIFICATION FROM THE STRUCTURAL ENGINEER OF RECORD (SEOR) AND ARCHITECT OF RECORD (AOR). DO NOT SCALE DRAWINGS. UNLESS NOTED OTHERWISE, PLAN DIMENSIONS INDICATE CENTERLINE OF BEAMS AND COLUMNS, LIGHT-FRAMED WALLS ARE DIMENSIONED TO FACE OF STUDS, AND FOOTINGS ARE CENTERED UNDER THE ELEMENTS THEY SUPPORT. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE FIELD VERIFY BY THE CONTRACTOR PRIOR TO START OF WORK.

4. PROJECT SPECIFICATIONS SHALL BE A PART OF THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN GENERAL NOTES, PLANS, DETAILS AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN. SPECIFIC NOTES AND DETAILS ON DRAWINGS GOVERN OVER GENERAL NOTES AND TYPICAL DETAILS. NOTIFY THE ARCHITECT OF RECORD (AOR) AND ENGINEER OF RECORD (SEOR) IMMEDIATELY WHERE CONFLICT OCCURS BETWEEN DRAWINGS AND SPECIFICATIONS.

5. REFER TO THE TYPICAL DETAIL SHEETS FOR TYPICAL CONSTRUCTION DETAILS. TYPICAL DETAILS APPLY TO ALL CONSTRUCTION DOCUMENTS AND MAY NOT BE SPECIFICALLY REFERENCE THEREIN. UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE, CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THESE TYPICAL DETAILS PRIOR TO COMMENCEMENT OF WORK. WHERE CONDITIONS REQUIRE MODIFICATIONS OF A TYPICAL DETAIL, THE CONTRACTOR SHALL SUBMIT MODIFIED DETAIL FOR APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD (SEOR) PRIOR TO FABRICATION AND INSTALLATION. DETAIL OF CONSTRUCTION NOT SHOWN SHALL BE OF SAME NATURE AS THOSE SHOWN FOR SIMILAR CONSTRUCTION.

6. THESE DOCUMENTS SHALL NOT BE CONSTRUED AS STAND-ALONE DOCUMENTS. CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONSULTANTS WORK.

7. MODIFICATIONS AND SUBSTITUTION REQUESTS FOR MATERIALS SPECIFIED ON STRUCTURAL DRAWINGS MUST BE ACCEPTED IN WRITING BY SEOR PRIOR TO PROCEEDING WITH WORK. CURRENT EVALUATION REPORTS AND PRODUCT INFORMATION SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER DEMONSTRATING THE REQUIRED CAPACITY AND PERFORMANCE OF THE MATERIAL TO BE SUBSTITUTED.

8. CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION OR NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN OF TEMPORARY ERECTION AIDS, FORMWORK, SCAFFOLDING, SAFETY MEASURES, SHORING OF ANY PORTION OF WORK DUE TO CONSTRUCTION EQUIPMENT, MACHINERY AND MATERIALS, AND PROTECTION OF ADJACENT PROPERTIES. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. VISITS TO THE SITE BY THE STRUCTURAL ENGINEER OF RECORD (SEOR) AND ARCHITECT OF RECORD (AOR) SHALL NOT CONSTITUTE ACCEPTANCE OF CONSTRUCTION MEANS AND METHODS AND DO NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE ABOVE. CONSTRUCTION MATERIALS AND ERECTION LOADS SHALL BE DISTRIBUTED WHEN PLACED ON THE STRUCTURE SUCH THAT THEY DO NOT EXCEED DESIGN LIVE LOADS OR RESULT IN AN UNBALANCED CONDITION. CONSTRUCTION LOADS ON ELEVATED SLABS SHALL NOT RESULT IN EXCESSIVE SHORT-TERM OR LONG-TERN DEFLECTIONS.

9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. THE SEOR AND THE OWNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE.

10. ALL STRUCTURAL FRAMING SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND LEFT IN PLACE UNTIL ADEQUATE STRUCTURE IS CONSTRUCTED FOR STABILITY.

11. MAXIMUM PERMANENT EQUIPMENT WEIGHTS, POSTED LOAD LIMITS OR OTHER RESTRICTIONS NOTED ON THE STRUCTURAL DRAWINGS SHALL NOT BE EXCEEDED WITHOUT PRIOR WRITTEN APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD (SEOR). UNLESS SPECIFICALLY STATED, THE STRUCTURE IS NOT DESIGNED TO SUPPORT TRAFFIC FROM FORK LIFTS, CRANES OR OTHER HEAVY CONSTRUCTION VEHICLES. ADEQUACY OF THE STRUCTURE TO SUPPORT TEMPORARY LOADS DURING CONSTRUCTION SHALL BE VERIFIED BY A LICENSED SHORING ENGINEERS RETAINED BY CONTRACTOR. SHORING SYSTEM SHALL BE DESIGNED AS A COMPLETE SYSTEM THAT INCLUDES BUT NOT LIMITED TO GRAVITY LOADS AND LATERAL LOADS.

12. THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION IF THE STRUCTURAL ENGINEER'S SEAL AND SIGNATURE IS NOT AFFIXED TO THESE DRAWINGS.

13. CONTRACTOR IS TO ESTABLISH AND VERIFY OPENINGS AND INSERTS FOR ITEMS TO BE INSTALLED BY OTHER TRADES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND CONSTRUCTION. PENETRATION THROUGH SLABS AND WALLS SHALL BE ADEQUATELY IDENTIFIED BY CONTRACTOR AND SUBMITTED TO STRUCTURAL ENGINEER OF RECORD (SEOR) FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF CONCRETE OR CMU. CORE DRILLING SHALL ONLY BE PERMITTED WHERE AUTHORIZED IN WRITING BY SEOR PRIOR TO PROCEEDING WITH THE WORK. CORE DRILLS SHALL NOT CUT ANY REINFORCING, UNLESS PERMITTED BY SEOR IN WRITING. THE CONTRACTOR IS TO COORDINATE WORK OF ALL TRADES TO ENSURE COMPLIANCE. ALL CORE DRILLS ARE TO BE PRESENTED TO THE INSPECTOR OF RECORD (IOR) FOR VERIFICATION. THE IOR IS TO DOCUMENT CORES EXAMINED INDICATING AN ABSENCE OF REINFORCING.

14. STRUCTURAL DRAWINGS INDICATE THE APPROXIMATE LOCATION OF EQUIPMENT AND THEIR SECONDARY FRAMING SUPPORTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK BETWEEN SUBCONTRACTORS IN ORDER TO PROVIDE NECESSARY DIMENSIONS IN A TIMELY MANNER TO ALL PARTIES INVOLVED.

15. SEE MECHANICAL, ELECTRICAL, AND PLUMBING (MEP) DRAWINGS FOR SIZE AND LOCATION OF EQUIPMENT PADS, EQUIPMENT ANCHORAGE TO STRUCTURE, AND EQUIPMENT WEIGHTS; ANCHORAGE OF DUCTWORK, PIPING, ELECTRICAL CONDUITS TO STRUCTURE; ELECTRICAL CONDUIT RUNS, OUTLETS AND BOXES IN CONCRETE SLABS AND WALLS; PIPE SLEEVES, TRENCHES, AND OPENINGS THROUGH WALLS AND SLABS FOR DUCTWORK, PIPE RUNS, AND ELECTRICAL CONDUIT RUNS. MECHANICAL, ELECTRICAL, AND PLUMBING LOADS SHALL BE SUPPORTED AS INDICATED BY TYPICAL DETAILS AND MEP DRAWINGS.

16. PROVIDE A SHIM SPACE AT HEADERS AND JAMBS TO ALLOW FOR SETTLEMENT AND MOVEMENT OF FRAMING. INSTALL WINDOWS, DOORS AND OTHER INSET ITEMS IN WALLS AFTER BUILDING LOADS ARE FULLY APPLIED.

17. STRUCTURAL JOINT DIMENSIONS SHOWN ON PLANS AND DETAILS (EXPANSION, SEISMIC, SEPARATION, ETC) INDICATE THE MINIMUM CLEAR DISTANCE REQUIRED. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. ALL PIPES, DUCTS, CONDUIT, ETC., CROSSING SUCH JOINTS SHALL HAVE FLEXIBLE LINES WITH ADEQUATE RANGE OF MOTION.

18. ALL WORK IS NEW UNLESS INDICATED AS EXISTING.

19. IN EXISTING STRUCTURE WHERE MODIFICATIONS TO AN EXISTING LOAD-BEARING WALL IS REQUIRED, PROVIDE TEMPORARY BRACING/SHORING UNTIL NEW LOAD-BEARING WALL CONSTRUCTION IS COMPLETED AND LOAD PATH IS RESTORED.

20. REFER TO THE PROJECT SPECIFICATIONS FOR SHOP DRAWING REQUIREMENTS AND SUBMITTALS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD (SEOR) PRIOR TO FABRICATION (ALLOW FOR A REVIEW DURATION OF MINIMUM 10 BUSINESS DAYS), AND SHALL CONSIST OF EITHER ELECTRONIC FILES OR TWO HARD COPIES (ONE SET FOR THE STRUCTURAL ENGINEER OF RECORD (SEOR) RECORDS AND ONE REPRODUCIBLE SET).

21. REVIEW OF SHOP DRAWINGS AND SUBMITTALS BY THE ARCHITECT OF RECORD (AOR) AND STRUCTURAL ENGINEER OF RECORD (SEOR) IS FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND DOES NOT CONSTITUTE AUTHORIZATION TO DEVIATE FROM TERMS AND CONDITIONS OF CONTRACT. THE CONTRACTOR WILL REMAIN RESPONSIBLE FOR ALL ERRORS OF DETAILING, FABRICATION, AND FOR CORRECT FITTING OF ALL STRUCTURAL MEMBERS, INCLUDING COORDINATION WITH OTHER TRADES. SHOP DRAWINGS AND SUBMITTALS DO NOT CONSTITUTE CHANGE ORDERS. ANY PROPOSED CHANGES TO THE STRUCTURAL DOCUMENTS MUST BE SUBMITTED IN WRITING AS A REQUEST FOR SUBSTITUTION TO THE ARCHITECT AND SEOR FOR APPROVAL.

22. PREPARE PROJECT-SPECIFIC SHOP DRAWINGS, TO SCALE. DO NOT BASE SHOP DRAWINGS ON REPRODUCTIONS OF THE CONTRACT DOCUMENTS.

23. LOAD-BEARING AND LATERAL-LOAD RESISTING WALLS ARE DESIGNED AS FULLY RESTRAINED AT FLOOR/ROOF LEVEL. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED TO RESIST DEAD, LIVE, LATERAL LOADS AND EQUIPMENT/CONSTRUCTION LOAD DURING CONSTRUCTION.

24. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF DOOR AND WINDOW OPENINGS IN STRUCTURAL WALLS; SIZE AND LOCATION OF FLOOR AND ROOF OPENINGS AND SLAB EDGES; SIZE AND LOCATION OF NON-BEARING CMU WALLS AND OPENINGS THEREIN; SIZE AND LOCATION OF CONCRETE CURBS, SLOPES, DEPRESSIONS, DRAINS, NON-STRUCTURAL PARTITIONS, CHANGES IN LEVEL, CHAMFERS AND REVEALS, INSERTS FOR FINISH SYSTEMS; EXTERIOR WALL SYSTEM AND LOCATION; STAIR SIZE AND LOCATION, FRAMING AND DETAILS, UNLESS DETAILED ON STRUCTURAL DRAWINGS; DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

25. SCHEDULE CONSTRUCTION OPERATIONS IN SEQUENCE REQUIRED TO OBTAIN THE BEST RESULTS, WHERE INSTALLATION OF ONE PART OF THE WORK DEPENDS ON INSTALLATION OF OTHER COMPONENTS, BEFORE OR AFTER ITS OWN INSTALLATION. COORDINATE INSTALLATION OF DIFFERENT COMPONENTS TO ENSURE MAXIMUM PERFORMANCE AND ACCESSIBILITY FOR REQUIRED MAINTENANCE, SERVICE, AND REPAIR.

STRUCTURAL DESIGN CRITERIA

1. GOVERNING CODE:
ALL WORK SHALL BE IN CONFORMANCE WITH THE CALIFORNIA BUILDING CODE 2019 EDITION (CBC 2019), INCLUDING ALL AMENDMENTS AND SUPPLEMENTS BY GOVERNING CODE AUTHORITY, AND OTHER CODES AND STANDARDS REFERENCED IN THE CONTRACT DOCUMENTS. ALL CODES AND STANDARDS REFERENCED IN CONTRACT DOCUMENTS SHALL BE THE LATEST EDITION AS NOTED BY CBC 2019, CHAPTER 35, UNO.

2. GOVERNING CODE AUTHORITY:
THE DIVISION OF THE STATE ARCHITECT (DSA) - STRUCTURAL SAFETY.

3. WIND DESIGN DATA (IN ACCORDANCE WITH REQUIREMENTS OF SECTION 1603A OF CBC 2019):

BASIC DESIGN WIND SPEED........102 MPH
WIND EXPOSURE........C
RISK CATEGORY........III
BUILDING ENCLOSURE........PARTIALLY ENCLOSED
INTERNAL PRESSURE COEFFICIENT........±0.18
EXTERIOR WIND PRESSURE (COMPONENT & CLADDING) BASED ON ZONE 5 AND:
COMPONENT TRIBUTARY AREA = 10 FT^2........35 PSF
COMPONENT TRIBUTARY AREA = 200 FT^2........24 PSF

4. EARTHQUAKE DESIGN DATA:

SITE LATITUDE........34.07165 N
SITE LONGITUDE........-118.03087 W
RISK CATEGORY........III
SEISMIC IMPORTANCE FACTOR, I_e........1.25
SITE CLASS........D
SHORT-PERIOD SITE COEFFICIENT, F_a........1.0
LONG-PERIOD SITE COEFFICIENT, F_v........1.7
MAPPED SPECTRAL RESPONSE ACCELERATION, S_S........1.842 g
MAPPED SPECTRAL RESPONSE ACCELERATION, S_1........0.668 g
DESIGN SPECTRAL RESPONSE ACCELERATION, S_{DS}........1.228 g
DESIGN SPECTRAL RESPONSE ACCELERATION, S_{D1}........0.757 g
SEISMIC DESIGN CATEGORY........D

STRUCTURAL OBSERVATIONS

1. VISUAL OBSERVATIONS WILL BE PERFORMED AT THE DISCRETION OF THE OWNER, ARCHITECT OR RECORD (AOR), STRUCTURAL ENGINEER OF RECORD (SEOR), AND AS REQUIRED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE. VISUAL OBSERVATIONS SHALL NOT BE CONSIDERED AS A SUBSTITUTE FOR THE SPECIAL INSPECTION REQUIREMENTS.

2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE STRUCTURAL ENGINEER OR RECORD (SEOR) AS TO WHEN EACH MAJOR PHASE OF CONSTRUCTION WILL BE READY FOR OBSERVATION A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT FASTENERS, ANCHORAGES, REINFORCEMENT, WELDS, CONNECTION, ETC. ARE VISIBLE FOR OBSERVATION WHEN THE STRUCTURAL ENGINEER OF RECORD (SEOR) IS ON SITE AND FOR ANY SCHEDULING DELAYS DUE TO NONCOMPLIANT ITEMS FOUND DURING THE OBSERVATION.

4. AT THE CONCLUSION OF THE WORK INCLUDED IN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVERS KNOWLEDGE, HAVE NOT BEEN RESOLVED.

5. THE FOLLOWING MAJOR PHASES OF CONSTRUCTION REQUIRE A SITE VISIT AND STRUCTURAL OBSERVATION REPORT FROM THE SEOR:

   FOUNDATION REBAR AND ANCHORS - PRIOR TO PLACEMENT OF FIRST CONCRETE POUR.

   STRUCTURAL FRAMING - AFTER ERECTION AND PRIOR TO CLOSING IN.

   ELEVATED SLABS AND REBAR - PRIOR TO PLACEMENT OF FIRST CONCRETE POUR.

   ROOF DECK WELDING - PRIOR TO INSTALLATION OF ROOFING AND CRICKETS.

   COMPLETION OF THE STRUCTURAL SYSTEM.

DEMOLITION NOTES

1. DEMOLITION WORK SHALL BE CONDUCTED IN SUCH A MANNER AS TO NOT DAMAGE EXISTING ELEMENTS THAT ARE TO REMAIN IN THE FINISHED BUILDING.

2. VERIFY EXISTING BUILDING DIMENSIONS AND ELEVATIONS. NOTIFY AOR/SEOR OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.

3. PROVIDE MEASURES NECESSARY TO PROTECT THE EXISTING STRUCTURE DURING DEMOLITION WORK. PROTECTIVE MEASURES SHALL REMAIN IN PLACE UNTIL THE FINAL STRUCTURAL ELEMENTS ARE IN PLACE AND ABLE TO SAFELY CARRY ALL IMPOSED EXISTING BUILDING LOADS. SUCH MEASURES INCLUDE, BUT NOT LIMITED TO, BRACING AND SHORING.

4. EXISTING ELEMENTS OF THE STRUCTURE THAT ARE TO REMAIN IN THE FINISHED BUILDING SHALL BE PROTECTED AS NECESSARY TO MINIMIZE DAMAGE DURING DEMOLITION WORK, ANY SUCH DAMAGE SHALL BE REPAIRED AND/OR REPLACE AT NO ADDED COST.

5. ROUGHEN EXISTING CONCRETE SURFACES AGAINST WHICH FRESH CONCRETE IS TO BE PLACED TO A FULL AMPLITUDE OF 1/4 INCH.

6. EXISTING CONCRETE ELEMENTS THAT ARE TO BE REMOVED BY CHIPPING SHALL BE STARTED WITH A 3/4 INCH DEEP SAW CUT. CORNERS SHALL BE DRILLED TO PREVENT OVER-CUTTING. EXPOSED SAW CUT LINES SHALL BE CLEAN, STRAIGHT AND SMOOTH.

7. EXISTING REINFORCING STEEL TO REMAIN SHALL BE CLEANED TO BARE METAL.

8. DEMOLISHED MATERIAL PLACE ON EXISTING FLOORS SHALL BE SPREAD OUT SUCH THAT IMPOSED LOADS DO NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING WHERE OVERLOAD IS ANTICIPATED.

REINFORCING STEEL

1. REINFORCING GRADES FOR CONCRETE OR MASONRY (UNO):
   A. ALL BARS EXCEPT THOSE TO BE WELDED........ASTM A615, GRADE 60
   B. TIES AND STIRRUPS........ASTM A615, GRADE 60
   C. ALL BARS TO BE WELDED........ASTM A706, GRADE 60

   NOTE: ALL BARS SHALL BE DEFORMED.

2. MAINTAIN SPECIFIED CONCRETE COVER FROM FACE OF CONCRETE TO EDGE OF ALL REINFORCEMENT AS FOLLOWS (UNO):

SPECIFIED CONCRETE COVER FOR CAST-IN-PLACE NON-PRESTRESSED CONCRETE MEMBERS

CONCRETE EXPOSURE	MEMBER	REINFORCEMENT	SPECIFIED COVER (IN)
CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND	ALL	ALL	3
EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	ALL	NO. 6 THROUGH NO. 18 BARS	2
		NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER	1 1/2
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	SLABS, JOISTS, AND WALLS	NO. 14 AND NO.18 BARS	1 1/2
		NO. 11 BAR AND SMALLER	3/4
	BEAMS, COLUMNS, PEDESTALS, AND TENSION TIES	PRIMARY REINFORCEMENT, STIRRUPS, TIES, SPIRALS, AND HOOPS	1 1/2

3. REINFORCEMENT SHALL BE PLACED IN ACCORDANCE WITH THE LATEST EDITION OF CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE". EACH REINFORCING BAR SHALL BE WIRED TO A CROSS BAR AT A MAXIMUM SPACING OF 24"OC. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING IN POSITIONS SHOWN ON THE PLANS. DO NOT USE WOOD OR BRICK TO SUPPORT REINFORCING.

4. SPLICES IN CONTINUOUS REINFORCEMENT AS USED IN WALLS, WALL FOOTINGS, ETC., SHALL HAVE A CLASS "B" LAP (1'-6" MIN) AND THE SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN 5'-0" APART. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES. BARS MAY BE WIRED TOGETHER AT SPLICES OR LAPS EXCEPT FOR TOP REINFORCING OF BEAMS AND SLABS OR WHERE SPECIFICALLY DETAILED TO BE SEPARATED. WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM. ADJACENT WELDED WIRE FABRIC (WWF) SHEET SHALL BE LAPPED 12 INCHES MINIMUM.

5. PROVISION FOR LAP SPLICES OR DOWELS SHALL BE PROVIDED ACROSS ALL CONSTRUCTION JOINTS AND SHALL BE THE SAME GRADE, SIZE AND SPACING AS REINFORCING CONTINUING BEYOND UNLESS NOTED OTHERWISE. IN LIEU OF SPLICES OR DOWELS, THE CONTRACTOR MAY SUBMIT FOR SEOR APPROVAL THE LOCATION AND MANUFACTURER DATA OF FORMSAVERS OR COUPLERS PRIOR TO THEIR USE.

6. ALL DOWELS, ANCHOR BOLTS AND OTHER HARDWARE TO BE SET IN CONCRETE SHALL BE TIED IN PLACE PRIOR TO PLACEMENT OF CONCRETE. NO WET SETTING, STABBING, RODDING OR OTHER MOVEMENT OF EMBEDDED ITEMS SHALL BE PERFORMED DURING PLACEMENT OF CONCRETE.

7. BEND REINFORCING BARS COLD.

8. REINFORCING BARS SHALL BE KEPT CLEAN AND FREE OF RUST.

9. DOWELS BETWEEN FOOTING AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE MAIN REINFORCING UNO.

10. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN PLACE INSPECTION IS MADE.

11. CHAIRS OR SPACERS FOR REINFORCING SHALL BE PLASTIC WHEN RESTING ON EXPOSED SURFACES.

12. WHERE LONGITUDINAL REINFORCING BARS ARE PLACED IN 2 OR MORE LAYERS, BARS IN THE UPPER LAYERS SHALL BE PLACED DIRECTLY ABOVE BARS IN THE BOTTOM LAYER.

13. ALL BENDS WITHIN STIRRUPS, HOOPS, AND CROSS-TIES SHALL ENGAGE A LONGITUDINAL BAR. PROVIDE #4 SPACER BAR WHERE A LONGITUDINAL BAR IS NOT SPECIFICALLY DETAILED.

14. WELDING OF REINFORCING BARS SHALL BE ASTM A706 AND BE PERFORMED PER AMERICAN WELDING SOCIETY (AWS) D1.4 USING MATCHING FILLER MATERIALS PER AWS TABLE 7.1, MINIMUM E80XX ELECTRODES.

15. CONTRACTOR SHALL PROVIDE ALLOWANCE FOR 5 TONS OR 2% OF REINFORCING STEEL WHICHEVER IS GREATER TO BE FABRICATED AND/OR PLACED DURING THE PROGRESS OF CONSTRUCTION AS MAY BE DIRECTED BY THE AOR/SEOR. THE UNUSED PORTION SHALL BE CREDITED TO THE OWNER AT THE COMPLETION OF CONCRETE WORK.

16. THE FOLLOWING REINFORCEMENT SHALL COMPLY WITH ASTM A706:
   A. VERTICAL REINFORCEMENT AT INTERSECTIONS AND ENDS OF CONCRETE WALLS ENCLOSED IN TIES OR STIRRUPS (BOUNDARY ELEMENTS).
   B. LONGITUDINAL MOMENT FRAME BEAMS AND COLUMNS REINFORCING BARS.
   C. WELDED REINFORCING.

CAST-IN-PLACE CONCRETE

1. CONCRETE SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH THE CURRENT CBC ADOPTED EDITION OF ACI 318, ACI 301, AND PROJECT SPECIFICATIONS.

2. STRUCTURAL CONCRETE SHALL MEET THE FOLLOWING DESIGN CRITERIA UNLESS NOTED OTHERWISE:

LOCATION	MIN COMPRESSIVE STRENGTH AT 28 DAYS (f'c)	CONCRETE TYPE	MAX AGGREGATE SIZE	MAX W/C RATIO
FOUNDATIONS (UNO)	4,000 PSI	NORMAL-WEIGHT	1 1/2"	0.50
ALL OTHER STRUCTURAL CONCRETE (UNO)	3,000 PSI	NORMAL-WEIGHT	1"	0.50

3. STRUCTURAL CONCRETE SHALL CONFORM TO PROJECT SPECIFICATIONS AND FOLLOWING REQUIREMENTS:

   A. MAXIMUM DRY UNIT WEIGHT OF LIGHT-WEIGHT CONCRETE SHALL NOT EXCEED 110 ± 3 PCF. MAXIMUM DRY UNIT WEIGHT OF NORMAL-WEIGHT CONCRETE SHALL NOT EXCEED 150 ± 3 PCF.
   B. WHEN PLASTICIZER OR WATER REDUCER IS USED, MAXIMUM SLUMP SHALL BE 4" PRIOR TO ADMIXTURE AND 8" INCLUDING ADMIXTURE AT THE POINT OF DISCHARGE. IN THE ABSENCE OF PLASTICIZER AND WATER REDUCER, SLUMP AT THE POINT OF DISCHARGE SHALL NOT EXCEED 4" IN FLATWORK AND 5" ELSEWHERE.
   C. WATER-CEMENT (W/C) RATIO INDICATES WATER TO CEMENTITIOUS MATERIALS RATIO.THE MAXIMUM WATER-CEMENT (W/C) RATIO FOR SLABS ON GRADE AND ALL OTHER SLABS RECEIVING ADHERED FLOORING FINISHES SENSITIVE TO MOISTURE SHALL NOT EXCEED 0.45, WATER-CEMENT (W/C) RATIO FOR CONCRETE ON METAL DECK WITH VENTED FLUTES MAY BE 0.50. CURING COMPOUNDS USED ON CONCRETE THAT IS TO RECEIVE FINISHES SHALL BE COMPATIBLE WITH TILE AND ADHESIVES OR GROUTS IN ACCORDANCE WITH MANUFACTURER'S DATA.
   D. SLABS ON GRADE, TOPPING SLABS, AND ELEVATED CONCRETE FLOORS (INCLUDING CONCRETE ON METAL DECK) SHALL HAVE A MAXIMUM SHRINKAGE RATE OF 0.045% AT 28 DAYS PER ASTM C 157. SUBMIT SHRINKAGE TEST RESULTS AS PART OF CONCRETE MIX DESIGN FOR REVIEW AND APPROVAL BY SEOR.
   E. MAXIMUM AGGREGATE SIZE SHALL BE AS NOTED IN TABLE ABOVE, BUT NOT LARGER THAN LEAST OF ONE-FIFTH THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS, ONE-THIRD THE DEPTH OF SLAB, AND THREE-FOURTH THE MINIMUM SPECIFIED CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR TENDONS.
   F. AGGREGATE GRADATION OF 3/8" MAXIMUM (PEA GRAVEL) SHALL NOT BE USED WHERE FINISHED CONCRETE SURFACE IS EXPOSED TO VIEW.
   G. ALL CONCRETE ARE ASSIGNED TO EXPOSURE CLASSES F0, S0, P0 AND C0 AS DEFINED IN TABLE 19.3.1.1 OF ACI 318, UNLESS NOTED OTHERWISE. FOR CONCRETE IN CONTACT WITH GROUND, EXPOSURE CLASS S1 SHALL BE ASSIGNED.

4. CONCRETE MIX PROPORTIONING SHALL BE BASED ON FIELD DATA AND/OR LABORATORY TRIAL MIXES AS REQUIRED BY CBC, ACI 318, ACI 214R AND ACI 301. THE CONCRETE SHALL BE WORKABLE AND MEET DURABILITY AND STRENGTH REQUIREMENT OF THE CODE. SUBMIT CONCRETE MIX PROPORTIONING DATA INCLUDING HISTORICAL STRENGTH RECORDS AND/OR LABORATORY TRIAL MIXES FOR EACH TYPE AND COMPRESSIVE STRENGTH PREPARED, SIGNED AND SEALED BY A CALIFORNIA LICENSED CIVIL OR STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL BY AOR/SEOR AND DSA'S LABORATORY ACCEPTANCE PROGRAM (LEA) PRIOR TO CONCRETE PLACEMENT.

5. AGGREGATES IN NORMAL-WEIGHT CONCRETE SHALL BE HARD ROCK AND CONFORM TO ASTM C33. AGGREGATES IN LIGHT-WEIGHT CONCRETE SHALL BE EXPANDED SHALE AND CONFORM TO ASTM C330.

6. PORTLAND CEMENT SHALL BE TYPE I/II AND SHALL CONFORM TO ASTM C150, LOW ALKALI. MILL TESTS WITH CERTIFICATES OF COMPLIANCE SHALL BE SUBMITTED.

7. FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618 CLASS F MAY BE USED AS A PARTIAL SUBSTITUTION FOR PORTLAND CEMENT UP TO A MAXIMUM OF 25% TOTAL CEMENTITIOUS MATERIALS BY WEIGHT IF THE MIX DESIGN IS PROPORTIONED BY FIELD EXPERIENCE OR TRIAL MIXTURES.

8. READY-MIXED CONCRETE SHALL BE BATCHED, MIXED AND DELIVERED IN CONFORMANCE WITH ASTM C94.

   A. ADMIXTURES SHALL CONFORM WITH THE FOLLOWING REQUIREMENTS: WATER REDUCER AND SETTING TIME MODIFICATION IN CONFORMANCE WITH ASTM C494 (TYPE F OR G) SUPERPLASTICIZER IN CONFORMANCE WITH ASTM C1017 (TYPE I OR II). AIR ENTRAINMENT IN CONFORMANCE WITH ASTM C260. INHIBITING CHLORIDE-INDUCED CORROSION IN CONFORMANCE WITH C1582.

10. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL OR CAUSE SEGREGATION OF AGGREGATES. IN SUCH CASES, HOPPERS AND VERTICAL CHUTES OR TRUNKS SHALL BE USED. CHUTES OR TRUNKS SHALL BE OF VARIABLE LENGTHS SO THAT FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED SIX FEET. A SUFFICIENT NUMBER OF CHUTES OR TRUNKS SHALL BE USED TO ENSURE THE CONCRETE IS KEPT LEVEL AT ALL TIMES.

11. CONSTRUCTION JOINTS SHALL BE CLEANED AND ROUGHENED BY REMOVING THE ENTIRE SURFACE TO EXPOSE CLEAN AGGREGATE SOLIDLY EMBEDDED IN THE MORTAR MATRIX. SEE PLANS AND DETAILS FOR LOCATION AND TYPE OF CONSTRUCTION JOINT. LOCATIONS OF ADDITIONAL CONSTRUCTION JOINTS NOT SHOWN ON THESE PLANS SHALL BE SUBMITTED TO SEOR FOR APPROVAL PRIOR TO CONCRETE PLACEMENT.

12. LEAN CONCRETE, WHERE SPECIFICALLY INDICATED, SHALL CONTAIN 2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.

13. DRYPACK OR NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI, AND CONSIST OF MASTERFLOW 713, EUCON NS GROUT, SIKA GROUT 212, OR APPROVED EQUAL. FOR THICK GROUT LAYERS FOLLOW MANUFACTURER'S GUIDELINES TO ATTAIN THE REQUIRED STRENGTH, WHICH MAY INCLUDE THE ADDITION OF PEA FINE AGGREGATES. FOR BASE PLATES LARGER THAN 6 SQUARE FEET, USE HI-FLOW GROUT OR MASTERFLOW 928.

14. DO NOT USE ANY CONCRETE OR GROUT CONTAINING CHLORIDES. WATER USED IN MIX SHALL BE CLEAN AND POTABLE.

15. PRIOR TO ERECTING ANY ELEMENTS THAT LOAD THE FOUNDATION, CONCRETE MUST REACH AN UNCONFINED COMPRESSION STRENGTH OF MINIMUM 75% f'c AS DETERMINED BY TESTING OR PREVIOUSLY DOCUMENTED DATA FOR THE MIX DESIGN USED UNDER SIMILAR CONDITIONS, AND MUST BE ALLOWED TO CURE FOR A MINIMUM OF 3 DAYS.

16. MAINTAIN CONCRETE ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT UNLESS OTHERWISE ACCEPTED BY SEOR.

17. SEE ARCHITECTURAL DRAWINGS FOR WALL OPENING SIZES AND LOCATIONS, WALL OFFSETS, CHAMFERS, KERFS, DRIPS AND FOR EXTENT OF DEPRESSIONS, RAMPS, ETC.

18. PROVIDE SLEEVES FOR ALL PIPES THROUGH CONCRETE WALLS AND FOOTINGS WHERE SHOWN ON THESE DRAWINGS. CORING IS NOT PERMITTED WITHOUT PRIOR APPROVAL BY THE SEOR.

19. EXPOSED CORNERS OF SLABS, BEAMS, WALLS, COLUMNS, ETC. SHALL BE FORMED WITH 3/4" CHAMFER OR 1/2" RADIUS TOOLED EDGE, UNO.

20. SUBMIT SHOP DRAWINGS INDICATING LOCATIONS OF CONCRETE CONSTRUCTION JOINTS TO SEOR FOR REVIEW AND APPROVAL PRIOR TO CONCRETE PLACEMENT. LOCATE CONSTRUCTION JOINTS TO MINIMIZE EFFECTS OF SHRINKAGE AND AT POINTS OF LOW STRESS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT PERMITTED IN BEAMS AND SLABS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED BY SEOR PRIOR TO CONSTRUCTION.

21. PRIOR TO PLACING CONCRETE, REINFORCING BARS (INCLUDING WELDED WIRE REINFORCEMENT), EMBEDDED PLATES, ANCHOR BOLTS, AND OTHER CONCRETE EMBEDMENTS SHALL BE WELL SECURED IN POSITION.

22. CONCRETE PLACEMENT SHALL CONFORM TO ACI 304 AND CONTRACT DOCUMENTS. INTENTIONALLY ROUGHEN ALL PREVIOUSLY HARDENED CONCRETE SURFACES TO A FULL AMPLITUDE OF 1/4-INCH AGAINST WHICH FRESH CONCRETE IS PLACE.

CURING COMPOUNDS, SEALERS, HARDENERS, ETC., USED ON CONCRETE THAT RECEIVES A FINISH SHALL BE APPROVED BY THE ARCHITECT BEFORE USE.

COLD-FORMED STEEL FRAMING

1. DESIGN, FABRICATION AND ERECTION OF COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE CURRENT CBC ADOPTED EDITION OF THE SPECIFICATIONS AND STANDARD OF THE AMERICAN IRON AND STEEL INSTITUTE (AISI), AS CONTAINED IN THE "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", INCLUDING ALL APPLICABLE AMENDMENTS.

2. ALL COLD-FORMED STEEL FRAMING SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND LEFT IN PLACE UNTIL OTHER MEANS IS PROVIDED TO ADEQUATELY BRACE THE STRUCTURE. ALL COLD-FORMED STEEL FRAMING SHALL BE BRACED AS REQUIRED BY SECTION D3 OF THE AISI SPECIFICATION.

3. COLD-FORMED STEEL GRADES (ASTM A1003):

   18 GA (43 MILS) OR THINNER........GRADE 33 (Fy = 33 KSI)
   16 GA (54 MILS) AND THICKER........GRADE 50 (Fy = 50 KSI)

4. SUBMIT COLD-FORMED STEEL FRAMING SHOP DRAWINGS AND SPECIFICATIONS TO THE SEOR AND AOR FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

5. COLD-FORMED STEEL STUDS AND TRACKS ARE TO BE ATTACHED WITH SHEET METAL SCREWS (SMS) WITH SIZES CALLED OUT ON THE DETAILS. PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN 3 EXPOSED THREADS. SCREWS ARE TO BE INSTALLED AND TIGHTENED IN ACCORDANCE WITH SCREW MANUFACTURER'S RECOMMENDATIONS. SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513, SELF-DRILLING AND TAPPING TYPE, WITH PANCAKE FRAMER HEAD TYPE FOR #10 SMS AND HEX WASHER HEAD TYPE FOR #12 AND #14 (1/4"Ø) SMS UNLESS NOTED OTHERWISE.

6. COLD-FORMED STUD MEMBERS SHALL BE UNPUNCHED WHERE USED FOR THE FOLLOWING: HEADERS AND SILLS OF OPENINGS WIDER THAN 3'-0", AND BUILT-UP BOX AND BACK-TO-BACK SECTIONS. PUNCH-OUTS SHALL BE LOCATED IN THE CENTER OF THE WEB WITH A MINIMUM SPACING OF 24"OC, HAVE A MAXIMUM WIDTH OF HALF THE MEMBER DEPTH OR 2 1/2", WHICHEVER IS LESS, AND A MAXIMUM LENGTH OF 4 1/2". THE MINIMUM DISTANCE BETWEEN THE END OF THE MEMBER AND THE NEAR EDGE OF THE PUNCH-OUT SHALL BE 12".

WELDING OF LIGHT GAGE STEEL SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.3.

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EMUHSD PDC IMPROVEMENTS

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MARK	DATE	DESCRIPTION
	12/07/22	CONSTRUCTION DOCUMENTS

PROJECT NO.: **21095.01**

SHEET TITLE:
GENERAL NOTES

SHEET NO.:
S0.1

POST-INSTALLED ANCHOR

1. POST-INSTALLED ANCHORS INCLUDE EXPANSION ANCHORS, SCREW ANCHORS, EPOXY ANCHORS/DOWELS, AND POWDER-ACTUATED FASTENERS.
2. INSTALL POST-INSTALLED ANCHORS PER MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
3. WHEN INSTALLING POWER-INSTALLED ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE REINFORCING BARS OR OTHER EMBEDDED ITEMS SUCH AS ELECTRICAL/TELECOMMUNICATIONS CONDUIT AND GAS LINES. WHEN INSTALLING DRILL-IN ANCHORS INTO PRESTRESSED CONCRETE (PRE OR POST-TENSIONED), LOCATE TENDONS DURING INSTALLATION BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR.
4. WHERE SPECIFIED ANCHOR EMBEDMENT DEPTH, SPACING OR EDGE DISTANCE CANNOT BE PROVIDED, NOTIFY THE SEOR AND IOR PRIOR TO INSTALLATION.
5. PATCH ABANDONED HOLES AND SPALLS USING NON-SHRINK GROUT AND REPAIR FINISHES AS REQUIRED. ANCHORS PENETRATING THROUGH WATER PROOFING OR VAPOR MEMBRANES SHALL BE SEALED OR FLASHED.
6. TESTING OF POST-INSTALLED ANCHORS IS REQUIRED UNO. TEST ANCHORS IN ACCORDANCE WITH THE PROVISIONS OF CBC 19010A.5 AND THE FOLLOWING:
   a. TEST 100% OF ANCHORS AT ALL STRUCTURAL APPLICATIONS UNO.
   b. TEST 50% OF ANCHORS AT ALL-NON-STRUCTURAL APPLICATIONS SUCH AS EQUIPMENT ANCHORAGE, UNO.
   c. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE NOT PREVIOUSLY TESTED UNTIL TWENTY (20 CONSECUTIVE ANCHORS PASS, THEN RESUME INITIAL TEST FREQUENCY. IF THE ANCHORS ARE USED FOR THE SUPPORT AND BRACING OF NON-STRCTURAL COMPONENTS (PIPE, DUCT, OR CONDUIT), THE TWENTY (2) SHALL BE ONLY THOSE ANCHORS INSTALLED BY THE SAME TRADE.
   d. ALL POST-INSTALLED ANCHORS ARE TO BE TENSION TESTED WITH THE EXCEPTION THAT TORQUE TESTING IS ALLOWED IF THE ANCHORS ARE SPECIFICALLY DESIGNED AS TORQUE CONTROLLED.
   e. TENSION TESTS ACCEPTANCE: APPLY PROOF TEST LOADS TO ANCHORS WITHOUT REMOVING NUT IS POSSIBLE. IF NOT, REMOVE NUT AND INSTALL A THREADED COUPLER TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TORQUE WRENCH AND APPLY LOAD. ANCHORS TESTED WITH A HYDRAULIC JACK OR SPRING LOADED DEVICES SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNIBLE MOVEMENT DURING THE TENSION TEST, E.G. AS EVIDENCED BY LOOSENING F THE WASHER UNDER THE NUT.
   f. TORQUE TESTS ACCEPTANCE: ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH MUST ATTAIN THE MANUFACTURER'S RECOMMENDED TORQUE WITHIN 1/2 TURN OF THE NUT.
   g. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
   h. FIELD TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR OR INSPECTOR OF RECORD.
   i. TESTING SHOULD OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF THE SUBJECT ANCHORS.
   j. INSPECTOR OF RECORDS SHALL REQUEST PROOF TEST VALUES FROM SEOR FOR EACH TYPE OF POST-INSTALLED ANCHORS AT LEAST 48 HOURS PRIOR TO TESTING.
7. INSTALLERS PLACING HORIZONTALLY OR UPWARDLY INCLINED ADHESIVE ANCHORS SHALL BE CERTIFIED BY ACI OR APPROVED EQUIVALENT.
8. RE-USE OF SCREW ANCHORS OR HOLES IS NOT PERMITTED.

POWER ACTUATED FASTENERS (PAF)

1. ALLOWABLE POWDER-ACTUATED FASTENERS (PAF) SHALL BE EITHER ONE OF THE FOLLOWING UNO: HILTI X-U (ICC ESR-2269), SIMPSON POWER-DRIVEN FASTENERS (ICC ESR-2138), DEWALT CSI SPIRAL DRIVE PIN (ICC ESR-2024)
2. INSTALL PER MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
3. PROVIDE 0.08" THICK x 1.1" SQUARE OR 1.425" ROUND WASHERS FOR ALL POWDER-ACTUATED FASTENERS.
4. THE MINIMUM EMBEDMENT OF PAF INTO CONCRETE SHALL BE 1" UNO.
5. THE EMBEDMENT OF PAF INTO STEEL SHALL BE THAT REQUIRED BY PAF MANUFACTURER ICC ESR REPORT.
6. TESTING OF PAF IS NOT REQUIRED.
7. MAINTAIN ALL APPLICABLE EDGE DISTANCE AT CURBS AND SLAB EDGES PER MANUFACTURER'S ICC ESR REPORT.

EXISTING CONDITIONS

1. SEE "AS-BUILT" DRAWINGS FOR EXISTING BUILDING ITEMS NOT SHOWN OR NOTED.
2. FIELD VERIFY ALL CONDITIONS & DIMENSIONS PRIOR TO SHOP DRAWING PRODUCTION AND FABRICATION OF STRUCTURAL ELEMENTS.
3. WHERE ALL OTHER EXISTING CONDITIONS VARY SIGNIFICANTLY FROM THOSE SHOWN ON THESE DRAWINGS, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUED CONSTRUCTION RELATED TO SUBJECT CONDITIONS.
4. SHORE ALL EXISTING CONSTRUCTION AS REQUIRED, INCLUDING WHERE WELDING TO EXISTING STEEL FRAMING. SHORING DESIGN BY OTHERS.
5. ALL EXISTING CONCRETE SURFACES TO BE IN CONTACT WITH NEW CONCRETE SHALL BE ROUGHENED TO 1/4" MINIMUM AMPLITUDE. USE ICC APPROVED BONDING AGENT ON EXISTING CONCRETE PRIOR TO PLACING NEW CONCRETE.
6. VERIFY LOCATION OF EXISTING REBAR BEFORE FABRICATION USING NON-DESTRUCTIVE TESTING. EXISTING REINFORCING SHALL BE AVOIDED WHERE DRILLING FOR POST-INSTALLED ANCHORS OR CONCRETE DOWELS.
7. THE GENERAL CONTRACTOR SHALL COORDINATE THE WEIGHT AND SPECIFIC LOCATION OF ALL MECHANICAL EQUIPMENT WITH THE STRUCTURAL FRAMING. IF THE EQUIPMENT DEVIATES IN WEIGHT OR LOCATION FROM THOSE INDICATED IN THE DRAWINGS, THE STRUCTURAL ENGINEER'S APPROVAL MUST BE OBTAINED PRIOR TO INSTALLATION OF THE UNITS.
8. ALL EXISTING WOOD FRAMING MEMBERS SUPPORTING NEW MECHANICAL UNITS SHALL BE INSPECTED FOR DAMAGE AND DETERIORATION PRIOR TO INSTALLATION OF THE UNITS. NOTIFY THE STRUCTURAL ENGINEER IF DAMAGE OR DETERIORATION IS DISCOVERED.
9. ALL EXISTING (E) WOOD ELEMENTS TO REMAIN SHALL BE FIELD INSPECTED DURING CONSTRUCTION AND TREATED FOR DRYROT REMOVAL / CONTROL. WHERE EXISTING GLUE LAMINATED TIMBER BEAMS TO REMAIN ARE FOUND TO HAVE EXTENSIVE DRYROT DEEPER THAN THE TOP TWO LAMINATIONS (3"), THE STRUCTURAL ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUED CONSTRUCTION RELATED TO SUBJECT GLUE LAMINATED TIMBER BEAMS .
10. ALL EXISTING CONNECTIONS AT ELEMENTS TO BE REPLACED SHALL BE REPLACED OR RE-ATTACHED TO MATCH EXISTING CONDITIONS.
11. SEE PROJECT REPORTS AND ARCHITECTURAL DRAWINGS FOR HAZARDOUS MATERIALS (LEAD, ASBESTOS, ETC.) ABATEMENT REQUIREMENTS.
12. DO NOT CUT OR DAMAGE EXISTING CONCRETE OR MASONRY REINFORCEMENT EXCEPT AS CLEARLY INDICATED ON STRUCTURAL DRAWINGS. MAINTAIN AT LEAST 2 INCHES CLEAR TO EXISTING REINFORCEMENT, CONDUIT AND OTHER EMBEDDED ITEMS FROM CUTS, CORES, DRILL HOLES, SHOTPINS, ETC. IN AREAS OF WORK, MARK LOCATIONS OF SUCH ITEMS USING NONDESTRUCTIVE METHODS SUCH AS GROUND PENETRATING RADAR OR X-RAY.

REPAIR OF CONCRETE CRACKS

1. THE CONTRACTOR OR HIS SUB-CONTRACTOR SHALL FURNISH ALL MATERIALS, TOOLS, EQUIPMENT, APPLIANCES, TRANSPORTATION, LABOR AND SUPERVISION REQUIRED TO REPAIR CRACKS BY THE INJECTION OF AN EPOXY RESIN ADHESIVE.
2. REPAIR EXPOSED CRACKS WHOSE WIDTHS EXCEED 0.030 INCHES IN AREAS DESIGNATED ON THESE DRAWINGS.
3. APPLICATOR'S QUALIFICATIONS. EPOXY INJECTION SHALL BE PERFORMED BY A CERTIFIED APPLICATOR OF THE STRUCTURAL CONCRETE BONDING PROCESS AND HAVE A MINIMUM OF FIVE YEARS EXPERIENCE IN EPOXY INJECTION WORK.
4. EPOXY RESIN ADHESIVE FOR INJECTION: ADHESIVE SHALL BE "SIKADUR 35, HI-MOD LV; SIKADUR 52; OR SIKADUR INJECTION GEL" OR APPROVED EQUAL. USE TYPE SPECIFIED BY THE MANUFACTURER FOR EACH CONDITION.
5. THE SURFACE SEAL MATERIAL IS THAT MATERIAL USED TO CONFINE THE INJECTION ADHESIVE IN THE FISSURE DURING INJECTION AND CURE. THE SURFACE SEAL MATERIAL SHALL HAVE ADEQUATE STRENGTH TO HOLD INJECTION FITTINGS FIRMLY IN PLACE AND TO RESIST INJECTION PRESSURES ADEQUATELY TO PREVENT LEAKAGE DURING INJECTION.
6. THE EQUIPMENT USED TO METER AND MIX THE TWO INJECTION ADHESIVE COMPONENTS AND INJECT THE MIXED ADHESIVE INTO THE CRACK SHALL BE PORTABLE. POSITIVE DISPLACEMENT TYPE PUMPS WITH INTERLOCK TO PROVIDE POSITIVE RATIO CONTROL OF EXACT PROPORTIONS OF THE TWO COMPONENTS AT THE NOZZLE. THE PUMPS SHALL BE ELECTRIC OR AIR POWERED AND SHALL PROVIDE IN-LINE METERING AND MIXING.
7. DISCHARGE PRESSURE. THE INJECTION EQUIPMENT SHALL HAVE AUTOMATIC PRESSURE CONTROL CAPABLE OF DISCHARGING THE MIXED ADHESIVE AT ANY PRE-SET PRESSURE UP TO 200 PSI PLUS/MINUS 5 PSI AND SHALL BE EQUIPPED WITH A MANUAL PRESSURE CONTROL OVERRIDE.
8. THE EQUIPMENT SHALL HAVE THE CAPABILITY OF MAINTAINING THE VOLUME RATIO FOR THE INJECTION ADHESIVE PRESCRIBED BY THE MANUFACTURER OF THE ADHESIVE WITHIN A TOLERANCE OF PLUS OR MINUS 5 PERCENT BY VOLUME AT ANY DISCHARGE PRESSURE UP TO 200 PSI.
9. THE INJECTION EQUIPMENT SHALL BE EQUIPPED WITH SENSORS ON BOTH THE COMPONENT A AND B RESERVOIRS THAT WILL AUTOMATICALLY STOP THE MACHINE WHEN ONLY ONE COMPONENT IS BEING PUMPED TO THE MIXING HEAD.
10. SURFACES ADJACENT TO CRACKS OR OTHER AREAS OF APPLICATION SHALL BE CLEANED OF DIRT, DUST, GREASE, OIL, EFFLORESCENCE OR OTHER FOREIGN MATTER DETRIMENTAL TO BOND OF EPOXY INJECTION SURFACE SEAL SYSTEM. ACIDS AND CORROSIVES SHALL NOT BE PERMITTED.
11. ENTRY PORTS SHALL BE PROVIDED ALONG THE CRACK AT INTERVALS OF NOT LESS THAN THE THICKNESS OF THE CONCRETE AT THAT LOCATION. SURFACE SEAL MATERIAL SHALL BE APPLIED TO THE FACE OF THE CRACK BETWEEN THE ENTRY PORTS. FOR THROUGH CRACKS, SURFACE SEAL SHALL BE APPLIED TO BOTH FACES. ENOUGH TIME FOR THE SURFACE SEAL MATERIAL TO GAIN ADEQUATE STRENGTH SHALL PASS BEFORE PROCEEDING WITH THE INJECTION.
12. INJECTION OF EPOXY ADHESIVE SHALL BEGIN AT LOWER ENTRY PORT AND CONTINUE UNTIL THERE IS AN APPEARANCE OF EPOXY ADHESIVE AT THE NEXT ENTRY PORT ADJACENT TO THE ENTRY PORT BEING PUMPED.
13. WHEN EPOXY ADHESIVE TRAVEL IS INDICATED BY APPEARANCE AT THE NEXT ADJACENT PORT, INJECTION SHALL BE DISCONTINUED ON THE ENTRY PORT BEING PUMPED, AND EPOXY INJECTION SHALL BE TRANSFERRED TO NEXT ADJACENT PORT WHERE EPOXY ADHESIVE HAS APPEARED.
14. PERFORM EPOXY ADHESIVE INJECTION CONTINUOUSLY UNTIL CRACKS ARE COMPLETELY FILLED.
15. IF PORT TO PORT TRAVEL OF EPOXY ADHESIVE IS NOT INDICATED, THE WORK IMMEDIATELY SHALL BE STOPPED AND THE ENGINEER NOTIFIED.
16. WHEN CRACKS ARE COMPLETELY FILLED, EPOXY ADHESIVE SHALL BE CURED FOR SUFFICIENT TIME TO ALLOW REMOVAL OF SURFACE SEAL WITHOUT ANY DRAINING OR RUNBACK OF EPOXY MATERIAL FROM CRACKS.
17. SURFACE SEAL MATERIAL AND INJECTION ADHESIVE RUNS OR SPILLS SHALL BE REMOVED FROM CONCRETE SURFACES.
18. THE FACE OF THE CRACK SHALL BE FINISHED FLUSH TO THE ADJACENT CONCRETE SHOWING NO INDENTATIONS OR PROTRUSIONS CAUSED BY THE PLACEMENT OF ENTRY PORTS

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B&J PROJECT #: S22-0046

CONSULTANT STAMP

DATE: 05/04/2023
FOR BRANDOW & JOHNSTON

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	12/07/22	CONSTRUCTION DOCUMENTS

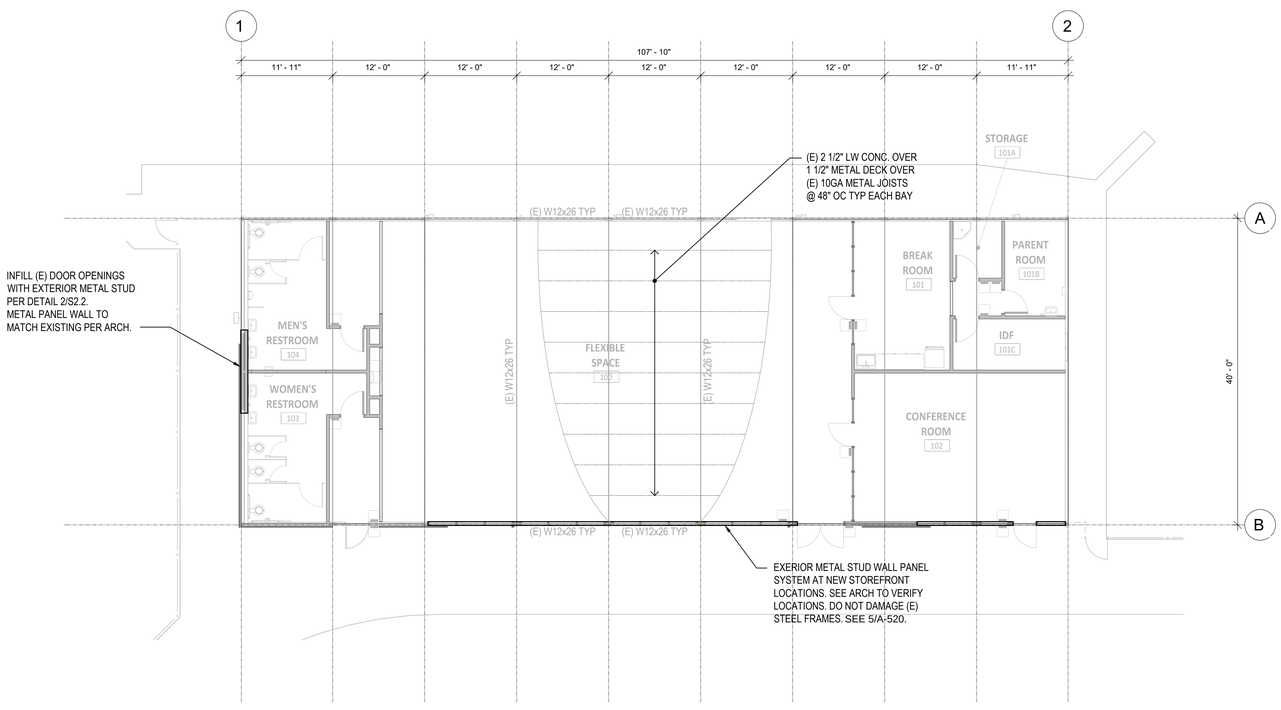
PROJECT NO.: **21095.01**

SHEET TITLE:

GENERAL NOTES

SHEET NO.:

S0.2



PLAN NOTES:

1. FOR GENERAL NOTES AND TYPICAL DETAILS, SEE S0.X AND S2.X SERIES.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO WORK. NOTIFY ENGINEER FOR ANY DEVIATIONS.
3. VERIFY ALL DIMENSIONS PRIOR TO START OF WORK, SEE ARCHITECTURAL DRAWINGS FOR REMINDER OF DIMENSIONS NOT SHOWN ON THIS PLAN.
4. SEE ARCHITECTURAL DRAWINGS FOR CONCRETE SLAB ELEVATIONS, DEPRESSIONS, SLOPES, OPENINGS, CURBS, DRAINS, TRENCHES, SLAB EDGE LOCATIONS, ETC, AND FOR WALL OVERALL DIMENSIONS, LOCATIONS, LOCATIONS OF OPENINGS, ETC, NOT INDICATED ON STRUCTURAL DRAWINGS. SEE MECHANICAL AND ELECTRICAL FOR EQUIPMENT PAD INFORMATION.
5. ALL STRUCTURAL MEMBERS ARE NEW UNLESS OTHERWISE NOTED AS (E) EXISTING. REFER TO ALL DETAILS AND KEY-NOTE DETAILS INDICATED FOR ADDITIONAL FRAMING MEMBERS THAT MAY NOT BE INDICATED IN PLAN.

STRUCTURAL FRAMING PLAN (1)

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

N

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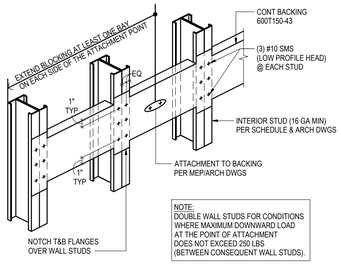
SHEET TITLE:

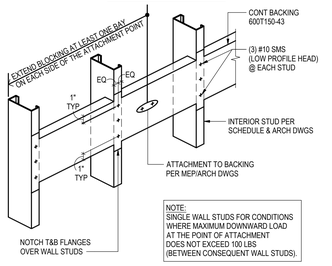
STRUCTURAL FRAMING PLAN

SHEET NO.:

S1.1



NOTCHED TRACK BLOCKING



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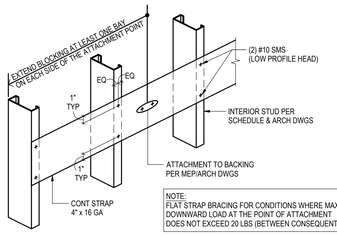
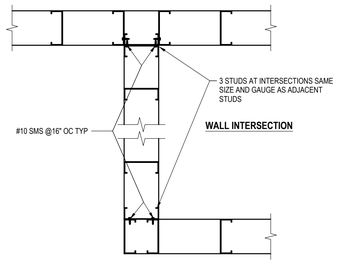


FLAT STRAP BLOCKING

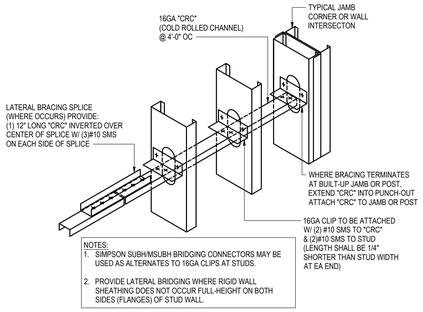
TYPICAL WALL BACKING DETAIL | 14



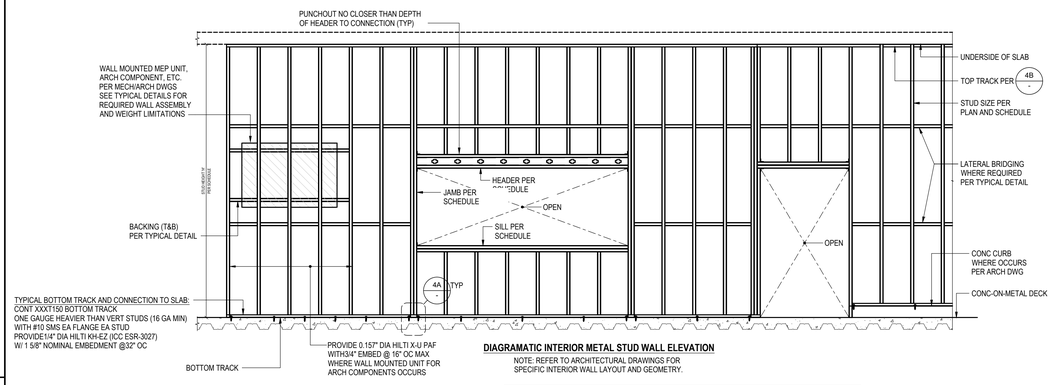
WALL INTERSECTION

WALL CORNER

TYPICAL STUD WALL INTERSECTION DETAIL | 9



TYPICAL STUD LATERAL BRIDGING DETAIL | 10



DIAGRAMATIC INTERIOR METAL STUD WALL ELEVATION

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC INTERIOR WALL LAYOUT AND GEOMETRY.

INTERIOR METAL STUD WALL SCHEDULE

STUD DEPTH	STUD DESIGNATION	MAX HEIGHT 'H'
3 5/8"	362S162-33 @ 16" OC	13'-0"

INTERIOR WALL OPENING SCHEDULE

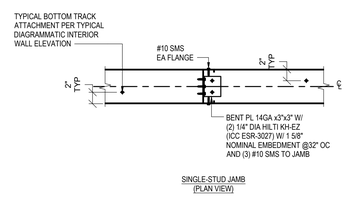
MAX STUD HEIGHT 'H'	MAXIMUM WALL OPENING WIDTH	JAMB SIZE	HEADER SIZE	SILL SIZE
13'-0"	5'-0"	SINGLE-STUD (XXXS162-54)	(1)362X250-43	XXXT150-43

NOTES:

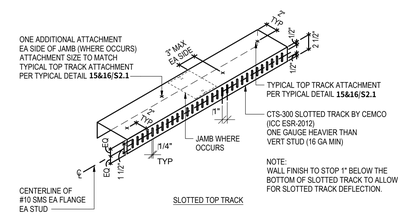
1. REFER TO S00 SERIES FOR GENERAL NOTES.
2. PROVIDE 16 GA STUDS MINIMUM WHERE EQUIPMENTS, CABINETS, ELECTRICAL PANELS, ETC ARE ATTACHED TO STUDS. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS. PROVIDE BACKING PER TYPICAL DETAIL.
3. WHERE WALLS HAVE CABINETS / CASEWORK ON BOTH SIDES, USE SPACING 12" OC WHERE 16" OC CALLED OUT.
4. TOP & BOTTOM TRACK SIZE TO MATCH WALL STUDS. TOP & BOTTOM TRACK SHALL BE 1 GAUGE HEAVIER THAN WALL STUDS.
5. AT FULL HT TRACK FOR TYPE "C" JAMB, STOP TRACK 2" FROM FLOOR AND TOP TRACK TO AVOID INTERFERENCE WITH SILL AND TOP TRACKS.
6. REFER TO ARCHITECTURAL SPECIFICATIONS AND DRAWINGS FOR WALL THICKNESSES.
7. CONTRACTOR MAY USE PRO-X HEADERS (IAPMO REPORT # 0286) AT INTERIOR NON-LOAD BEARING CONDITIONS IN LIEU OF THIS DETAIL. FOLLOW ALL REQUIREMENTS AND ATTACH TO JAMB STUDS PER ICC REPORT.
8. INTERIOR STUD WALLS ARE DESIGNED TO LIMIT STUD DEFLECTION TO L/240, WHERE L IS DEFINED AS THE STUD SPAN BETWEEN LATERALLY RESTRAINED POINTS.
9. METAL STUD SIZES ARE IDENTIFIED AS NOTED BELOW:

600 S 162 - 54

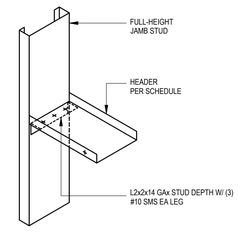
- 600 — INDICATES MEMBER DEPTH (600 / 100 = 6 INCHES)
- S — INDICATES STUD (S) OR TRACK (T) SECTION
- 162 — INDICATES FLANGE WIDTH (162 / 100 = 1 5/8")
- 54 — INDICATES SECTION THICKNESS (54 = 16GA)



A **JAMB TO BOTTOM TRACK CONNECTION**



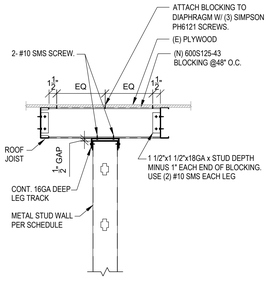
B **TOP TRACK PROFILE**



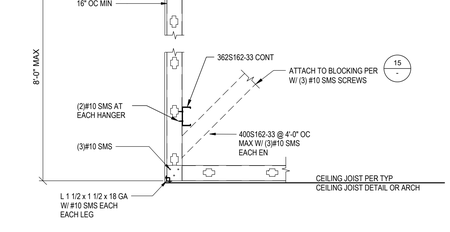
SINGLE HEADER

C **HEADER-TO-JAMB CONNECTION**

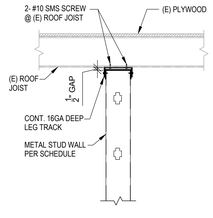
TYPICAL INTERIOR METAL STUD WALL CONSTRUCTION | 4



NON-BEARING PARTITION WALL PARALLEL TO ROOF | 15



TYPICAL TOP TRACK SPLICE DETAIL | 11



NON-BEARING PARTITION WALL PERPENDICULAT TO ROOF | 16

TYPICAL METAL STUD STUD SOFFIT BRACING DETAIL | 12

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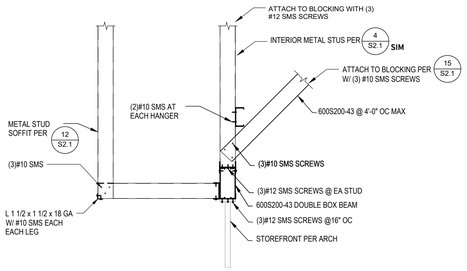
MARK	DATE	DESCRIPTION
	12/07/22	CONSTRUCTION DOCUMENTS

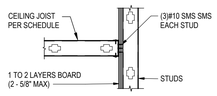
PROJECT NO.: **21095.01**

SHEET TITLE:
TYPICAL INTERIOR METAL STUD WALL DETAILS

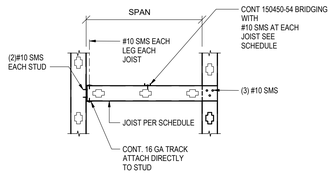
SHEET NO.:
S2.1



TYPICAL STOREFRONT BRACING DETAIL | 13



ATTACHMENT TO TYP BOARD WALL (C)



TYPICAL (A) **ALTERNATE** (B)

CEILING JOIST SCHEDULE					
SECTION	Fy (ksi)	UNSUPPORTED		MIDSPAN BRIDGING	
		MAX SPAN	SPACING	MAX SPAN	SPACING
362S162-33	33	10'-0"	16"	10'-0"	16"
362S162-43	33	10'-0"	16"	15'-0"	16"

TABLE NOTE:
1. ONE LAYER OF 5/8" GYP BOARD WEIGHS 5.0 PSF
2. CONFIRM ALLOWABLE SPANS FOR FINISHES WITH ARCHITECT

TYPICAL CEILING JOIST CONNECTION DETAIL | 10

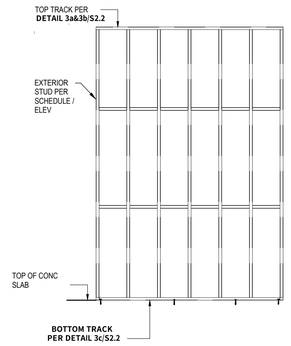
NOTES:

1. REFER TO S0.X SERIES FOR GENERAL NOTES.
2. PROVIDE MINIMUM 16 GA STUDS WHERE EQUIPMENTS, CABINETS, ELECTRICAL PANELS, ETC ARE ATTACHED TO STUDS. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS. REFER TO TYPICAL DETAILS FOR BACKING AND ADDITIONAL REQUIREMENTS AND LIMITATIONS.
3. METAL STUD SIZES ARE IDENTIFIED AS NOTED BELOW:

600 S 162 - 54

- 600: INDICATES MEMBER DEPTH (600 / 100 = 6 INCHES)
- S: INDICATES STUD (S) OR TRACK (T) SECTION
- 162: INDICATES FLANGE WIDTH (162 / 100 = 1 5/8")
- 54: INDICATES SECTION THICKNESS (54 = 16GA)

4. PROVIDE LATERAL BRIDGING WHERE RIGID WALL SHEATHING DOES NOT OCCURS FULL-HEIGHT OF BOTH SIDES OF THE STUD WALL.
5. EXTERIOR STUD WALLS ARE DESIGNED TO LIMIT STUD DEFLECTIONS TO L/360, WHERE L IS DEFINED AS THE STUD SPAN BETWEEN LATERALLY RESTRAINED POINTS.
6. JAMB SECTIONS SHALL BE UNPUNCHED STUDS.



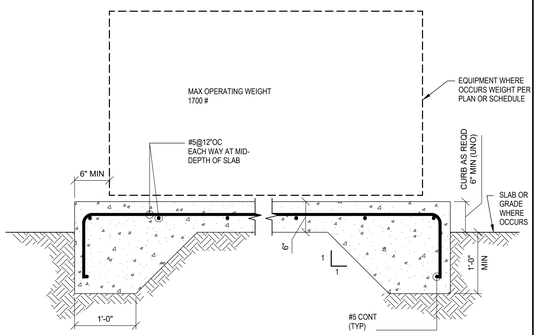
DIAGRAMATIC EXTERIOR METAL STUD WALL ELEVATION

NOTE: REFER TO BUILDING ELEVATIONS FOR SPECIFIC FRAMING LAYOUT AND MEMBER CALL OUTS.

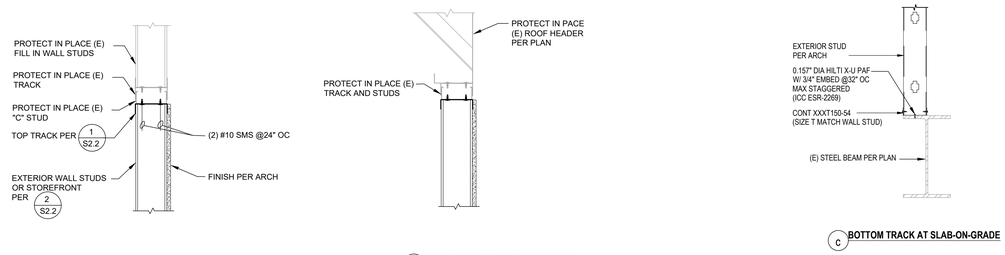
EXTERIOR WALL STUD SCHEDULE	
MEMBER TYPE	SIZE
S1	600S162-43 @ 16" OC
S2	600S162-54 @ 16" OC
J1	600S200-54
J2	(2) 600S200-54
J3	(2) 600S250-68 + (2) 600T250-68
J4	(2) 600250-68
J5	(2) 600S250-68
H1	600T200-68
H2	(2) 600S162-43 + (2) 600T150-43
H3	(2) 600S200-68 + (2) 600T200-68
H4	(2) 600S250-54 + 600T200-54 (BOTTOM) + 600T300-68 (TOP)
SL1	600T150-68
SL2	600S162-54 + 600T250-54 W/ TRACK 600T150-54

EFFECTIVE METAL STUD DESIGNATION	EFFECTIVE SECTION MODULES Sx (IN^3)	EFFECTIVE MOMENT OF INERTIA Ix (IN^4)	EFFECTIVE SECTION MODULES Sy (IN^3)	EFFECTIVE MOMENT OF INERTIA Iy (IN^4)
400S162-43	0.417	0.892	0.107	0.131
400S162-54	0.498	1.098	0.130	0.159
400T150-43	0.293	0.811	0.030	0.066
400T150-54	0.374	0.918	0.039	0.082
600S162-43	0.767	2.316	0.108	0.148
600S162-54	0.953	2.859	0.131	0.180
600S200-54	1.106	3.318	0.230	0.329
600S250-68	1.386	4.723	0.351	0.688
600S300-68	1.446	5.221	0.462	1.075
600S300-97	2.247	7.28	0.656	1.454
600S300-118	2.797	8.713	0.787	1.704
600S350-54	1.335	4.721	0.550	1.491
600T250-54	0.732	2.953	0.052	0.377
600S350-97	2.593	8.631	1.036	2.518
600T150-43	0.474	1.890	0.028	0.073
600T250-97	1.656	6.157	0.217	0.661
600T150-54	0.609	2.400	0.036	0.091
600T200-54	0.717	2.641	0.045	0.203
600S350-97	2.593	8.631	1.036	2.518

TYPICAL EXTERIOR METAL STUD SCHEDULE | 2



TYPICAL ISOLATED PAD ON GRADE | 11

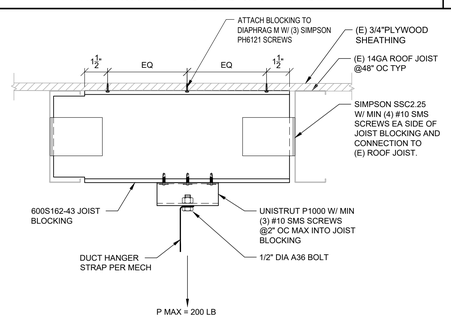


a **SLIP TRACK ATTACHED TO TRACK**

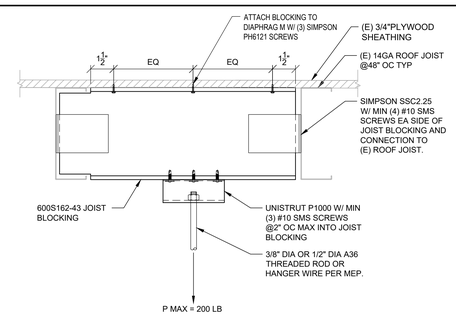
b **SLIP TRACK ATTACHED TO CHANNEL**

c **BOTTOM TRACK AT SLAB-ON-GRADE**

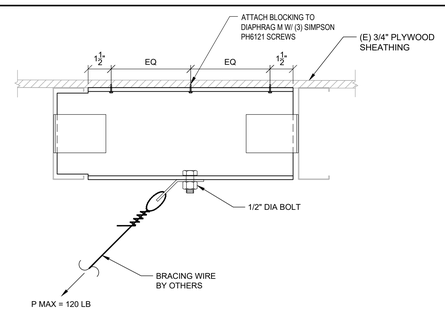
TYPICAL EXTERIOR METAL STUD WALL CONSTRUCTION | 3



DUCT HANGER SUPPORT



HANGER SUPPORT



BRACE SUPPORT

TYPICAL MECHANICAL EQUIPMENT BRACE AND HANGER DETAIL | 4

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PROJECT NAME:
EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
	12/07/22	CONSTRUCTION DOCUMENTS

PROJECT NO.: **21095.01**

SHEET TITLE:
MISC. SECTIONS AND DETAILS

SHEET NO.:
S2.2

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 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7–16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING 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.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING 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 HAVING 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 THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

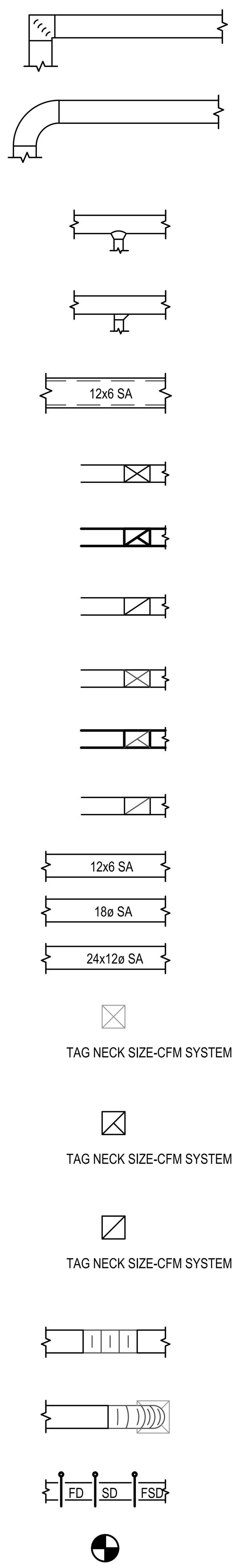
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7–16 SECTION 13.3 AS DEFINED IN ASCE 7–16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

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.

MECHANICAL DUCTS (MD) DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MECHANICAL SYMBOLS

MECHANICAL DUCTWORK AND ACCESSORIES



- DUCT ELBOW WITH TURNING VANES
- SMOOTH RADIUS DUCT ELBOW WITHOUT TURNING VANES
- CONICAL BRANCH FITTING
- 45 DEGREE BOOT LO–LOSS BRANCH FITTING
- ACOUSTICAL LINING DUCT (DIMENSION IS INSIDE DIMENSION)
- SUPPLY DUCT UP
- EXHAUST DUCT UP
- RETURN DUCT UP
- SUPPLY DUCT DOWN
- EXHAUST DUCT DOWN
- RETURN DUCT DOWN
- RECTANGULAR DUCT SIZE (WIDTH x DEPTH IN INCHES + SYSTEM)
- ROUND DUCT SIZE (DIAMETER IN INCHES + SYSTEM)
- OVAL DUCT SIZE (WIDTH x DEPTH IN INCHES + SYSTEM)
- RECTANGULAR OR ROUND SUPPLY DIFFUSER OR REGISTER (SEE SCHEDULE). 4–WAY THROW UNLESS INDICATED OTHERWISE. EXAMPLE: SB12X12–400S REFERS TO TAG SB WITH 12"X12" NECK, 400 CFM AND SYSTEM
- RECTANGULAR OR ROUND EXHAUST GRILLE REGISTER (SEE OR SCHEDULE)
- RECTANGULAR OR ROUND RETURN GRILLE REGISTER (SEE OR SCHEDULE)
- FLEXIBLE CONNECTION
- FLEXIBLE DUCT RUNOUT TO DIFFUSER
- FIRE DAMPER, SMOKE DAMPER, OR FIRE AND SMOKE COMBINATION DAMPER
- POINT OF CONNECTION

ABBREVIATIONS

AAV	AUTOMATIC AIR VENT	LPS	LOW PRESSURE STEAM
ADD	ADDITION	LWB	LEAVING WET BULB
AFF	ABOVE FINISHED FLOOR	LWT	LEAVING WATER TEMPERATURE
AFMS	AIR FLOW MEASURING STATION	M	MOTOR
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MAX	MAXIMUM
AHJ	AUTHORITY HAVING JURISDICTION	MBH	THOUSAND BTU PER HOUR
A	AMPERE	MCA	MINIMUM CIRCUIT AMPACITY
AP	ACCESS PANEL	MD	MOTORIZED DAMPER
ARI	AMERICAN REFRIGERATION INSTITUTE	MECH	MECHANICAL
AUX	AUXILIARY	MERV	MINIMUM EFFICIENCY RATING VALUE
B	BOILER	MFG	MANUFACTURER
BAS	BUILDING MANAGEMENT SYSTEM	MIN	MINIMUM
BDD	BACKDRAFT DAMPER	MOCP	MINIMUM OVER CURRENT PROTECTION
BEL	BELOW	(N)	NEW
BHP	BRAKE HORSEPOWER	NA	NOT APPLICABLE
BOD	BOTTOM OF DUCT	NIC	NOT IN CONTRACT
BOP	BOTTOM OF PIPE	NOM	NOMINAL
BTU	BRITISH THERMAL UNIT	NTS	NOT TO SCALE
BTUH	BTU PER HOUR	OA	OUTSIDE AIR
CAP	CAPACITY	OAT	OUTSIDE AIR TEMPERATURE
CAV	CONSTANT AIR VOLUME	OBD	OPPOSED BLADE DAMPER
CFM	CUBIC FEET PER MINUTE	OD	OUTSIDE DAMPER
CHWP	CHILLED WATER PUMP	PD	PRESSURE DROP
CHWR	CHILLED WATER RETURN	PH	PHASE (ELECTRICAL)
CHWS	CHILLED WATER SUPPLY	POC	POINT OF CONNECTION
CH	CHILLER	POD	POINT OF DISCONNECTION
CL	CENTERLINE	PS	PRESSURE SENSOR
CLG	CEILING	PSI	POUNDS PER SQUARE INCH
CO	CLEANOUT	PSIA	PSI ABSOLUTE
COP	COEFFICIENT OF PERFORMANCE	PSIG	PSI GAUGE
CW	COLD WATER	QTY	QUANTITY
CWP	CONDENSER WATER PUMP	RA	RETURN AIR
CWR	CONDENSER WATER RETURN	REFRIG	REFRIGERATION
CWS	CONDENSER WATER SUPPLY	RH	RELATIVE HUMIDITY
DDC	DIRECT DIGITAL CONTROL	RPM	REVOLUTIONS PER MINUTE
DIA	DIAMETER	SA	SUPPLY AIR
DN	DOWN	SCFM	CFM, STANDARD CONDITIONS
DP	DIFFERENTIAL PRESSURE	SD	SMOKE DAMPER
DSD	DUCT SMOKE DETECTOR	SEER	SEASONAL ENERGY EFFICIENCY RATING
DX	DIRECT EXPANSION	SENS	SENSIBLE
(E)	EXISTING	SF	SQUARE FEET
EA	EXHAUST AIR	SPEC	SPECIFICATIONS
EAT	ENTERING AIR TEMPERATURE	SQ IN	SQUARE INCH
EWT	ENTERING WATER TEMPERATURE	T	THERMOSTAT OR THERMOMETER
EER	ENERGY EFFICIENCY RATING	TA	TRANSFER AIR
EF	EXHAUST FAN	TEMP	TEMPERATURE
EQUIP	EQUIPMENT	TI	TENANT IMPROVEMENT
(ER)	EXISTING RELOCATED	TS	TEMPERATURE SENSOR
ESP	EXTERNAL STATIC PRESSURE	TSP	TOTAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE	(TYP)	TYPICAL
F	FAHRENHEIT	U	HEAT TRANSFER COEFFICIENT
FCU	FAN COIL UNIT	UC	UNDER CUT DOOR
FD	FIRE DAMPER	UG	UNDERGROUND
FF	FINAL FILTER OR FINISHED FLOOR	VD	VOLUME DAMPER
FLR	FLOOR	VEL	VELOCITY
FPI	FINS PER INCH	VFD	VARIABLE FREQUENCY DRIVE
FPS	FEET PER SECOND	VFM	VENTURI FLOW METER
FSD	FIRE/SMOKE COMBINATION DAMPER	VOL	VOLUME
FT	FOOT OR FEET	VTR	VENT THROUGH ROOF
G	GAS	W	WASTE OR WIDTH OR WATTS
GA	GAUGE, GAGE	WB	WET BULB TEMPERATURE
GAL	GALLONS	WC	WATER COLUMN
GPM	GALLONS PER MINUTE	WG	WATER GAUGE
GND	GROUND	WP	WORKING PRESSURE
H	HEIGHT	WPD	WATER PRESSURE DROP
HP	HORSEPOWER	WT	WEIGHT
HS	HUMIDITY SENSOR		
HVAC	HEATING, VENTILATING AND AIR CONDITIONING		
HW	HEATING WATER		
HWP	HEATING WATER PUMP		
HWR	HEATING WATER RETURN		
HWS	HEATING WATER SUPPLY		
HZ	FREQUENCY (HERTZ)		
ID	INSIDE DIAMETER		
IN	INCH(ES)		
KW	KILOWATT		
KWH	KILOWATT HOUR		
L	LENGTH		
LAT	LEAVING AIR TEMPERATURE		
LBS	POUNDS		
LDB	LEAVING DRY BULB		
LF	LINEAR FEET		
LP	LOW PRESSURE		
LPC	LOW PRESSURE CONDENSATE		

MECHANICAL CONTROL SYMBOLS

TS, TS	TEMPERATURE SENSOR
T	THERMOSTAT OR THERMOMETER
CO2	CARBON DIOXIDE SENSOR
OS	OCCUPANCY SENSOR
H	HUMIDITY SENSOR OR HUMIDISTAT
SP, SP	STATIC PRESSURE SENSOR
RS	REFRIGERANT SENSOR
CO	CARBON MONOXIDE SENSOR
DSD	DUCT SMOKE DETECTOR
PS	PRESSURE SENSOR OR SWITCH
DPS	DIFFERENTIAL PRESSURE SENSOR

NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS ARE APPLICABLE TO THIS PROJECT. REFER TO DETAILS AND NOTES FOR MOUNTING HEIGHTS.

HVAC DRAWING LIST

M001	MECHANICAL COVER SHEET
M002	MECHANICAL GENERAL NOTES
M010	MECHANICAL SCHEDULES
M101	MECHANICAL ZONING PLAN
M111D	MECHANICAL DEMO PLAN
M111	MECHANICAL FLOOR PLAN
M112	MECHANICAL ROOF PLAN
M401	MECHANICAL TITLE–24
M501	MECHANICAL DETAILS
M601	MECHANICAL PIPING AND CONTROL DIAGRAM
M701	REFERENCE SHEET

HVAC BASIS OF DESIGN

GOVERNING CODES AND STANDARDS

CODES
- 2019 CALIFORNIA BUILDING CODE BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC), WITH CITY OF LOS ANGELES AMENDMENTS.
- 2019 CALIFORNIA MECHANICAL CODE BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC), WITH CITY OF LOS ANGELES AMENDMENTS.
- 2019 CALIFORNIA ENERGY CODE BASED ON TITLE 24, PART 6.
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE.
- AMERICANS WITH DISABILITY ACT (ADA).

STANDARDS
- AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS (ASHRAE)
  - a. HANDBOOKS: FUNDAMENTALS, APPLICATIONS, SYSTEMS AND EQUIPMENT
  - b. STANDARD 15: SAFETY CODE FOR MECHANICAL REFRIGERATION
  - c. STANDARD 52: GRAVIMETRIC AND DUST – SPOT PROCEDURES FOR TESTING AIR–CLEANING DEVICES USED IN GENERAL VENTILATION FOR REMOVING PARTICULATE MATTER
  - d. STANDARD 55: THERMAL ENVIRONMENTAL CONDITIONS FOR HUMAN OCCUPANCY
  - e. STANDARD 62: VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY
  - f. STANDARD 90.1: ENERGY EFFICIENT DESIGN OF NEW BUILDINGS EXCEPT LOW RISE RESIDENTIAL BUILDINGS
  - g. STANDARD 105: STANDARD METHOD OF MEASURING AND EXPRESSING BUILDING ENERGY PERFORMANCE
  - h. STANDARD 111: PRACTICES FOR MEASUREMENT, TESTING, ADJUSTING AND BALANCING OF BUILDING HVAC & REFRIGERATION
  - i. STANDARD 114: ENERGY MANAGEMENT CONTROL SYSTEMS INSTRUMENTATION
  - j. STANDARD 135: BACNET A DATA COMMUNICATION PROTOCOL FOR BUILDING AUTOMATION AND CONTROL NETWORKS
- AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI) STANDARDS
  - a. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS
  - b. NFPA 90A – INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS
  - c. NFPA 101 – LIFE SAFETY CODE
- AIR MOVING AND CONDITIONING ASSOCIATION (AMCA) STANDARDS
- SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)
- OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, 29 CFR, PARTS 1926 AND 1910
- ENVIRONMENTAL PROTECTION AGENCY REGULATIONS
- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PUBLICATIONS

HVAC DESIGN CRITERIA

A. VENTILATION CRITERIA
- PER ASHRAE STANDARD 62.1 AND TITLE 24, WHICHEVER VALUE IS GREATER.
- EXHAUST TO OUTDOORS: EXHAUST SHALL TERMINATE 10 FEET FROM ANY INTAKE OPENINGS.

B. BUILDING ENVELOPE
THE BUILDING ENVELOPE PROPERTIES WILL BE IN COMPLIANCE WITH TITLE 24 MINIMUM REQUIREMENTS.

C. INTERNAL HEAT GAIN
- LIGHTING: PER TITLE 24 MAXIMUM ALLOWED VALUES BASED ON OCCUPANCY
- RECEPTACLE POWER: IN GENERAL, RECEPTACLE AND MISCELLANEOUS LOADS SHALL BE CALCULATED PER THE 2013 ASHRAE FUNDAMENTALS HANDBOOK – CHAPTER 18 (NONRESIDENTIAL COOLING AND HEATING LOAD CALCULATION PROCEDURES).
- OCCUPANTS: 250 BTU/HR SENSIBLE AND 250 BTU/HR LATENT
- OCCUPANCY CRITERIA FOR VENTILATION BASED ON ANSI/ASHRAE STANDARD 62.1–2007 AND PER OWNERSHIP PROVIDED PEOPLE COUNT IN EACH SPACE

D. AIR DISTRIBUTION DESIGN CRITERIA
- SUPPLY DUCTWORK: 0.08" W.G./100 FT. MAX
- RETURN DUCTWORK: 0.06" W.G./100 FT. MAX
- EXHAUST DUCTWORK: 0.08" W.G./100 FT. MAX
- OVERHEAD AIR DISTRIBUTION SYSTEM
  - a. 1500 FPM MAX ABOVE CEILING
  - b. 2000 FPM MAX IN SHAFT
- RETURN VELOCITY: 1500 FPM MAX
- EXHAUST VELOCITY: 1500 FPM MAX

HVAC SYSTEM

COOLING AND HEATING WILL BE PROVIDED TO FLEX, CONFERENCE, BREAK, PARENT AND DATA ROOM BY ENEW HEAT RECOVERY VRF SYSTEM AND NEW SPLIT SYSTEMS. TEMPERATURE CONTROLLERS WILL BE PROVIDED TO EACH ZONE. EXISTING RESTROOMS ARE NOT IN SCOPE OF WORK.

ALL EQUIPMENT SHALL BE TESTED, ADJUSTED AND BALANCED IN ACCORDANCE WITH TABB, NEBB OR AABC.

ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEET METAL UNTIL THE FINAL STARTUP OF THE HVAC UNIT.

AUTHORITY APPROVAL:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE: MECHANICAL COVER SHEET

SHEET NO.: M-001

3/21/2022 9:02:26 AM

MECHANICAL GENERAL NOTES

(GENERAL NOTES APPLY TO ALL SHEETS)

1. ALL WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AS REQUIRED. ALL WORK SHALL COMPLY WITH CODE AND THE LATEST AUTHORITY HAVING JURISDICTION (AHJ) REQUIREMENTS.

2. ALL WORK SHALL COMPLY WITH SECTION 120.0 TO SECTION 120.9 IN SUBCHAPTER 3, NONRESIDENTIAL, HIGH-RISE RESIDENTIAL, HOTEL/MOTEL OCCUPANCIES, AND COVERED PROCESSES – MANDATORY REQUIREMENTS, IN 2019 BUILDING ENERGY EFFICIENCY STANDARDS

3. ALL DRAWINGS ARE DIAGRAMMATIC IN NATURE, AND ARE ONLY INTENDED TO CONVEY THE DESIGN INTENT GENERAL ARRANGEMENT. CONTRACTOR SHALL NOT SCALE FOR MATERIAL QUANTITIES. SEE ARCHITECTURAL PLANS FOR DIMENSION AND SCALING. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL BE COORDINATED WITH THE OWNER' S REPRESENTATIVE PRIOR TO INSTALLATION.

4. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL FIELD CONDITION SUCH AS DIMENSIONS PRIOR TO BIDDING AND CONSTRUCTION.

5. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES UNLESS OTHERWISE INDICATED.

6. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED FEES, PERMITS AND INSPECTIONS. OBTAIN ALL FIELD APPROVALS ON WORK FROM REGULATING AGENCIES WHERE REQUIRED.

7. DURING ENTIRE CONSTRUCTION PERIOD MAINTAIN ADEQUATE 2A:40BC FIRE EXTINGUISHERS READY FOR USE IN CASE OF FIRE.

8. PROTECTION OF PUBLIC: THE CONTRACTOR SHALL PROTECT THE PUBLIC FROM INJURY DURING PROGRESS OF THE WORK BY POSTING WARNING SIGNS, GUARD LIGHTS AND BARRICADES AS REQUIRED.

9. COORDINATE ALL WORK WITH VARIOUS TRADES IN INSTALLING ALL WORK TO CLEAR ARCHITECTURAL AND STRUCTURAL MEMBERS. NO WORK SUCH AS PIPE, DUCT, ETC., TO BE IN CONTACT WITH ANY EQUIPMENT OR BUILDING MEMBERS.

10. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO HIS WORK. COORDINATE WITH GENERAL CONTRACTOR AND ANY DISCIPLINES INVOLVED PRIOR TO ANY CUTTING AND PATCHING WORK.

11. COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO CUTTING OR PATCHING ANY STRUCTURAL SYSTEMS. DO NOT CUT ROOF FRAMING.

12. EQUIPMENT SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTORS CONTROLS AND LUBRICATION OF MOVING PARTS. MINIMUM OF 30 INCHES OF CLEARANCE IN DEPTH WIDTH AND HEIGHT SHALL BE PROVIDED TO SERVICE THE EQUIPMENT.

13. ACCESS PANELS/DOORS SHALL BE PROVIDED AT MAINTENANCE/SERVICE AREAS FOR ALL CONCEALED EQUIPMENT, DEVICES, DAMPERS, VALVES AND ETC. PANELS/DOORS SHALL BE SIZED PER EQUIPMENT, DEVICES, DAMPERS, VALVES AND ETC AND SHALL NOT BE SMALLER THAN 12"X12". IF INSTALLED ON THE FIRE RATED WALL/CEILING, ACCESS PANELS/DOORS SHALL CARRY THE SAME FIRE RATING AS THE WALL/CEILING.

14. SEE STRUCTURAL DESIGN FOR ALL ATTACHMENTS TO THE BUILDING STRUCTURE SYSTEM. REFER TO STRUCTURAL PLANS FOR SEISMIC ATTACHMENT REQUIREMENTS.

15. ALL DUCT HANGERS AND SUPPORTS SHALL COMPLY WITH THE MECHANICAL CODE AND THE "SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE".

16. ALL SUPPLY, RETURN AND EXHAUST AIR DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH CMC AND LATEST EDITIONS OF THE "SMACNA HVAC DUCT CONSTRUCTION STANDARDS (HDCS)" AND "ASHRAE STANDARDS." DUCT GAUGE AND CONSTRUCTION SHALL BE SELECTED AT 1.5 TIMES THE DESIGN FAN SUPPLY STATIC.

17. ALL SUPPLY DUCTWORK SHALL HAVE TURNING VANES AT EACH RECTANGULAR ELBOW.

18. DIMENSIONS OF THE DUCT MAY BE ALTERED TO AVOID INTERFERENCES AND MAINTAIN ADEQUATE CLEARANCES AS LONG AS THE SAME AIR HANDLING CHARACTERISTICS ARE MAINTAINED.

19. ALL DUCTWORK DIMENSIONS SHOWN ON THE DRAWINGS ARE INTERNAL CLEAR DIMENSIONS.

20. SEAL ALL DUCT JOINTS, INCLUDING LONGITUDINAL JOINTS, WITH WATER BASED SEALANT. MAXIMUM ALLOWABLE DUCTWORK LEAKAGE SHALL NOT EXCEED 5% AND AS DEFINED ELSEWHERE IN DOCUMENTS.

21. ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED WITH NOT LESS THAN THE AMOUNT OF INSULATION INDICATED IN ACCORDANCE WITH THE MECHANICAL CODE AND ENERGY CODE.

22. ALL EXTERIOR DUCTWORK SHALL BE SANDWICHED INSULATION WITH DOUBLE WALL SHEET METAL CONSTRUCTION.

23. IDENTIFY ALL NEW MECHANICAL EQUIPMENT WITH NAMEPLATES PERMANENTLY ENGRAVED WITH 1/2 INCH HIGH WHITE LETTERS ON A BLACK BACKGROUND. IDENTIFY EQUIPMENT WITH TAGS SHOWN ON THE MECHANICAL SCHEDULES/PLANS.

24. CONTRACTOR SHALL INSTALL VOLUME DAMPERS AS REQUIRED FOR PROPER AIR BALANCING OF EACH DIFFUSER/GRILLE/BRANCH DUCTWORK. IF VOLUME DAMPERS ARE INSTALLED ABOVE INACCESSIBLE CEILINGS, THEN EXTENDED REGULATORS SHALL BE PROVIDED.

25. CONTRACTOR SHALL COORDINATE WITH OTHER TRADE TO PROVIDE FLASHING AND COUNTERFLASHING AT PENETRATIONS THROUGH WALLS OR ROOF TO MAKE WATERPROOF INSTALLATION.

26. FRESH AIR INTAKE SHALL NOT BE INSTALLED CLOSER THAN 10 FEET FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN.

27. CEILING DIFFUSER SIZES SHOWN INDICATE NECK SIZES. PROVIDE FRAMES AS REQUIRED TO MATCH MOUNTING SURFACE.

28. CONDENSATE AND PRESSURE RELIEF PIPING SHALL BE TYPE L OR M TUBING WITH WROUGHT COPPER FITTINGS. PRIMARY DRAIN PAN SHALL BE PROVIDED WITH COOLING COIL AND EXTEND BEYOND THE LEAVING SIDE OF THE COIL AND UNDERNEATH THE COOLING COIL CONNECTIONS. PROVIDE SECONDARY DRAIN PIPE OR AUTOMATIC SHUT-OFF SWITCH FOR EQUIPMENT ABOVE CEILINGS.

29. SUPPORT ALL PIPING SO THAT IT IS FIRMLY HELD IN PLACE BY APPROVED IRON HANGERS AND SUPPORTS, IN ACCORDANCE WITH RECOMMENDATIONS OF AMERICAN PIPE FITTERS ASSOCIATION AND PIPE HANGER INSTITUTE.

30. MOTOR STARTERS AND VARIABLE FREQUENCY DRIVES, WHERE REQUIRED, SHALL BE PROVIDED AND MOUNTED BY THE MECHANICAL INSTALLER AND WIRING/CONDUIT BY ELECTRICAL INSTALLER.

31. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWING FOR DIFFUSER, REGISTER, AND GRILLE LOCATIONS AND MAKE DUCT MODIFICATIONS AS NEEDED.

32. ALL AIR HANDLING, PACKAGED ROOFTOP, FAN COIL UNITS AND ETC SHALL OPERATE WITHOUT MOISTURE CARRYOVER.

33. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING, PACKAGED ROOFTOP, FAN COIL UNITS AND FANS. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.

34. ALL DUCTS SHALL BE GROUNDED WITH FLEXIBLE COPPER GROUNDING STRAPS. GROUNDING STRAPS SHALL BE BOLTED OR SOLDERED TO BOTH THE EQUIPMENT AND THE DUCT.

35. INDIVIDUAL RUNS OF FLEXIBLE DUCT SHALL NOT EXCEED FIVE (5) FEET.

36. ALL EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE SUPPORTED AS REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.

37. PROVIDE VIBRATION ISOLATION DEVICES FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.

38. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

39. DUCT MOUNTED PHOTOELECTRIC SMOKE DETECTORS SHALL BE INSTALLED WITH ONE REQUIRED FOR EACH HEATING OR COOLING SYSTEM SUPPLYING AIR IN EXCESS OF 2000 CFM. DETECTOR SHALL BE PROVIDED WITH METAL SAMPLING TUBE AND BE MOUNTED IN THE SUPPLY AIR DUCTWORK. DETECTOR SHALL SHUT DOWN THE AIR-MOVING EQUIPMENT WHEN SMOKE IS DETECTED. PROVIDE REMOTE TEST AND RESET STATION FOR MOUNTING AT THE CEILING OR WALL IN THE VICINITY OF THE SMOKE DETECTOR

40. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL INSTALLER. THE MECHANICAL INSTALLER SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER' S PRINTED INSTRUCTIONS.

41. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWING FOR LOUVER DETAIL AND INFORMATION. EXTERIOR LOUVERS SHOWN ON THE DRAWINGS ARE INDICATED FOR INFORMATION ONLY.

42. UNLESS OTHERWISE SHOWN, LOCATE ALL ROOM SENSORS AT 4'-0" (CENTERLINE) ABOVE FINISHED FLOOR. NOTIFY THE OWNER' S REPRESENTATIVE OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.

43. PROVIDE ALL DEVICES, CONTROLLERS, SENSORS, CONDUIT, WIRING AND LABOR AS NEEDED TO PROVIDE OWNERSHIP WITH A COMPLETE AND OPERATIONAL CONTROL SYSTEM AND TO MEET PROJECT REQUIREMENTS.

44. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE ELECTRICAL CODE AND THE SPECIFICATION SECTIONS.

45. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE DUCT AND PIPE TRANSITIONS AS REQUIRED FOR PROPER INSTALLATION AND FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSION BEFORE FABRICATION.

46. CONCRETE HOUSEKEEPING PADS TO SUIT MECHANICAL EQUIPMENT SHALL BE SIZED AND LOCATED BY THE MECHANICAL INSTALLER. MINIMUM CONCRETE PAD THICKNESS SHALL BE 6 INCHES. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6 INCHES ON EACH SIDE. CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.

47. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

48. MECHANICAL EQUIPMENT, DUCTWORK, AND PIPING SHALL NOT BE SUPPORTED FROM METAL DECK.

49. CONTRACTOR SHALL PROVIDE DAMPER AND SEAL WITH CODE REQUIRED AND/OR UL APPROVED SEALANT MATERIALS ON ALL PENETRATIONS THROUGH IN FIRE AND SMOKE RATED WALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC.

50. MECHANICAL DUCT PENETRATIONS OF A NON-FIRE RESISTANCE RATED FLOOR ASSEMBLY SHALL BE PROTECTED WITH A SHAFT ASSEMBLY IN ACCORDANCE WITH THE BUILDING CODE. WHEN THE DUCT CONNECTS NOT MORE THAN TWO STORIES, THE ANNULAR SPACE AROUND THE PENETRATING DUCT MUST BE MATERIAL THAT RESISTS THE FREE PASSAGE OF FLAME AND PRODUCTS OF CONSTRUCTION.

51. CONDENSATE DRAIN LINES SHALL BE PROVIDED TO EACH AIR CONDITIONING, PACKAGED ROOFTOP, FAN COIL UNIT, ETC. CONDENSATE DRAIN LINES SHALL HAVE THE SAME SIZE AS THE DRAIN OUTLET ON THE UNIT.

52. COORDINATE WITH ELECTRICAL CONTRACTOR FOR 120 VOLT ELECTRICAL OUTLETS WITHIN 25 FEET OF ALL MECHANICAL EQUIPMENT.

53. SIZING OF THE GAS FIRED CATEGORY 1 APPLIANCE VENTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MECHANICAL CODE.

54. THE GAS FURNACES SHALL BE INSTALLED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE MANUFACTURER' S LISTING AND INSTALLATION INSTRUCTIONS. CLEARANCE REQUIREMENTS FOR THE FURNACES SHALL BE AS SPECIFIED IN THE MANUFACTURER' S INSTRUCTIONS OR RATING PLATE. CLEARANCES FOR THE VENT PIPE SHALL BE AS REQUIRED BY THE LISTED VENT PIPE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

55. TYPE I HOODS GREASE EXHAUST HOODS SHALL BE INSTALLED WITH A MINIMUM OF 18 INCHES TO COMBUSTIBLES AND 3 INCHES CLEARANCE TO LIMITED COMBUSTIBLES, UNLESS THE HOOD IS LISTED FOR LESS CLEARANCE.

56. OPENINGS ON HORIZONTAL GREASE DUCT SYSTEMS SHALL BE PROVIDED WITH SAFE ACCESS AND WORK PLATFORM WHEN NOT EASILY ACCESSIBLE FROM A 10 FOOT STEPLADDER.

57. CONTRACTOR SHALL PERFORM TESTS PRIOR TO ANY MECHANICAL EQUIPMENT OR PIPING INSULATION IS APPLIED.

58. BALANCE AIR FLOW AT ALL AIR INLETS AND OUTLETS TO AIR QUANTITIES SHOWN. MECHANICAL CONTRACTOR SHALL PROVIDE MOTORS, PULLEYS AND BELTS AS REQUIRED TO ACCOMMODATE THE REQUIRED AIR FLOWS. BALANCE ALL WATER FLOWS TO COILS AND MECHANICAL EQUIPMENT TO VALUES SHOWN. INSTALL TEST PLUGS WHERE NECESSARY. BALANCING CONTRACTOR SHALL BE INDEPENDENT OF THE INSTALLING CONTRACTORS AND CERTIFIED BY THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) OR ASSOCIATED AIR BALANCE COUNCIL (AABC) WITH AT LEAST THREE YEARS OF EXPERIENCE.

63. A FINAL REPORT FOR THE TESTING AND ADJUSTING OF ALL MECHANICAL SYSTEMS SHALL BE COMPLETED PRIOR TO FINAL APPROVAL BY THE FIELD INSPECTOR. THIS REPORT SHALL BE SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.

64. RESTORE ALL DAMAGE RESULTING FROM YOUR WORK AND LEAVE PREMISES IN CLEAN CONDITION WHEN FINISHED WITH WORK.

65. GUARANTEE ALL WORK AND MATERIALS FOR A MINIMUM OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY.

66. AT COMPLETION OF CONSTRUCTION PROVIDE AS-BUILT MARK-UPS AND COPIES OF BOUND OPERATIONS AND MAINTENANCE MANUALS.

67. A COPY OF THE MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE PROVIDED AT THE LOCATION OF EACH PIECE OF EQUIPMENT.

68. A COPY OF THE CONSTRUCTION DOCUMENTS OR A COMPARABLE DOCUMENT INDICATING THE INFORMATION FROM THE ENERGY CODE SECTION 110.10(b) THROUGH 110.10(c) SHALL BE PROVIDED TO OCCUPANT

69. IF THE NEW HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MERV OF 13. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY.

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PROJECT NO.: **21095.01**

SHEET TITLE:

MECHANICAL GENERAL NOTES

SHEET NO.:

M-002

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FAN COIL UNIT SCHEDULE

TAG	MFG	MODEL NUMBER	TYPE	SERVING	CONDENSING UNIT	COOLING TOTAL CAP (MBTUH)	COOLING SENS CAP (MBTUH)	COOLING SUPPLY AIR FLOW (CFM)	COOLING MIN OA FLOW (CFM)	COOLING ESP	HEATING TOTAL CAP (MBTUH)	ELECTRICAL V/PH	ELECTRICAL MCA (A)	ELECTRICAL MOCP (A)	ELECTRICAL EMERG POWER (Y/N)	FILTER	UNIT SIZE (L"xW"xH")	OPER. WT. (LBS)	COMMENTS
FCU-1	DAIKIN	FTX24UVJU	WALL MOUNTED	IDF - 101C	CU-2	24	16.7	643	-	-	NA	NOTE #3			N	NOTE #2	47 X 13 X 10	50	
FCU-2	DAIKIN	FDMQ09RVJU	CONCEALED DUCTED	PARENT ROOM - 101B	CU-4	9	7.6	340	50	0.42	8.5	NOTE #3			N	NOTE #1	28 X 32 X 10	80	
FCU-3	DAIKIN	FXFQ12TVJU	CASSETTE	MEN'S RESTROOM - 104	CU-3	12	9.7	440	-	-	13.5	208 / 1	0.3	15	N	NOTE #4	28 X 22 X 12	65	
FCU-4	DAIKIN	FXFQ12TVJU	CASSETTE	WOMEN'S RESTROOM - 103	CU-3	12	9.7	440	-	-	13.5	208 / 1	0.3	15	N	NOTE #4	28 X 22 X 12	65	
FCU-100A	DAIKIN	FXMQ048PBVJU	CONCEALED DUCTED	FLEXIBLE SPACE - 100	CU-1	48	35.8	1,350	500	0.48	54	208 / 1	3.4	15	N	NOTE #1	56 X 28 X 12	120	
FCU-100B	DAIKIN	FXMQ048PBVJU	CONCEALED DUCTED	FLEXIBLE SPACE - 100	CU-1	48	35.8	1,350	500	0.48	54	208 / 1	3.4	15	N	NOTE #1	56 X 28 X 12	120	
FCU-100C	DAIKIN	FXMQ048PBVJU	CONCEALED DUCTED	FLEXIBLE SPACE - 100	CU-1	48	35.8	1,350	500	0.48	54	208 / 1	3.4	15	N	NOTE #1	56 X 28 X 12	120	
FCU-100D	DAIKIN	FXMQ048PBVJU	CONCEALED DUCTED	FLEXIBLE SPACE - 100	CU-1	48	35.8	1,350	500	0.48	54	208 / 1	3.4	15	N	NOTE #1	56 X 28 X 12	120	
FCU-101	DAIKIN	FXSQ24TAVJU	CONCEALED DUCTED	BREAK ROOM - 101	CU-1	24	11	330	230	0.42	13.5	208 / 1	0.8	15	N	NOTE #1	32 X 22 X 10	65	
FCU-102	DAIKIN	FXMQ72MVJU	CONCEALED DUCTED	CONFERENCE - 102	CU-1	49.2	38.9	2,000	420	0.48	81	208 / 1	9.5	15	N	NOTE #1	55 X 44 X 19	350	KEY NOTE #5

GENERAL NOTES:
A. COORDINATE WITH ELECTRICAL POWER AND DISCONNECT AS REQUIRED.
B. COORDINATE WITH STRUCTURAL CONSULTANT FOR HANGING DETAIL.
C. PROVIDE CONDENSATE PUMP.
D. PROVIDE BRANCH SELECTOR. PROVIDE SEPARATE POWER CONNECTION
E. PROVIDE OVERFLOW SENSOR
F. PROVIDE HARDWIRED THERMOSTAT / WALL CONTROLLER

KEY NOTES:
1. PROVIDE MERV 13 FILTER RACK
2. UNIT SERVING IT ROOM
3. INDOOR UNIT POWERED BY OUTDOOR UNIT
4. UNIT SERVING RESTROOM
5. PROVIDE DUCT SMOKE DETECTOR. PROVIDE RELAY BACK TO EXISTING FIRE ALARM PANEL

CONDENSING UNIT SCHEDULE

TAG	MFG	MODEL NUMBER	SYSTEM	LOCATION	COOLING CAP. (MBH)	EER	IEER / SEER	COP / HSPF	REFRIG TYPE	REFRIG (LBS.)	ELECTRICAL V/PH	ELECTRICAL MCA (A)	ELECTRICAL MOCP (A)	ELECTRICAL EMERG POWER (Y/N)	UNIT SIZE (L"xW"xH")	OPER. WT. (LBS)	COMMENTS
CU-1	DAIKIN	REYQ240AATJA	VRF	BACKYARD	245	10.8	19.7	3.2	R410A	71	208 / 3	73.7	80	N	104 X 31 X 66	1,100	
CU-2	DAIKIN	RX24AXVJU	MINI-SPLIT HEAT PUMP	BACKYARD	24	12.2	19	3.45	R410A	-	208 / 1	18.9	20	N	34 X 30 X 13	110	
CU-3	DAIKIN	RXTQ36TAVJ9A	HEAT PUMP VRF	BACKYARD	36	10	16	9	R410A	7.7	208 / 1	16.5	20	N	37 X 39 X 13	190	
CU-4	DAIKIN	RX09RMVJU9	MINI-SPLIT HEAT PUMP	BACKYARD	9	11.1	17.8	4.1	R410A	-	208 / 1	9	15	N	22 X 27 X 12	70	

GENERAL NOTES:
A. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECTS AS REQUIRED.
B. PROVIDE DISTRIBUTION CONTROLLER AND REFRIGERANT PIPING PER MANUFACTURER'S REQUIREMENTS.
C. PROVIDE SEPARATE POWER CONNECTION TO BRANCH SELECTORS (BS-1 & BS-2). BS-1 ELECTRICAL POWER REQUIREMENTS: 208V / 1PH, 0.1MCA, 15 MOP. BS-2 ELECTRICAL POWER REQUIREMENTS: 208V / 1PH, 0.6MCA, 15 MOP.

DIFFUSER AND GRILLE SCHEDULE

TAG	MANUFACTURER	MODEL NUMBER	DESCRIPTION	FACE TYPE	FACE SIZE (INCHES)	COLOR	COMMENTS
LD	PRICE	SDS75	LINEAR SLOT DIFFUSER	SLOT	3/4" SLOT	NOTE #1	NOTE #2
LS	PRICE	SDR75	LINEAR SLOT DIFFUSER	2 SLOT	3/4" SLOT	NOTE #1	NOTE #2
WR	PRICE	510	SUPPLY GRILLE	LOUVERED	SEE PLANS	NOTE #3	
WG	PRICE	530	RETURN GRILLE	LOUVERED	SEE PLANS	NOTE #1	
CG	PRICE	80	EGGCRATE RETURN	1/2" x 1/2" x 1/2" EGGCRATE	SEE PLANS	NOTE #1	

GENERAL NOTES:
A. MAXIMUM TOTAL PRESSURE DROP SHALL NOT EXCEED 0.15" WG WITH DUCT TRANSITION.
B. ALL VISIBLE SURFACES AND DUCTWORK BEHIND FACE SHALL BE PAINTED FLAT BLACK.
C. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS FOR BORDER TYPES.
D. PROVIDE RECTANGULAR/SQUARE TO ROUND TRANSITION AS REQUIRED AND SIZED FOR MAXIMUM 0.01" WG TOTAL PRESSURE DROP.
E. REGISTER/GRILLE MATERIAL SHALL BE STEEL AND NO OPPOSED BLADE DAMPER SHALL BE USED FOR THIS PROJECT.

KEY NOTES:
1. GRILLE/DIFFUSER COLOR SHALL MATCH WALL/CEILING COLOR. COORDINATE WITH ARCHITECT BEFORE INSTALLATION.
2. PROVIDE MANUFACTURER'S SUPPLY PLENUM
3. GRILLE/DIFFUSER MOUNTED DIRECTLY ON EXPOSED DUCT SHALL MATCH COLOR OF DUCT (IF PAINTED) OR SHALL HAVE CLEAR ANODIZED FINISH (IF DUCT IS UNPAINTED).

EXHAUST FAN SCHEDULE

TAG	MANUFACTURER	MODEL NUMBER	DISCH	TYPE	DRIVE	AIR FLOW (CFM)	SP (IN.WG.)	FAN RPM	ELECTRICAL HP	ELECTRICAL FLA (A)	ELECTRICAL V/PH	ELECTRICAL VFD (Y/N)	UNIT SIZE (L"xW"xH")	OPER. WT. (LBS)	KEY NOTES
EF-1	GREENHECK	G-080-VG	DOWN	CENTRIFUGAL	DIRECT	70	0.2	1,252	1/15	1.3	120/1	N	20X20X26	50	KEY NOTE#1
EF-2	GREENHECK	G-140-VG	DOWN	CENTRIFUGAL	DIRECT	2,450	0.4	1,463	1	11.5	120/1	N	29X29X38	110	KEY NOTE#2
EF-3	GREENHECK	G-090-VG	DOWN	CENTRIFUGAL	DIRECT	410	0.4	1,375	1/10	1.38	120/1	N	22X22X29	60	KEY NOTE#1

GENERAL NOTES
A COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECT AS REQUIRED.
B PROVIDE MANUFACTURER'S PRE-FABRICATED MIN 14" ROOF CURB. COORDINATE WITH EXISTING ROOF TYPE
C PROVIDE BACKDRAFT DAMPER.
D PROVIDE BIRDSCREEN

KEY NOTES
1 PROVIDE 24 HR, 365 DAY LINE VOLTAGE TIEMER WITH PROGRAMMABLE HOLIDAYS AND MANUAL OVERRICE CAPABILITIES.
2 PROVIDE VARI-GREEN CONSTANT PRESSURE CONTROL WITH BALANCE DIAL, CONTROLS TRANSFORMER, PRESSURE TRANSDUCER AND ROOM STATIC PRESSURE PROBE

VENTILATION TABLE - BY SPACE

ROOM NAME	UNIT TAG	AREA (SF)	OCCUPANCY	MAX COOLING AIR SUPPLY (CFM)	SPACE CATEGORY	AIR SUPPLY TYPE	CMC CHAPTER 4 PEOPLE OUTDOOR AIR RATE (Rp)	CMC CHAPTER 4 AREA OUTDOOR AIR RATE (Ra)	CMC CHAPTER 4 MIN OUTDOOR AIR CFM	TITLE 24 BY AREA VENTILATION RATE (CFM/SF)	TITLE 24 BY AREA MIN OUTDOOR AIR CFM	TITLE 24 BY PEOPLE CFM PER OCCUPANCY	TITLE 24 BY PEOPLE MIN OUTDOOR AIR CFM	OA DESIGNED
FLEXIBLE SPACE - 100	FCU-100A,B,C,D	2,648	133	6,120	MULTI-USE ASSE	MECHANICAL	7.5	0.06	1,160	0.5	1,325	15	1,995	2,000
BREAK ROOM - 101	FCU-101	288	15	400	BREAKROOM	MECHANICAL	5	0.06	95	0.5	145	15	225	230
PARENT ROOM - 101B	FCU-2	106	1	250	OFFICE	MECHANICAL	5	0.06	15	0.15	20	15	15	50
CONFERENCE ROOM - 102	FCU-102	553	28	2,000	CONFERENCE	MECHANICAL	5	0.06	175	0.5	280	15	420	420

VRF SYSTEM REFRIGERANT CALCULATION

ROOM NAME	UNIT TAG	AREA (SF)	ROOM HEIGHT (FT)	ROOM VOLUME (CF)	ASHRAE-15 MAX ALLOW (LBS/1000 CF)	MAX REF ALLOWED (LBS)	SYSTEM REF CHARGE (LBS)	NOTE
FLEXIBLE SPACE - 100	FCU-100A,B,C,D	2,648	8.25	21,846	26	568	74	
BREAK ROOM - 101	FCU-101	341	8.42	2,871	26	75	74	CONNECTED WITH STORAGE ROOM VIA DOOR LOUVER
CONFERENCE ROOM - 102	FCU-102	553	8.25	4,562	26	119	74	
WOMEN'S RESTROOM - 103	FCU-4	229	8.25	1,889	26	49	8	
MEN'S RESTROOM - 104	FCU-3	229	8.25	1,889	26	49	8	
PARENT ROOM - 101B	FCU-2	106	8.25	875	26	23	96	
IDF - 101C	FCU-1	300	8.25	2,475	26	64	96	

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MECHANICAL SCHEDULES

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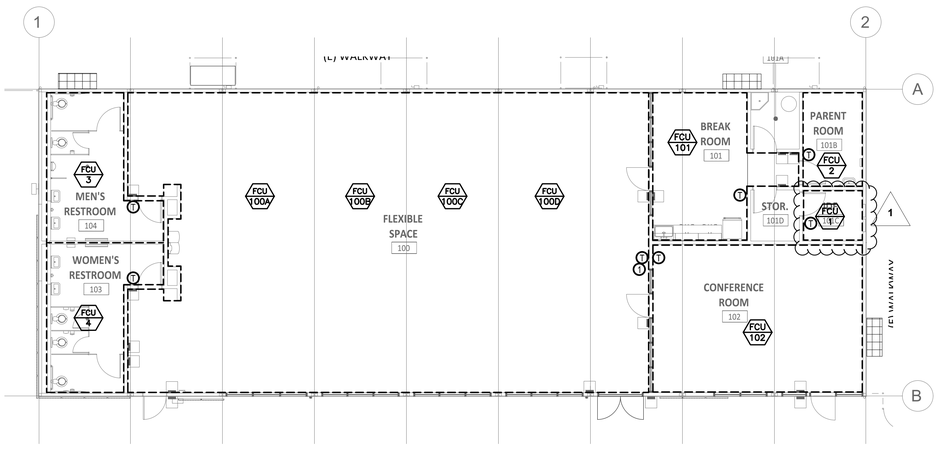

MECHANICAL ZONING PLAN (1)

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

SHEET NOTES

KEYNOTES

1. FCU–100A,B,C,D TO BE CONTROLLED BY SINGLE THERMOSTAT

LEGEND

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MECHANICAL ZONING PLAN

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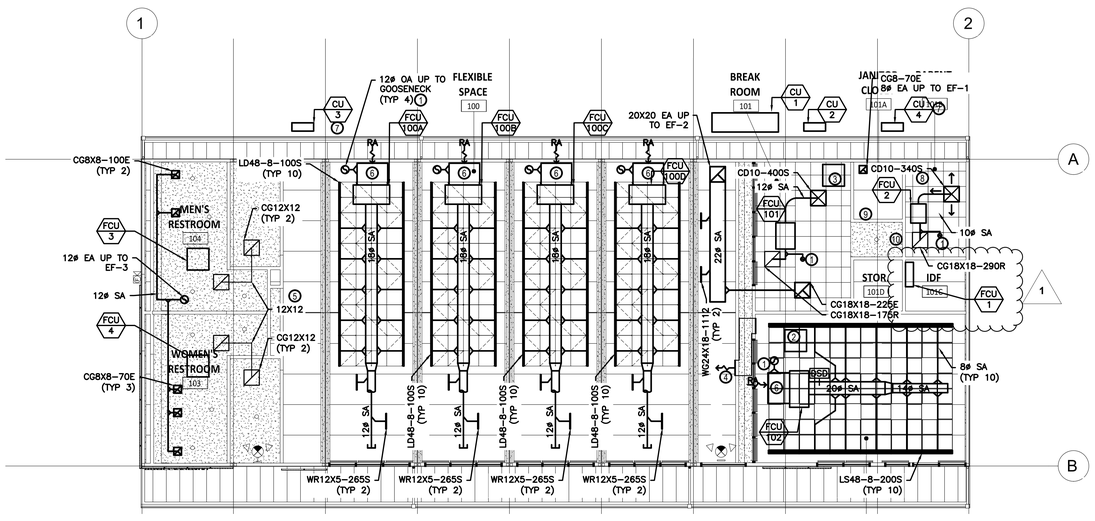

MECHANICAL FLOOR PLAN

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

1

SHEET NOTES

A. PROVIDE DUCT LINER ON EXPOSED DUCTWORK. SEE SPEC FOR DUCT LINER SPECIFICATION.
B. PROVIDE REFRIGERANT PIPE SIZING PER MANUFACTURER'S RECOMMENDATIONS.
C. PROVIDE INSULATED DUCT ACCESS DOORS FOR ALL ACCESSORIES INSTALLED INSIDE DUCTWORK.
D. SEE MECHANICAL ROOF PLAN FOR GOOSENECK DUCT SIZE.

KEYNOTES

1. PROVIDE MODULATE DAMPER
2. BRANCH SELECTOR (BS-1)
3. BRANCH SELECTOR (BS-2)
4. PROVIDE LINED TRANSFER BOOT WITH TWO (2) WG22X12
5. PROVIDE LINED TRANSFER DUCTS
6. PROVIDE LINED RETURN AIR BOOT WITH WIRE MESH SCREEN
7. UNIT TO BE MOUNTED ON EXISTING PAD. CONTRACTOR TO VERIFY PAD CONDITION AND DIMENSION PRIOR TO INSTALLATION
8. PROVIDE 3-WAY THROW
9. PROVIDE DOOR LOUVER
10. PROVIDE DOOR UNDERCUT

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MECHANICAL FLOOR PLAN

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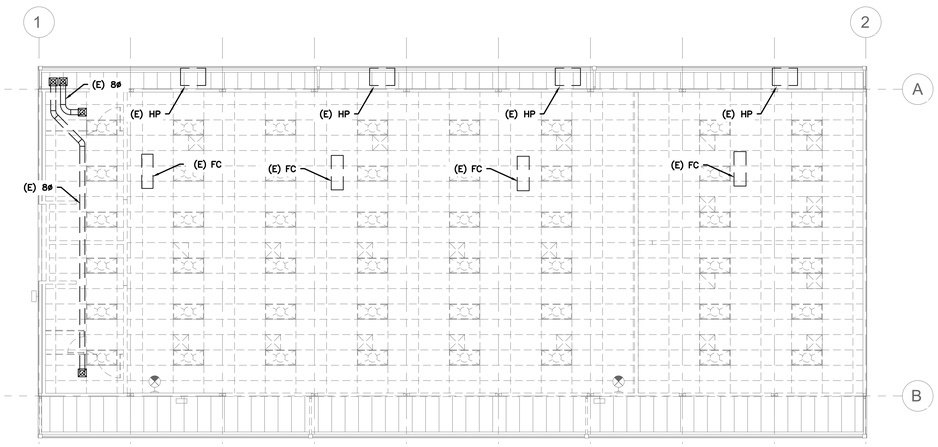

MECHANICAL DEMO PLAN

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

1

SHEET NOTES

A. DEMOLISH EXISTING FC, HP AND EF MECHANICAL SYSTEMS AND ITS ASSOCIATED ACCESSORIES.
B. CONFIRM WITH DISTRICT, SCHOOL, DESIGN TEAM PRIOR TO ANY DEMOLITION NOT SHOWN ON THE FLOOR PLAN.

KEYNOTES

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M-111D

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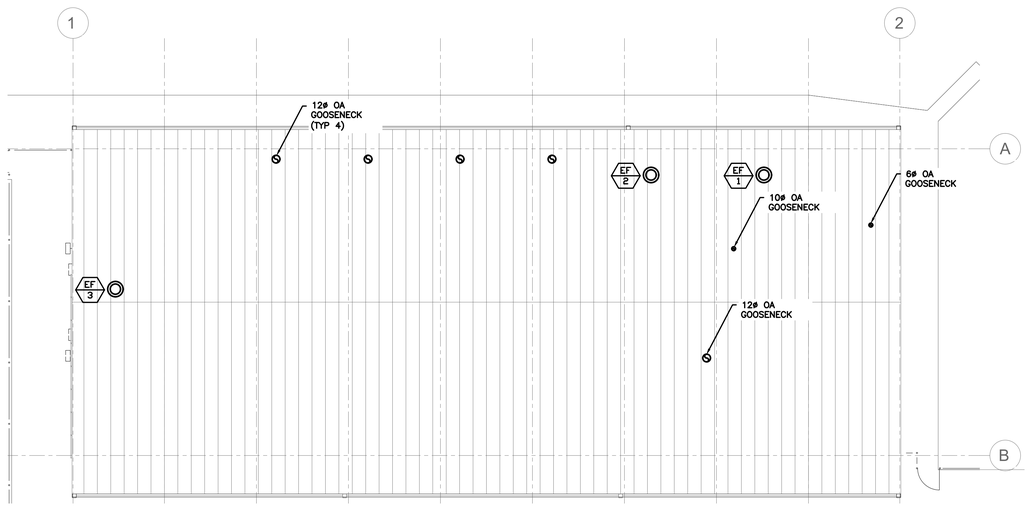

MECHANICAL ROOF PLAN 1

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

SHEET NOTES

A. EXHAUST FAN OUTLET TO BE 10FT FROM ANY OA INLET

KEYNOTES

LEGEND

AUTHORITY APPROVAL:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

CSDA DESIGN GROUP
LISTEN COLLABORATE CREATE

610 E. Franklin Ave
El Segundo, CA 90245
T: 415.689.9800
www.csdadesigngroup.com

ARCHITECT STAMP

CONSULTANT:

TX ENGINEERING

ADD: 2866 BIRCH LANE,
POMONA, CA 91767
TEL: 213-295-5532
EMAL: ADMIN@TXECORP.COM

CONSULTANT STAMP

REGISTERED PROFESSIONAL ENGINEER
DONGHUI XU
No. M38342
Exp. 3-31-25
MECHANICAL
STATE OF CALIFORNIA

COMMUNITY COMMITTED TO COLLEGE AND CAREER

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE:

MECHANICAL
ROOF PLAN

SHEET NO.:

M-112

3/21/2022 9:02:26 AM

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 1 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, or §141.0(b)2 for alterations.

Project Name: EMUHSD PDC IMPROVEMENTS | Report Page: Page 1 of 10
Project Address: 1001 DURFEE AVE SOUTH EL MONTE, CA 91733 | Date Prepared: 2022-11-30

A. GENERAL INFORMATION

01	Project Location (city)	04	Total Conditioned Floor Area 4,900
02	Climate Zone 9	05	Total Unconditioned Floor Area 0
03	Occupancy Types Within Project:	06	# of Stories (Habitable Above Grade) 1

☐ Office (B)	☐ Retail (M)	☐ Non-refrigerated Warehouse (S)
☐ Hotel/ Motel Guest Rooms (R-1)	☑ School (E)	☐ Healthcare Facility (I)
☐ High-Rise Residential (R-2/R-3)	☐ Relocatable Class Bldg (E)	☐ Other (Write In):

[1] FOOTNOTES: Climate zone can be determined on the California Energy Commission's website at http://www.energy.ca.gov/maps/renewable/building_climate_zones.html

B. PROJECT SCOPE

Table Instructions: Include any mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, or §141.0(b)2 for alterations.

My project consists of (check all that apply)

01 Air System(s)	02 Wet System Components	03 Dry System Components
☑ Heating Air System	☐ Water Economizer	☐ Air Economizer
☑ Cooling Air System	☐ Pumps	☐ Electric Resistance Heat
Mechanical Controls	☐ Hydronic System Piping	☐ Fan Systems
☐ Mechanical Controls (existing to remain, altered or new)	☐ Cooling Towers	☐ Ductwork (existing to remain, altered or new)
	☐ Chillers	☑ Ventilation
	☐ Boilers	☐ Zonal Systems/ Terminal Boxes

C. COMPLIANCE RESULTS

Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, for guidance.

01		02		03		04		05		06		07		08	09
System Summary §110.1, §110.2, §140.4	AND	Pumps §140.4(k)	AND	Fans/ Economizers §140.4(c), §140.4(e)	AND	System Controls §110.2, §120.2, §140.4(f)	AND	Ventilation §120.1	AND	Terminal Box Controls §140.4(d)	AND	Distribution §120.3, §140.4(l)	AND	Cooling Towers §110.2(e)2	**Compliance Results**
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
Yes	AND		AND		AND	Yes	AND	Yes	AND		AND		AND		**COMPLIES**
Mandatory Measures Compliance [See Table Q for Details]															**COMPLIES**

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 2 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Selections made in Table D have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.
Selections made in Table P have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Table Instructions: Complete the following equipment schedules to show compliance with mandatory requirements found in §110.1 and §110.2(a) and prescriptive requirements found in §140.4(a), §140.4(b) and §140.4(k) or §141.0(b)2 for alterations.

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)

01	02	03	04	05	06	07	08	09	10	11
				Equipment Sizing per Mechanical Schedule (kBtu/h) §140.4 (a&b)						
				Heating Output[1,2]			Cooling Output[2,3]		Load Calculations[3,4]	
Name or Item Tag	Equipment Category per Tables 110.2	Equipment Type per Tables 110.2 & Title 20	Smallest Size Available[5] §140.4(a)	Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
CU-1	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	199	199	0	265	245	199	245
CU-2	Sm. Commercial AC	Air-cooled unitary AC/HP Split Sys (3Ph)	Yes	32	32	0	24	24	32	24
CU-3	Variable Refrigerant Flow	VRF air conditioners, air cooled	Yes	35	28	0	36	24	28	24
CU-4	Sm. Commercial AC	Air-cooled unitary AC/HP Split Sys (3Ph)	Yes	8.5	8.5	0	9	9	8.5	9

Table Continued

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 3 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

Table Continued

[1] FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(a). Healthcare facilities are excepted.
[2] It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.
[3] If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.
[4] Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b).

Dry System Equipment Efficiency (other than Package Terminal Air Conditioner [PTAC] and Package Terminal Heat Pumps [PTHP])

01	02	03	04	05	06	07	08	09
			Heating Mode				Cooling Mode	
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Min Efficiency Required per Tables 110.2/ Title 20	Design Efficiency	Efficiency Unit	Min Efficiency Required per Tables 110.2/ Title 20	Design Efficiency
CU-1	≥240,000	47°Fdb/43°Fwb OSA	COP	3.2	3.2	EER	9.5	10.8
						IEER	12.7	19.7
CU-2	<65,000		HSPF	8.2	10.3	SEER	8	20
CU-3	<65,000					SEER	13	16
CU-4	<65,000		HSPF	8.2	9.3	SEER	8	18

G. PUMPS

This Section Does Not Apply

H. FAN SYSTEMS & AIR ECONOMIZERS

This Section Does Not Apply

I. SYSTEM CONTROLS

Table Instructions: Complete the following Table to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(f) and (n) or requirements in §141.0(b)2E for altered space conditioning systems.

Table Continued

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 4 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats §110.2(b) & (c)1, §120.2(a) or §141.0(b)2E	Shut-Off Controls §120.2(e)	Isolation Zone Controls §120.2(g)	Demand Response §110.12 and §120.2(b)	Supply Air Temp. Reset §140.4(f)	Window Interlocks per §140.4(n)
CU-1,3	multi-zone	≤ 25,000 ft²	Setback + DR Tstat per §110.12	NA: 7 day per §120.2(e)1	NA: Single Zone	DR Tstat per §110.12	NA: Single Zone	NA: No operable windows
CU-2,4	single zone	≤ 25,000 ft²	Setback Thermostat	NA: 7 day per §120.2(e)1	NA: Single Zone	DR Tstat per §110.12	NA: Single Zone	NA: No operable windows

[1] FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.
* NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
EX: System 1: SA Temp Reset: Exempt because zones compliant with §140.4(d). EXCEPTION 1 to §140.4(f)

J. VENTILATION AND INDOOR AIR QUALITY

Table Instructions: Complete the following Table to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(e)3B for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☑	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☐	Check this box if the project includes Nonresidential or Hotel/Motel spaces.
	☐	Check this box if the project includes new or altered high-rise residential dwelling units
03	☐	Check the box if the project is using natural ventilation in any spaces to meet required ventilation rates per §120.1(c)2.

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
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Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 5 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

[1] FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system.
* Air filtration requirements apply to the following three system types per §120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
[2] Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.
* See Standards Tables 120.1-A and 120.1-B
[3] For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.
* §120.2(e)3 requires systems serving rooms that are required by §130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft² or smaller, multipurpose rooms less than 1,000ft², classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by §130.1(c).

K. TERMINAL BOX CONTROLS

This Section Does Not Apply

L. DISTRIBUTION (DUCTWORK AND PIPING)

This Section Does Not Apply

M. COOLING TOWERS

This Section Does Not Apply

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector Pass	Field Inspector Fail
◉		NRCI-MCH-01-E - Must be submitted for all buildings.		☐	☐

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 6 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector Pass	Field Inspector Fail
◉	○	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. *Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.*		☐	☐
○	◉	NRCA-MCH-03-A Constant Volume Single Zone HVAC *NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
◉	○	NRCA-MCH-04-A Air Distribution Duct Leakage		☐	☐
○	◉	NRCA-MCH-05-A Air Economizer Controls		☐	☐
○	◉	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.		☐	☐
○	◉	NRCA-MCH-07-A Supply Fan Variable Flow Controls		☐	☐
○	◉	NRCA-MCH-08-A Valve Leakage Test		☐	☐
○	◉	NRCA-MCH-09-A Supply Water Temperature Reset Controls		☐	☐
○	◉	NRCA-MCH-10-A Hydronic System Variable Flow Controls		☐	☐
○	◉	NRCA-MCH-11-A Automatic Demand Shed Controls		☐	☐

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 7 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector Pass	Field Inspector Fail
○	◉	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units		☐	☐
○	◉	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance		☐	☐
○	◉	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance *NOTE: This form does not automatically move to "Yes". If Distributed Energy Storage DX AC Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
○	◉	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance *NOTE: This form does not automatically move to "Yes". If Chilled Water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External Melt, Ice Harvester, Brine, Ice-Slurry, Eutectic Salt, Clathrate Hydrate Slurry (CHS), Cryogenic or Encapsulated Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
○	◉	NRCA-MCH-16-A Supply Air Temperature Reset Controls		☐	☐
○	◉	NRCA-MCH-17-A Condenser Water Temperature Reset Controls		☐	☐
○	◉	NRCA-MCH-18 Energy Management Control Systems		☐	☐
○	◉	NRCA-MCH-19 Occupancy Sensor Controls		☐	☐
○	◉	NRCA-MCH-20 Multi-Family Ventilation		☐	☐
○	◉	NRCA-MCH-21 Multi-Family Envelope Leakage		☐	☐

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 8 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCV/

YES	NO	Form/Title	Field Inspector Pass	Field Inspector Fail
○	◉	NRCV-MCH-04-H Duct Leakage Test *NOTE: Must be completed by a HERS Rater*	☐	☐
○	◉	NRCV-MCH-24 Enclosure Air Leakage Worksheet *NOTE: Must be completed by a HERS Rater*	☐	☐
○	◉	NRCV-MCH-27 High-rise Residential *NOTE: Must be completed by a HERS Rater*	☐	☐
○	◉	NRCV-MCH-32 Local Mechanical Exhaust *NOTE: Must be completed by a HERS Rater*	☐	☐

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 9 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

Table Instructions: Indicate where mandatory measures are documented in the plan set or construction documentation. For any mandatory measures that do not apply, mark the plan sheet or construction document location as "N/A", any active cells that are left blank will result in non-compliance in Table C.

01		02 Plan sheet or construction document location
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block:	Yes	M002

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-MCH-E

Project Name:	EMUHSD PDC IMPROVEMENTS	Report Page:	Page 10 of 10
Project Address:	1001 DURFEE AVE SOUTH EL MONTE, CA 91733	Date Prepared:	2022-11-30

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	DONGHUI XU	Documentation Author Signature:	Donghui Xu
Company:	TX ENGINEERING CORPORATION	Signature Date:	11/30/2022
Address:	2866 BIRCH LANE	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip:	POMONA, CA 91767	Phone:	2135032332

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	DONGHUI XU	Responsible Designer Signature:	Donghui Xu
Company :	TX ENGINEERING CORPORATION	Date Signed:	11/30/2022
Address:	2866 BIRCH LANE	License:	M38342
City/State/Zip:	POMONA, CA 91767	Phone:	2135032332

3/21/2022 9:02:26 AM

AUTHORITY APPROVAL:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

CSDA DESIGN GROUP
LISTEN COLLABORATE CREATE

610 E. Franklin Ave
El Segundo, CA 90245
T: 415.689.9800
www.csdadesigngroup.com

ARCHITECT STAMP

CONSULTANT:

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ADD: 2866 BIRCH LANE,
POMONA, CA 91767
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CONSULTANT STAMP

REGISTERED PROFESSIONAL ENGINEER
DONGHUI XU
Ref. M38342
Exp. 3-31-25
MECHANICAL
STATE OF CALIFORNIA

EMUHSD EL MONTE UNION HIGH SCHOOL DISTRICT
COMMITTED TO COLLEGE AND CAREER
1951

PROJECT OWNER:

EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005

emuhsd.org

PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

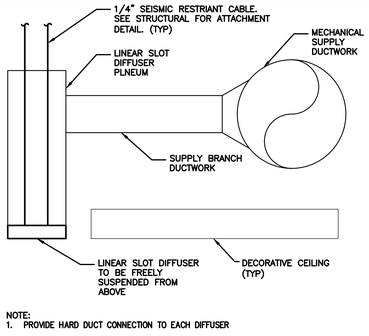
PROJECT NO.: **21095.01**

SHEET TITLE:

MECHANICAL
TITLE-24

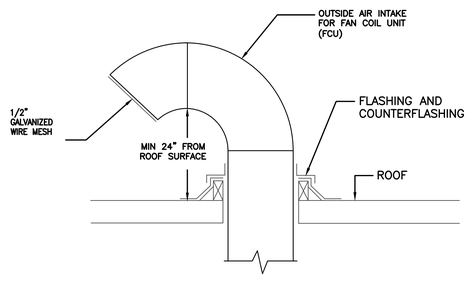
SHEET NO.:

M-401

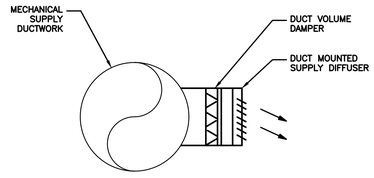


NOTE:
1. PROVIDE HARD DUCT CONNECTION TO EACH DIFFUSER

DUCT MOUNTED LINEAR SLOT DIFFUSER - MPR | 4



OUTSIDE AIR INTAKE GOOSENECK | 3

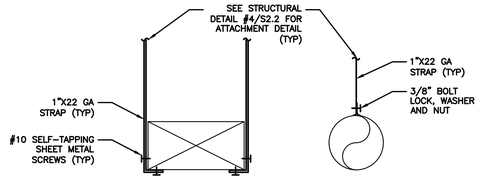


NOTE:
1. SEE STRUCTURAL DRAWING FOR ANCHOR DETAIL
2. PROVIDE INSTALLATION PER PRE-FAB MFG RECOMMENDATION

CONDENSING UNIT MOUNTING | 6

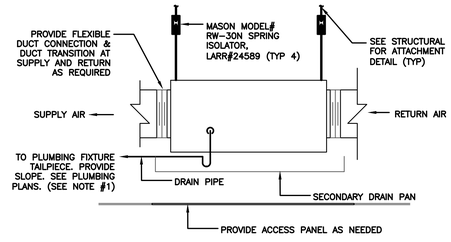
NOTE:
1. FINAL AIR BALANCE SHALL ADJUST FLOW DIRECTIONS TO REDUCE AIR VELOCITIES IN OCCUPIED SPACE TO 50 FPM (MAXIMUM).

EXPOSED DUCT MOUNTED SUPPLY DIFFUSER | 2



NOTES:
1. PROVIDE HANGS AT EACH CHANGE OF DIRECTION AND MAXIMUM SPAN SHOULD BE 10'.

DUCT MOUNTING DETAIL | 5



NOTE:
1. SEE PLUMBING DRAWINGS FOR CONDENSATE DRAIN SIZE AND ROUTING
2. PROVIDE MOISTURE SENSOR
3. SEE M701 FOR MASON RW-30N CUTSHEET

SUSPENDED FAN COIL UNIT | 1

AUTHORITY APPROVAL:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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emuhsd.org

PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: 21095.01

SHEET TITLE:

MECHANICAL DETAILS

SHEET NO.:

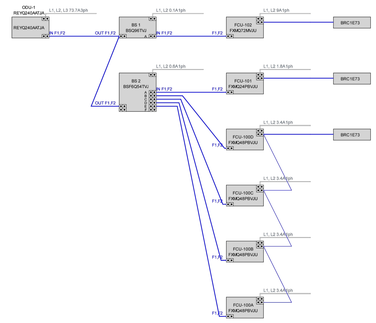
M-501

3/21/2022 9:02:26 AM

DAIKIN

Wiring diagrams

Wiring ODU-1



Remarks

P1P2 = AWG 18-2 is required - however always refer to local code for further information.

F1F2 IN/OUT = AWG 18-2 is required - however always refer to local code for further information

Note:

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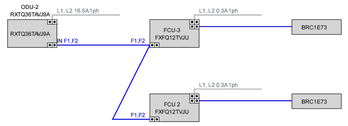
CU-1 CONTROL DIAGRAM | 4

DAIKIN

Wiring ODU-2



Remarks

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F1F2 IN/OUT = AWG 18-2 is required - however always refer to local code for further information

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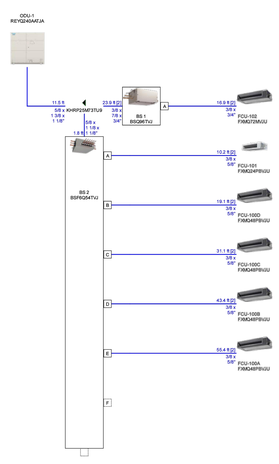
CU-3 CONTROL DIAGRAM | 3

DAIKIN

Piping diagrams

Piping ODU-1



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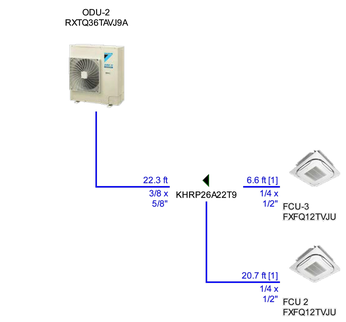
CU-1 PIPING DIAGRAM | 2

DAIKIN

Piping ODU-2



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CU-3 PIPING DIAGRAM | 1

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EMUHSD PDC IMPROVEMENTS

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MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE:

MECHANICAL PIPING AND CONTROL DIAGRAM

SHEET NO.:

M-601

3/21/2022 9:02:26 AM

LARR 24589

P10

MASON INDUSTRIES, Inc.
Manufacturers of Vibration Control Products
NY Mailing Address: PO Box 410, Smithtown, NY 11787

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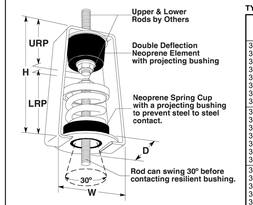
Hauppauge, NY 11788	Anaheim, CA 92801
631/348-0282	714/535-2727
FAX 631/348-0279	FAX 714/535-5738
Info@Mason-Ind.com	Info@MasonAnaheim.com

CERTIFIED FOR
JOB NAME :
CUSTOMER :
CUSTOMER P.O. :
MASON M.I. :
DWG. NO. :

TYPE
30N
1" Deflection
X, A, B, C, D & F
Series Hangers



TYPE 30N DIMENSIONS (inches)

Size Range	D	H	W	LRP	URP	MRD
30N-X-23-210	2 1/2	5 1/2	2 7/8	3 1/4	1 3/4	3/8
30N-A-12-25	2 3/4	6 3/4	3 1/4	3 1/4	2 1/4	5/8
30N-A-41-95	2 3/4	6 3/4	3 1/4	3 5/8	2 1/4	5/8
30N-B-138-540	4	6 3/4	4 3/4	3 3/4	2 3/4	5/8
30N-C-630-1265	4 3/4	9	5 1/4	5	3	3/4
30N-D-1575-2150	4 3/4	12 1/2	5 3/4	7	4 1/4	7/8
30N-F-2760	6	14 1/2	6 1/4	7	5	7/8

LRP - Lower Rod Penetration
URP - Upper Rod Penetration
MRD - Maximum Rod Diameter

TYPE 30N RATINGS

Size	Rated Capacity [lbs]	Rated Defl.† [in]	Spring Constant†† [lbs/in]	Avg Defl. Neoprene [in]	Spring Color
30N-X-23	23	1.50	18		Brown
30N-X-33	33	1.30	30		Red
30N-X-54	54	1.40	45		White
30N-X-76	76	1.22	73	0.20	Black
30N-X-113	113	1.20	113		Yellow
30N-X-130	130	1.20	130		Purple
30N-X-175	175	1.20	175		Silver
30N-X-210	210	1.20	210		Blue
30N-A-12	12	1.35	12		Red
30N-A-18	18	1.35	18		Gray
30N-A-25	25	1.35	25		Orange
30N-A-41	41	1.53	35	0.35	Pink
30N-A-56	56	1.49	49		Black
30N-A-73	73	1.41	69		Tan
30N-A-95	95	1.36	94		Green
30N-B-138	138	1.67	105		White
30N-B-222	222	1.51	191		Blue
30N-B-278	278	1.44	255	0.35	Purple
30N-B-336	336	1.35	336		Silver
30N-B-410	410	1.42	385		Black
30N-B-540	540	1.35	540		Yellow
30N-C-630	630	1.53	558		Gray
30N-C-800	800	1.40	800	0.40	Orange
30N-C-1010	1010	1.50	920		Green
30N-C-1265	1265	1.40	1265		Red
30N-D-1575	1575	1.63	1280	0.40	Pink
30N-D-2150	2150	1.43	2095		Purple
30N-F-2760	2760	1.40	2760	0.40	Silver

† includes double deflection neoprene element.
†† applies to spring only.

All springs have additional travel to solid equal to 50% of Rated Deflection.
Hanger elements have straight line deflection curves.

Allowable Loads per City of Los Angeles Approval Number RR 24589	
Type	Dead Loads For Tension, S.F. = 4
30N-X	554 lbs
30N-A	560 lbs
30N-B	625 lbs
30N-C	1800 lbs
30N-D	1815 lbs
30N-F	2751 lbs

Gurmeet Dhanna Reddy
Civil Engineer, California CE No. 59627

FOR REFERENCE ONLY

AUTHORITY APPROVAL:

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EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE:

REFERENCE SHEET

SHEET NO.:

M-701

3/21/2022 9:02:26 AM

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 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING 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.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING 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 HAVING 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 THE ABOVE REQUIREMENTS.

APPLICABLE CODE: 2019 CBC

PIPING SYSTEM BRACING NOTE

PIPING 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 2019 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.

PLUMBING PIPING DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

PLUMBING LEGEND

SYMBOLS	ABBR.	DESCRIPTION
	W. OR S.	WASTE OR SEWER BELOW SLAB ON GRADE
SAN	SAN	SANITARY WASTE PIPE ABOVE SLAB ON GRADE
	V.	SANITARY VENT
	CW	COLD WATER
	HWR	HOT WATER RETURN
	HW	HOT WATER (110° F)
	HW	HOT WATER (140° F)
CD	C.D.	CONDENSATE DRAIN
		FLOOR CLEAN OUT OR CLEAN OUT THRU GRADE.
	W.C.O.	WALL CLEAN OUT
	ABV.	ABOVE
	A.T.P.	AUTOMATIC TRAP PRIMER
	CLG.	CEILING
	CONT.	CONTINUATION
	D.S.	DOWN SPOUT
	I.E.	INVERT ELEVATION
	NC	NORMALLY CLOSED
	PP	PETS PLUG
T	T	TEPID WATER (75-78 DEGREE F)
ICW	ICW	INDUSTRIAL COLD WATER
	WC	WATER CLOSET
	L	LAVATORY
		AREA IN SCOPE (TYP.)
		THERMOMETER
	CW	COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN
	FCO	FLOOR CLEANOUT
	C.V.	CHECK VALVE
	A.P.	ACCESS PANEL
	BEL.	BELOW
	CONN.	CONNECTION
	DN.	DOWN
	EXIST. (E)	EXISTING
	POC	POINT OF CONNECTION
	V.T.R.	VENT THRU ROOF
	F.U.	FIXTURE UNIT
	HDR.	HEADER
	R.I.&C.	ROUGH IN AND CONNECT
	SS	STAINLESS STEEL
	ADA	AMERICAN DISABILITY ACT
	A.F.F.	ABOVE FINISHED FLOOR
	BV	BALL VALVE (NO-LEAD) SS BALL & STEM
	BAV ◇	BALLANCING VALVE (NO-LEAD) THERMOSTATIC TYPE
	PG	0-100 PSI PRESSURE GA
	TH	THERMOMETER
	SA &. AP	SHOCK ARRESTOR &. ACCESS PANEL
	TP &. AP	TRAP PRIMER &. ACCESS PANEL

PLUMBING BASIS OF DESIGN,
GOVERNING CODES AND STANDARDS
CODES

- 2019 CALIFORNIA BUILDING CODE (CBC) PART 2, Title 24 CCR
- 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) Part 1, Title 24 CCR
- 2019 CALIFORNIA ELECTRICAL CODE (CEC), Part 3, Title 24 CCR
- 2019 CALIFORNIA MECHANICAL CODE (CMC), Part 4, Title 24 CCR
- 2019 CALIFORNIA PLUMBING CODE (CPC) Part 5, Title 24 CCR
- 2019 CALIFORNIA ENERGY CODE Part 6, Title 24 CCR
- 2019 CALIFORNIA FIRE CODE (CFC), Part 9, Title 24 CCR
- 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), Part 10, Title 24 CCR
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen), Part 11, Title 24 CCR.
- 2019 CALIFORNIA REFERENCE STANDARDS CODE, Part 12, Title 24 CCR
- Title 19 CCR, Public Safety, State Fire Marshal Regulations
- AMERICANS WITH DISABILITY ACT (ADA).

APPLICABLE STANDARDS:
FOR A LIST OF APPLICABLE STANDARDS INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

STANDARDS

- AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS (ASHRAE)
  a. HANDBOOKS: FUNDAMENTALS, APPLICATIONS, SYSTEMS AND EQUIPMENT
  b. STANDARD 15: SAFETY CODE FOR MECHANICAL REFRIGERATION
  c. STANDARD 52: GRAVIMETRIC AND DUST - SPOT PROCEDURES FOR TESTING AIR-CLEANING DEVICES USED IN GENERAL VENTILATION FOR REMOVING PARTICULATE MATTER
  d. STANDARD 55: THERMAL ENVIRONMENTAL CONDITIONS FOR HUMAN OCCUPANCY
  e. STANDARD 62: VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY
  f. STANDARD 90.1: ENERGY EFFICIENT DESIGN OF NEW BUILDINGS EXCEPT LOW RISE RESIDENTIAL BUILDINGS
  g. STANDARD 105: STANDARD METHOD OF MEASURING AND EXPRESSING BUILDING ENERGY PERFORMANCE
  h. STANDARD 111: PRACTICES FOR MEASUREMENT, TESTING, ADJUSTING AND BALANCING OF BUILDING HVAC & REFRIGERATION
  i. STANDARD 114: ENERGY MANAGEMENT CONTROL SYSTEMS INSTRUMENTATION
  j. STANDARD 135: BACNET A DATA COMMUNICATION PROTOCOL FOR BUILDING AUTOMATION AND CONTROL NETWORKS
- AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI) STANDARDS
  a. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS
  b. NFPA 90A - INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS
  c. NFPA 101 - LIFE SAFETY CODE
- AIR MOVING AND CONDITIONING ASSOCIATION (AMCA) STANDARDS
- SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)
- OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, 29 CFR, PARTS 1926 AND 1910
- ENVIRONMENTAL PROTECTION AGENCY REGULATIONS
- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PUBLICATIONS

PLUMBING DESIGN CRITERIA

A. EXIST ITEMS TO BE RETAINED:
MAIN SEWER AND WATER TO BE DISCONNECTED 5' FROM BUILDING AND CAPPED BELOW EXIST. GRADE OR AS PER FIELD CONDITIONS REQUIRED.

EXIST. ROOF DRAINAGE SYSTEM TO BE EVALUATED ON SITE AND DETERMINATION MADE IF MAIN ROOF GUTTERS/DRAINS AND PIPING HAS TO BE MODIFIED OR REPLACED.

EXISTING HVAC CONDENSATE DRAINS FROM AC UNITS ARE CURRENTLY COLLECTED BELOW ROOF AND ARE TERMINATED INTO SITE DRY WELL AND WILL REMAIN UNLESS NEW CEILING HEIGHTS REQUIRE THEM TO BE RAISED.

B. DEMOLITION;

- REMOVE ALL EXIST. PLUMBING FIXTURES FROM SITE.
- REMOVE ALL UNUSED WASTE, VENT AND COLD WATER PIPING FROM SITE.
- REMOVE OR ABANDON EXISTING WASTE PIPING WITHIN BUILDING FOOTPRINT FROM SITE.
- REMOVE EXIST. INSTANTANEOUS WATER HEATERS CURRENTLY INSTALLED UNDER LAVATORIES, ONE IN EACH TOILET ROOM INCLUDING ALL HOT WATER PIPING FROM SITE.

C. NEW WORK:
PLUMBING FIXTURES: NEW FIXTURES, FAUCET AND TRIM WILL BE PROVIDED AS PER SPECIFICATION REQUIREMENTS. OWNERS REPRESENTATIVE TO APPROVE.

D. WASTE AND VENT PIPING UNDERGROUND/CRAWL SPACES: HUBLESS CAST IRON PIPES WITH HEAVY DUTY COUPLINGS. WASTE AND VENT PIPING ABOVE SLAB PIPING ABOVE SLAB ON GRADE WILL BE HUBLESS CAST IRON WITH STANDARD COUPLINGS.

E. HOT AND COLD WATER PIPING: ALL NEW PIPING ABOVE GROUND WILL BE COPPER TYPE "L" WITH SOLDER JOINTS OR PRESS FITTING JOINTS. COPPER TYPE "K" FOR UNDERGROUND PIPING IF BURIED IN DIRT.

F. INSULATION: ALL HOT WATER SUPPLY AND RETURN PIPING
ALL HOT WATER RUN-OUTS WITH 1/2" THICK FIBERGLASS INSULATION. ADA COMPLIANT PLUMBING FIXTURE LOCATION SERVED WITH HOT WATER WILL HAVE INSULATION INSTALLED UNDER THE FIXTURE IN THE DRAIN, HOT AND COLD WATER PIPING TO PREVENT SCALDING.

G. EQUIPMENT: PUBLIC RESTROOM LAVATORIES WILL BE SERVED FROM INSTANTANEOUS HOT WATER HEATER LOCATED UNDER THE LAVATORIES. ONE IN EACH ROOM.

ALL OTHER PLUMBING FIXTURES REQUIRING HOT WATER WILL BE SERVED FROM A 20 GALLON CAPACITY STORAGE TYPE ELECTRIC WATER HEATER LOCATED IN THE JANITOR STORAGE ROOM.

PLUMBING GENERAL NOTES

1. EXAMINATION OF THE SITE: CONTRACTOR SHALL EXAMINE THE SITE AND BECOME ACQUAINTED WITH THE SITE. CONTRACTOR SHALL BE HELD TO HAVE MADE SUCH EXAMINATION AND NO ALLOWANCE FOR EXTRAS WILL BE ALLOWED FOR ANY ERROR OR OVERSIGHT RESULTING FROM THE CONTRACTOR'S UNFAMILIARITY WITH THE SITE.
2. PROVIDE AND MAINTAIN ACCESS AND WORKING SPACE NEAR MECHANICAL, ELECTRICAL AND CONTROL EQUIPMENT TO PERMIT READY AND SAFE OPERATION, EXAMINATION AND MAINTENANCE.
3. COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH OTHER TRADES.
4. NEW WORK AND INSTALLATION SHALL NOT INTERFERE WITH THE PROPER FUNCTIONS OF EXISTING FACILITY AND COMPLETED PROJECT SHALL PROPERLY FUNCTION ENTIRELY TROUGH OUT FURNISH ALL LABOR AND MATERIALS REQUIRED TO RELOCATE, REMOVE, REINSTALL, RECONNECT, REPLACE, ETC. ANY EXISTING PLUMBING WORK TO ACCOMMODATE THE NEW LAYOUT.
5. ALL NEW PIPING AND SECTIONS OF PIPING SHALL BE TESTED AND CHLORINATED ACCORDING TO CPC 2019 REQUIREMENTS.

5A. ALL NEW HOT WATER AND HOT WATER RETURN PIPING SHALL BE INSULATED TO MIN. TITLE 24, LATEST EDITION REQUIREMENTS INCLUDING ALL EXISTING PIPING WHERE INSULATION WAS REMOVED, SHALL BE RESTORED TO ITS ORIGINAL CONDITION.

6. DESIGN DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS OR OTHER ELEMENTS WHICH MAY BE REQUIRED. CONTRACTOR SHALL PROVIDE ALL ACCESSORIES AS NECESSARY FOR A COMPLETE INSTALLATION.
7. VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION, INCLUDING, EXACT LOCATIONS AND SIZES TO ASSURE FULL RESPONSIBILITY FOR FITTINGS AND ALL EQUIPMENT AND MATERIAL HEREIN REQUIRED.
8. MAKE ALL CONNECTIONS TO ALL SERVICES WITH NEW FITTINGS.
9. FIXTURE: EXACT LOCATION, MOUNTING HEIGHTS, COLORS OF PLUMBING FIXTURES AND ACCESS PANELS SHALL BE OBTAINED FROM THE ARCHITECTURAL DRAWINGS.
10. DISABLE ACCESS FIXTURE: SEE ARCHITECTURAL DWGS FOR HANDICAP FIXTURE LOCATIONS AND MOUNTING HEIGHTS. (INSULATE ALL EXPOSED HOT WATER AND DRAIN PIPING BELOW HANDICAP LAVATORIES AND SINK WITH "TRAP CAP" MODEL 102BE, BEIGE OR EQUAL).
11. INTERFERENCE: ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID STRUCTURE FRAMING ASSEMBLY INCLUDING MOVEMENT.
12. ACCESS PANELS: THE CONTRACTOR SHALL COORDINATE AND INSTALL THE LOCATION OF ALL ACCESS PANELS INCLUDING CEILING ACCESS PANEL WITH ARCHITECTURAL DRAWINGS AND REFLECTIVE CEILING PLAN AND THE ELECTRICAL LIGHTING LAYOUT.
13. ALL VALVES, TRAP PRIMERS, WATER HAMMER ARRESTORS, CONTROLS, OR ANY OTHER ITEMS REQUIRING MAINTENANCE, ADJUSTMENT OR OBSERVATION TO BE INSTALLED IN AN ACCESSIBLE LOCATION. PROVIDE AND INSTALL ACCESS PANELS FOR ALL VALVES, WATER HAMMER ARRESTORS, CONTROLS, OR ANY OTHER ITEMS REQUIRING MAINTENANCE, ADJUSTMENT OR OBSERVATION INSTALLED WITHIN OR BEHIND WALLS OR NON-REMOVABLE CEILINGS.

PLUMBING GENERAL NOTES (CONT.)

14. PROVIDE WATER HAMMER ARRESTORS ON ALL WATER PIPING SERVING FIXTURES AND EQUIPMENT EQUIPPED WITH QUICK CLOSING VALVES, SOLENOID VALVES, ELECTRONIC SENSOR FAUCETS, ETC. AS RECOMMENDED BY PLUMBING DRAINAGE INSTITUTE WH-210 STANDARD. DEVICES SHALL BE FACTORY MADE WITH PERMANENT CUSHION OF GAS OR AIR. PROVIDE ACCESS PANEL.
15. LAVATORIES IN PUBLIC TOILET ROOM SHALL BE EQUIPPED WITH FAUCETS TO LIMIT THE HOT WATER TEMPERATURE TO A RANGE OF 105°F MINIMUM TO 120°F MAXIMUM AND THE HOT WATER FLOW TO 0.5 GALLON PER MINUTE.
16. CLEANOUTS: ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC., WITH THE ENGINEER PRIOR TO ANY INSTALLATION. ALL CLEANOUTS SHALL BE INSTALLED PER SECTION 707 AND 719 OF THE CALIFORNIA PLUMBING CODE.
17. INSTALL WALL CLEAN OUTS AND ACCESS PANEL IN ALL STORM DRAIN LEADERS. ACCESS FROM INSIDE OF BLDG. REQUIRED. COORDINATE LOCATION IN FIELD.
18. FIELD VERIFICATION: BEFORE FABRICATION OR INSTALLATION, THIS CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT AND EQUIPMENT PROVIDED UNDER ANOTHER SECTION OR SPECIFICATIONS. EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS SHALL BE COORDINATE IN FIELD.
19. STRUCTURAL PENETRATION: ANY STEEL AND CONCRETE WALL PENETRATION REQUIREMENTS SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
20. COORDINATE LOCATIONS, SIZES, AND ELEVATIONS OF ALL SLEEVES THROUGH STRUCTURE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.
21. ALL DOMESTIC WATER, WASTE AND VENT PIPES SHALL HAVE MARKERS WITH DIRECTION OF FLOW ARROWS AND COLOR CODES WITH CLEARLY RINTED LEGEND IDENTIFYING CONTENTS OF PIPE. ALL VALVES SHALL HAVE BRASS TAG IDENTIFYING THE APPROPRIATE SERVICE.
22. CERTIFIED FIXTURES & EQUIPMENT: ALL PLUMBING FIXTURES, SHOWER HEADS, STORAGE TYPE WATER HEATERS AND FAUCETS SHALL BE CERTIFIED BY THE STATE OF CALIFORNIA ENERGY COMMISSION AS REQUIRED BY THE CALIFORNIA ENERGY EFFICIENCY STANDARD.
23. PLUMBING FIXTURES AND FITTINGS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE FLOW RATES SPECIFIED IN 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE SECTION 5.303.3.
24. SPECIFICATION: THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH, AND BE CONSIDERED TO BE A PART OF THE SPECIFICATION IF BOOK SPECIFICATIONS ARE PART OF THIS PROJECT..
25. PROVIDE SLEEVES AND FIRESTOPPING ASSEMBLIES AT PIPE PENETRATIONS WITH CONSTRUCTION AND MATERIALS IN CONFORMANCE WITH STATE FIRE MARSHAL AND UL BUILDING MATERIALS/FIRE RESISTIVE DIRECTORY.
26. PROVIDE AND INSTALL TRAP PRIMERS FOR ALL FLOOR DRAINS. PROVIDE AND INSTALL TRAP PRIMERS FOR ALL FLOOR SINKS NOT RECEIVING CONTINUOUS DISCHARGE OF WASTE WATER. PROVIDE AND INSTALL TRAP PRIMERS IN ACCESSIBLE LOCATIONS WITH ACCESS PANELS.

DRAWING NO.	DRAWING NAMES	TOTAL SHEETS
P-001	PLUMBING LEGEND, NOTES	1
P-002	PLUMBING SCHEDULES	2
P-011	PLUMBING DEMOLITION PLAN - WASTE, VENT	3
P-021	PLUMBING DEMOLITION PLAN - WATER	4
P-111	PLUMBING NEW WORK PLAN - WASTE, VENT AND CONDENSATE DRAINAGE	5
P-121	PLUMBING NEW WORK PLAN - WATER	6
P-401	PLUMBING DETAILS	7
P-500	PLUMBING RISER DIAGRAMS - WASTE, VENT AND WATER	8

AUTHORITY APPROVAL:

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PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

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MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/22	DSA SUBMITTAL

PROJECT NO.: 21095.01

SHEET TITLE:

PLUMBING LEGEND, NOTES

SHEET NO.:

P-001

EXIST. DRAINAGE &. CW FIXTURE UNITS TO BE REMOVED					
FIXTURE	QUANT.	W FU EA.	CW FU EA.	W FU TOTAL	CW FU TOTAL
WC (WATER CLO.FL. VLV	3	4	5	12	15
L (LAVATORY)	4	1	1	4	4
HS (HAND SINK)	1	1	1	1	1
UR (URINAL)	1	2	4	2	4
FD (FLOOR DRAIN)	2	2	–	4	–
TOTAL FU				23	24

NEW DRAINAGE FIXTURE UNIT CHART 2019 CPC					
FIXTURE	QUANT.	FU EA. W		TOTAL W FU	REMARKS
WC (WATER CLOSET) FLUSH VALVE	5	4		20	
U (URINAL)	1	2		2	
L (LAVATORY)	5	1		5	
FD (FLOOR DRAIN)	2	2		4	
DF (DRINKING FOUNT.)	1	1		1	
SS (SERVICE SINK)	1	3		3	
SK (KITCHEN SINK)	1	2		2	
TOTAL				37	

NEW WATER FIXTURE UNIT CHART 2019 CPC			
FIXTURE	QUANT.	CW FU	TOTAL
WC (WATER CLOSET) FLUSH VALVE	5	5	25
U (URINAL) FLUSH VALVE	1	4	4
L (LAVATORY)	5	1	5
SK-1 (KITCHEN SINK)	1	2	2
SS (SERVICE SINK)	1	3	3
HB (HOSE BIBB)	1	2.5	2.5
TOTAL FU			41.5

DOMESTIC WATER PIPE SIZING SCHEDULE COPPER TYPE "L" PIPE AND FITTINGS

SIZE	FLUSH VALVE FU	GPM FV	FLUSH TANK CW FU	HOT WATER HW FU	GPM	
1/2"	0	0	0	0	0	
3/4"	0	–	6	6	3	
1"	0	–	12	12	6	
1-1/4"	0	–	24	24	11	
1-1/2"	8	–	30	31	19	
2"	63	42	155	119	42	
2-1/2"	245	75	380	245	74	
3"	596	126	665	406		

STREET PRSSURE: 85–95 PSI
ALL NEW PIPING IS SIZED BASED ON 3.0 PSI/100 FEET PRESSURE DROP.
MAX. VELOCITY COLD WATER: 8.0 FT/SEC.; HOT WATER: 5.0 FPS.

PLUMBING FIXTURE SCHEDULE

	FIXTURE	TRAP ARM SIZE (INCHES)	BRANCH SIZE CW	BRANCH SIZE HW	S OR W	V	WATER CONSUMPTION (GPM-GPF)	DESCRIPTION
WC-1 NON-ADA	WATER CLOSET FLUSH VALVE FLOOR MOUNTED	INTEGRAL	1 1/2"	–	4"	2"	1.28 GPF	NON-ADA_WATER CLOSET AMERICAN STANDARD MODEL MADERA ELONGATED BOWL FOR 1.28 GPF, MODEL 3451.128, FLOOR MOUNTED TOILET 15" RIM, WHITE VITREOUS CHINA, WITH 1.28 GPF BATTERY POWERED FLUSH VALVE, SLOAN ECOS_8111_1.28-OR (WITH OVERRIDE BUTTON) TOP SPUD, OPEN FRONT SEAT BEMIS NO. 55SSC,
WC-2 ADA	WATER CLOSET FLUSH VALVE FLOOR MOUNTED	INTEGRAL	1 1/2"	–	4"	2"	1.28 GPF	ADA_WATER CLOSET AMERICAN STANDARD MODEL MADERA 3461.001, ELONGATED BOWL FOR 1.28 GPF, WHITE VITREOUS CHINA, FLOOR MOUNTED, WITH 1.28 GPF BATTERY POWERED FLUSH VALVE, SLOAN ECOS_8111_1.28-OR (WITH OVERRIDE BUTTON) TOP SPUD, OPEN FRONT SEAT BEMIS NO. 55SSC,
U-1	URINAL ADA COMPLIANT	INTEGRAL	1 1/4"	–	2"	1-1/2"	0.125 GPF	AMERICAN STANDARD URINAL SYSTEM, ADA COMPLIANT, WHITE VITREOUS CHINA, MODEL PINTBROOK 6002.525, WITH SELECTRONIC 0.125 GPF BATTERY FLUSH VALVE, TOP SPUD, JR SMITH CARRIER MODEL NO 0615; ADA INSTALLATION.
L-1 ADA	LAVATORY WALL HUNG	1 1/4" X 1 1/2"	3/4"	3/4"	2"	1-1/2"	0.5 GPM	20"X18", VITREOUS CHINA, KOHLER K-2084 WHITE, WALL MOUNTED WITH CONCEALED ARM CARRIERS AND WALL HANGERS, FAUCET LEDGE PUNCHED WITH (1) HOLES FOR SINGLE TEMPERATURE WATER. CP STRAINER, 1 $\frac{1}{4}$"X1 $\frac{1}{2}$" TAILPIECE. LA APPROVED LA PATTERN P-TRAP AND C.P. WALL ESCUTCHEON. FAUCET SINGLE TEMPERATURE WATER INLET, SELF CLOSING METERING ELECTRICAL WIRING, J-BOX, TRANSFORMER AS REQUIRED (COORD. WITH ELECTRICAL), CHICAGO 116.706.AB.1 TRANSFORMER & BACKPLATE 243.260.00.1 CHICAGO 131-ABNF THERMOSTATIC MIXING VALVE. PREFORMED DRAIN, H &. CW. INSULATION TRUEBRO LAV GUARD 2. J.R. SMITH 0700 FLOOR SECURED WALL SUPPORT.
HS-1 ADA	WALL HUNG HAND SINK	1 1/2" X 2"	3/4"	3/4"	–	1 1/2"	0.5 GPM	20"X18", VITREOUS CHINA, KOHLER K-2084 WHITE, WALL MOUNTED WITH CONCEALED ARM CARRIERS AND WALL HANGERS, FAUCET LEDGE PUNCHED WITH (1) HOLES FOR SINGLE TEMPERATURE WATER.. CP STRAINER, 1 $\frac{1}{4}$"X1 $\frac{1}{2}$" TAILPIECE. LA APPROVED LA PATTERN P-TRAP AND C.P. WALL ESCUTCHEON. FAUCET SINGLE TEMPERATURE WATER INLET, SELF CLOSING METERING TYPE, WIRING, J-BOX AS REQUIRED (COORD. WITH ELECTRICAL) TYPE AS CHICAGO 116.706.AB.1 TRANSFORMER & BACKPLATE 243.260.00.1 CHICAGO 131-ABNF THERMOSTATIC MIXING VALVE. PREFORMED DRAIN, H &. CW. INSULATION TRUEBRO LAV GUARD 2. J.R. SMITH 0700 FLOOR SECURED WALL SUPPORT.
FWC-1 ADA	DRINKING FOUNTAIN WITH ELECTRIC WATER COOLER & DUAL HEIGHT, BOTTLE FILLER	2"	3/4"	–	–	1 1/2"	8 GAL./HR.	DUAL HEIGHT, STAINLESS STEEL, WITH BOTTLE FILLER, BUILT-IN CHILLER REFRIGERANT UNIT. ELEC.: 120 V, 1-PHASE, FURNISH AND INSTALL WALL SUPPORT, ELKAY MODEL EZSTL8WSLK. WALL SUPPORT FRAME. TRAP AND SUPPLY STOP.
SS-1	SERVICE SINK	3"	3/4"	3/4"	3"	2"	1.5 GPM	AMERICAN STANDARD 7745.811 SERVICE SINK, FLOOR MOUNTED, CORNER TYPE, CAST IRON, ACID RESISTANT ENAMEL, WHITE. WITH GUARD., FAUCET: CHICAGO NO. 897-RCF, RIM GUARD, STRAINER, 3" SIZE: 28"X28"X13" HIGH.
KS-1 ADA	KITCHEN SINK ADA GARBAGE DISPOSER	1 1/2" X 2"	3/4"	3/4"	–	–	–	RESIDENTIAL TYPE SELF RIMMING SINK, WITH LEDGES, JUST SLN-ADA-2225A-GR, 18 GAUGE, 22'X 25" X 6.5" DEEP, FAUCET F1: ELKAY SINGLE HOLE WITH CONCEALED DECK FAUCET WITH 8" HIGH ARC SPOUT 2" LEVER HANDLES CHROME MODEL(S) LK500HA08L2, CONN. WASTE HOSE TO GARBAGE DISPOSER, CONNECT COPPER TUBING TO SEPARATE SUPPLY STOPS INSTALLED IN KITCHEN COMPARTMENT SINK SPACE, OR EQUAL, OR BETTER.
FD-1	FLOOR DRAIN	2"	1/2"	–	2"	1 1/2"	–	J.R.SMITH #2005-PB, ROUND STRAINER WITH TRAP PRIMER CONNECTION, HEEL PROOF.
TP-1	TRAP PRIMER	–	1/2"	–	–	–	–	PRECISION PLUMBING PRODUCTS PPP500 WITH DISTRIBUTION FITTING AND ACCESS PANEL IN WALL.

ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	MANUF. MOD. NO.	TYPE	SERVING	TEMPERATURE RISE (F°)	RECOVERY GPH	HEATER SIZE H X D (IN)	TEMPERATURE IN (F°)	TEMPERATURE OUT (F°)	ELECTRICAL DATA V	PH	KW	AMPS	OPER. WEIGHT (LBS)	COMMENTS
EWH-1	JANITOR CLOSET	A.O.SMITH DEL-20	STORAGE 20 GAL	PLBG. FIXTURES	60	41	22-1/4"H X 21-3/4"	60	120	208	1ø	6	28.8	300	INSTALL HEATER ON WELDED WALL STEEL SUPPORT. ROUTE P & T RELIEF VALVE DRAIN TO MOP SINK. SEE DET.1A/P-401 FOR WALL SUPPORT DETAILS.

CIRCULATING PUMP SCHEDULE

MARK	DESCRIPTION	LOCATION	TYPE	SERVING	MANUFACTURER	CAPACITIES/PIPE SIZES GPM	TDH'	SUCTION SIZE	DISCHARGE SIZE	ELECTRICAL DATA HP	V	PH	WATTS	OPER. WEIGHT (LBS)	REMARKS
CP-1	CIRCULATING PUMP	JANITOR ROOM	IN-LINE	DOMESTIC HOT WATER	TACO MOD. NO. 0011-SF4-1FC	2	8	3/4"	3/4"	1/8	120	1ø	30	12	PROVIDE COMBINATION AQUASTAT/TIMER CONTROLLER. INTERLOCK W. CIRCULATING PUMP. PUMP TO BE OPERATED FROM WALL MOUNTED TOGGLE SWITCH. PUMP CASING TO BE STAINLESS STEEL.

THERMOSTATIC MASTER MIXING VALVE

MARK	DESCRIPTION	LOCATION	TYPE	SERVING	MANUFACTURER	CAPACITIES/PIPE SIZES GPM	VALVE PIPE CONN'S. CW	HW	TW	ELECTRICAL DATA –	V	PH	WATTS	OPER. WEIGHT (LBS)	REMARKS
TMV-1 HTA-1 HTS-1	MIXING-VALVE HI-TEMP-ALARM HI-TEMP-SENSOR	JANITOR ROOM	IN-LINE	DOMESTIC HOT WATER	LEONARD NUCLEUS PNV-100-LF	.25-17	3/4"	3/4"	1"	–	120	1ø	30	12	INSTALL 5'-0" ABV. FLOOR ON GALV. STEEL STRUTS SECURED TO STUD WALL. REMOTE CONTROL HI-TEMP ALARM MODULE. (HTA-1) INSTALL IN RECEPTION AREA. WATTS/POWERS AQYASENTRY 2 LF460. INTERLOCK WITH PIPE SENSOR.

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MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/22	DSA SUBMITTAL

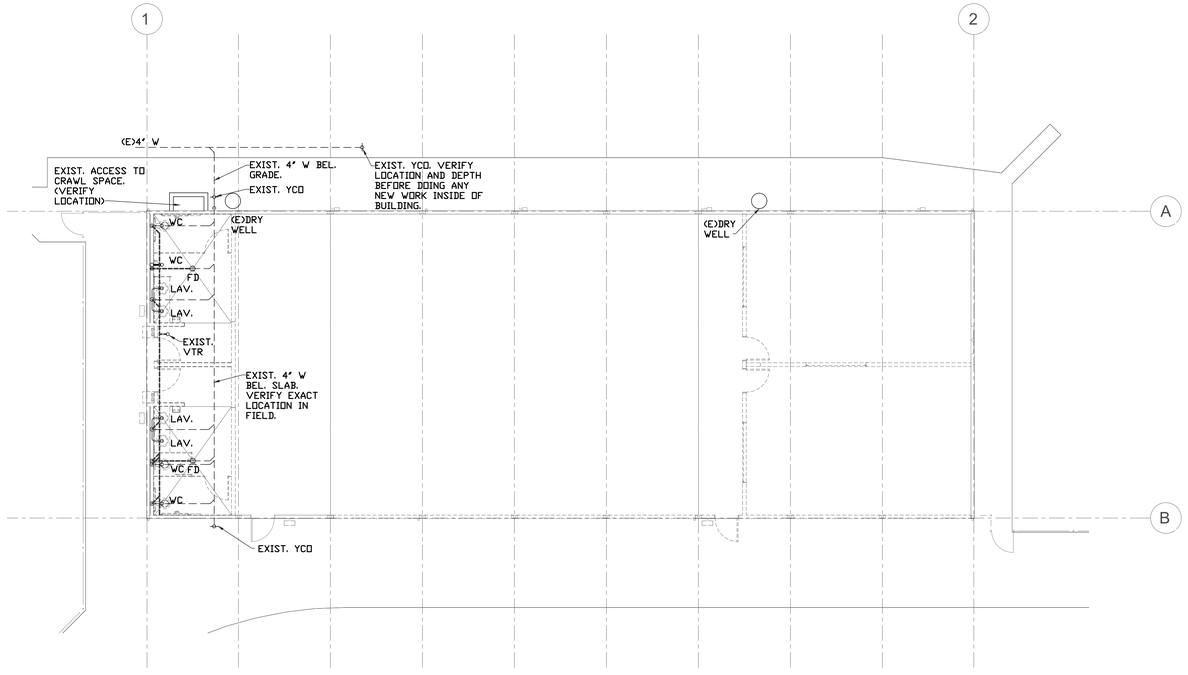
PROJECT NO.: **21095.01**

SHEET TITLE:

PLUMBING SCHEDULES

SHEET NO.:

P-002



GENERAL NOTES:
EXISTING INFORMATION IS PER PER AS BUILT DSA APPROVED RECORD SET- FROM DEC 16 2008
APP 03 109501;

DEMOLITION NOTES:
REMOVE ALL EXISTING PLUMBING FIXTURES & TRIMS, FLOOR DRAINS, INCLUDING UTILITIES, WASTE, VENT, WATER AND ALL WASTE LINE IN CRAWL SPACE BELOW FLOOR.

ALL PLUMBING FIXTURE AND PIPING SHOWN TO BE REPLACED WITH NEW. PREPARE SLAB AND WALLS TO RECEIVE NEW PIPING.

EXIST. VTR TO REMAIN. SEE NEW WORK DWG. FOR NEW POC'S ETC.

DISCONN. EXIST. 4" W 5' FR. BLDG. AND PREPARE FOR NEW POC. IF EXIST. FOOTING STEM WALL PENETRATION IS DIFFICULT TO REPLACE, VERIFY CONDITION OT IS AND IF SATISFACORY, MAKE POC ON EITHER SIDE OF WALL PENETRATION.

PLUMBING DEMOLITION PLAN (1)
SCALE: 1/8" = 1'-0"

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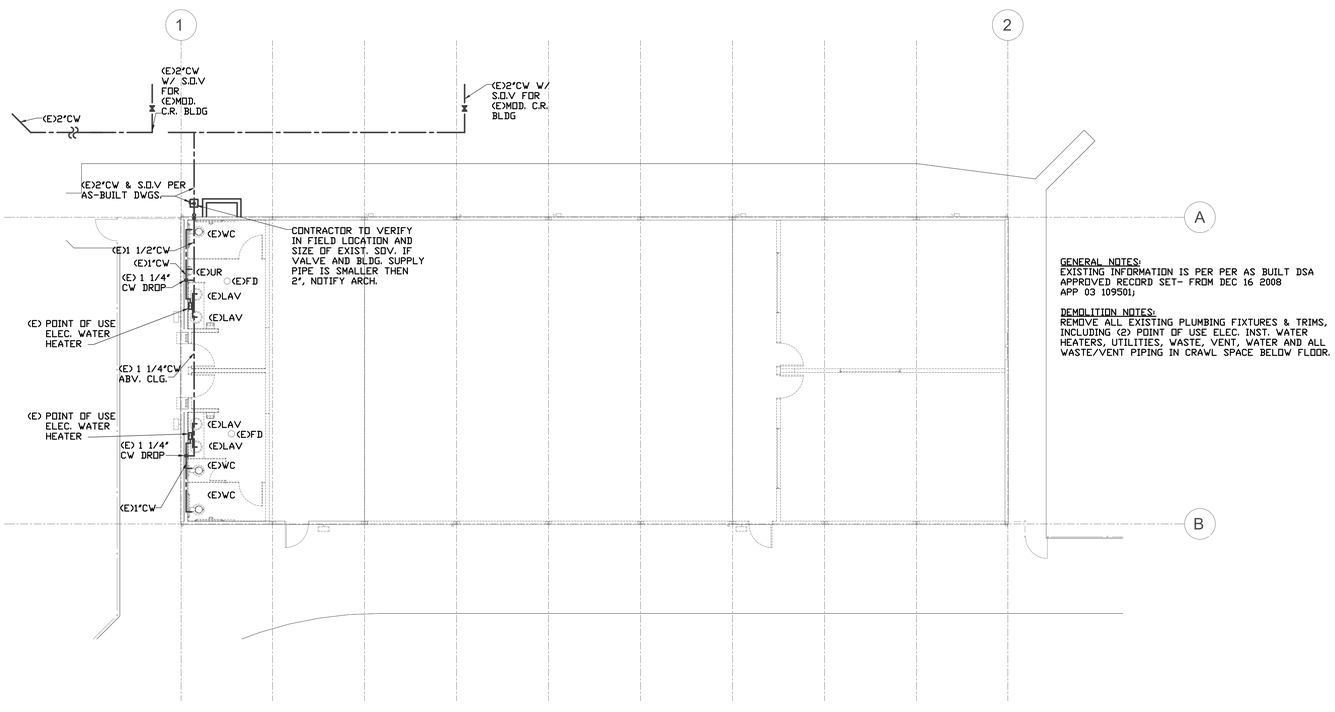
PROJECT NO.: **21095.01**

SHEET TITLE:
PLUMBING DEMOLITION PLAN- WASTE AND VENT

SHEET NO.:
P-011



GENERAL NOTES:
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DEMOLITION NOTES:
REMOVE ALL EXISTING PLUMBING FIXTURES & TRIMS, INCLUDING (2) POINT OF USE ELEC. INST. WATER HEATERS, UTILITIES, WASTE, VENT, WATER AND ALL WASTE/VENT PIPING IN CRAWL SPACE BELOW FLOOR.

PLUMBING DEMOLITION PLAN (1)

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

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	12/07/22	DSA SUBMITTAL

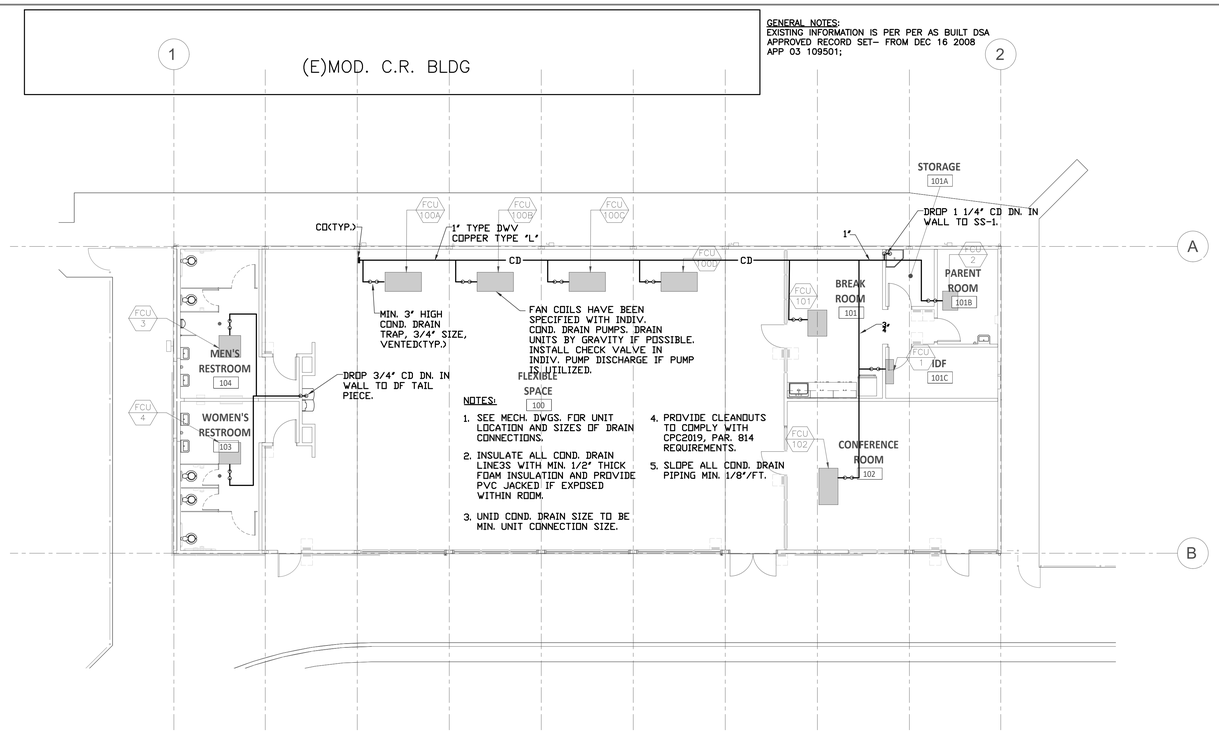
PROJECT NO.: **21095.01**

SHEET TITLE:

PLUMBING DEMOLITION PLAN-WATER

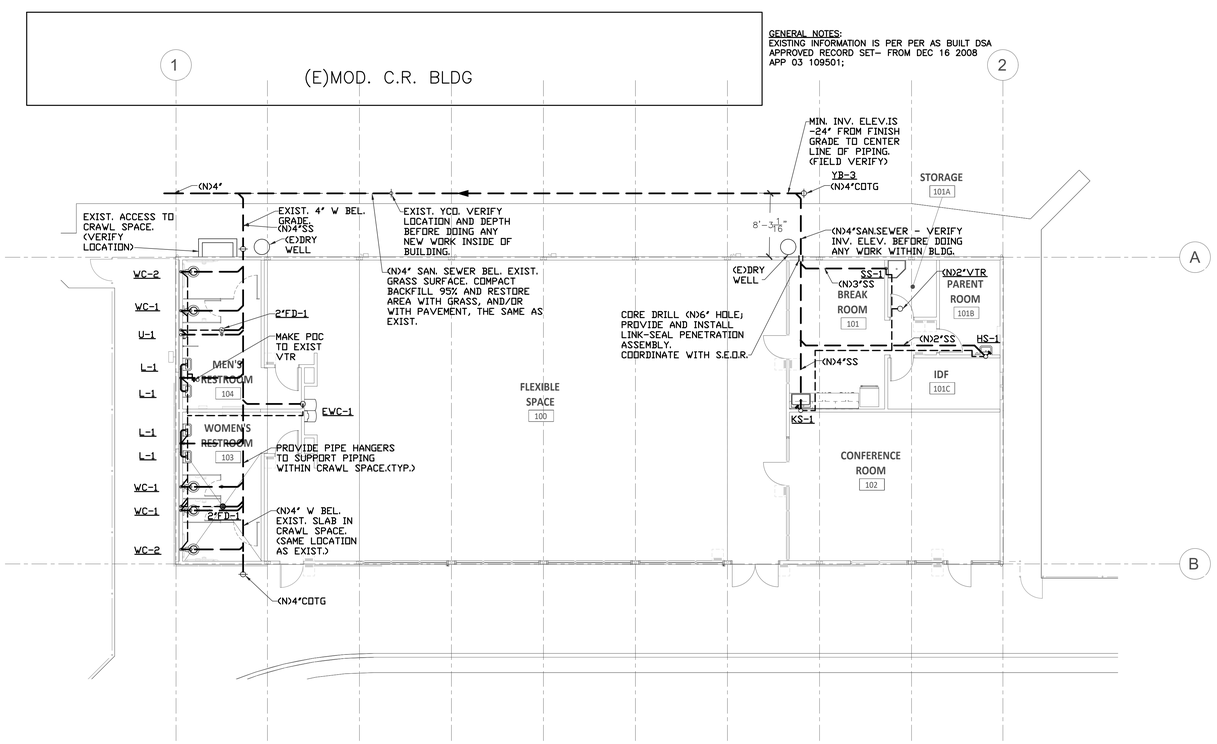
SHEET NO.:

P-021



PLUMBING NEW WORK PLAN- CONDENSATE DRAINAGE (2)

SCALE: 1/8 = 1'-0"



PLUMBING NEW WORK PLAN- WASTE, VENT (1)

SCALE: 1/8 = 1'-0"

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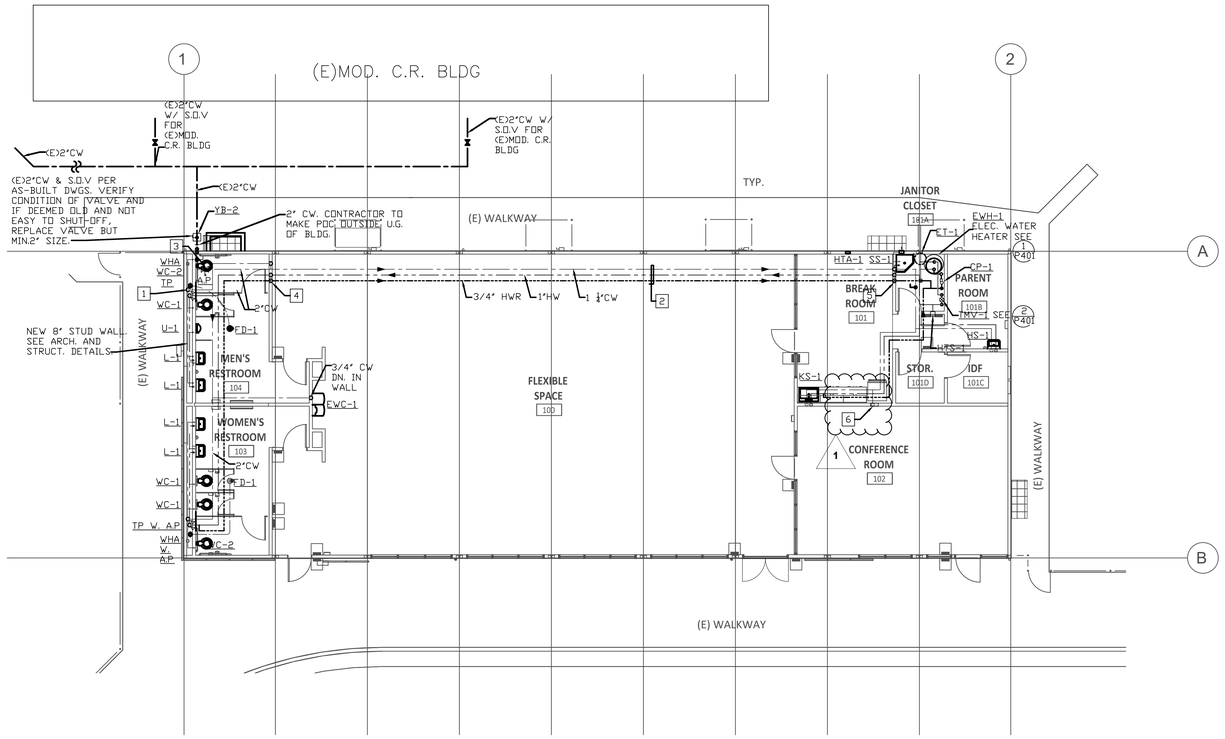
PROJECT NO.: **21095.01**

SHEET TITLE:

PLUMBING NEW WORK PLAN- WASTE, VENT AND COND. DRAINAGE

SHEET NO.:

P-111



GENERAL NOTES:

1. EXISTING INFORMATION IS PER PER AS BUILT DSA APPROVED RECORD SET- FROM DEC 16 2008 APP 03 109501;
2. ALL PLUMBING INCLUDING PIPES SHOWN, ARE NEW WORK, EXCEPT IF NOTED AS EXISTING (E).

KEY NOTES:

1. 2" CW &. 3/4 HW DN. IN WALL TO SDV &. AP. INSTALL AT + 7'-0"
2. ROUTE NEW WATER PIPING IN ACCESSIBLE CRAWL SPACE IF POSSIBLE. COORDINATE WITH FIELD CONDITIONS.
3. IF WATER PRESS. IS MORE THEN 80 PSI, INSTALL NEW 2" PRV WILKINS 500XLYSBR IN CRAWL SPACE. (FIELD VERIFY)
4. RISE 2" CW, 1" HW&. ¾" HWR IN WALL TO ABV. TOILET ROOM CLG. ELEV.
5. RISE 1 1/4" CW, 1" HW &. ¾" HWR IN WALL TO ABV. JAN. ROOM CLG. ELEV.
6. DROP ¾" CW IN WALL TO REFRIGERATOR WALL-BOX WITH ½" BALL VALVE

PLUMBING NEW WORK PLAN- WATER (1)

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

3/21/2022 9:02:26 AM

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PROJECT NAME:

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SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION
01	09-25-2023	ADDENDEM 01

PROJECT NO.: **21095.01**

SHEET TITLE:

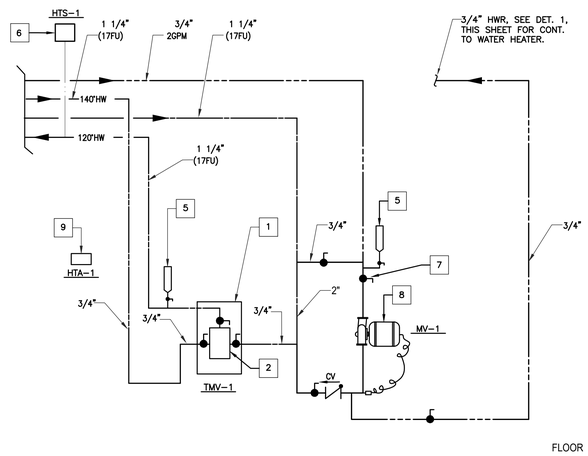
PLUMBING NEW WORK PLAN- WATER

SHEET NO.:

P-121

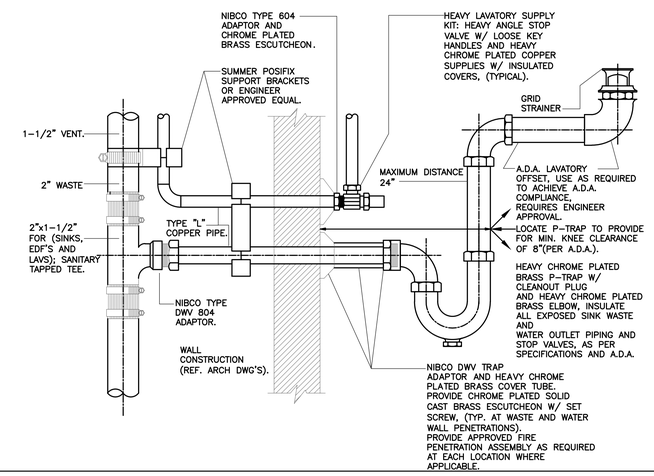
LEGEND:

1. NEMA 1 PANEL SUPPORT FROM CONCRETE PAD.
2. THERMOSTATIC ELEC. TYPE MIXING VALVE. 120V, 1–PHASE (EMERG. BRANCH)
3. INSTALL ALARM PANEL IN EXIST. PBX ROOM OF HOSPITAL
4. INSTALL MIXING VALVE AND PIPING ACCORDING TO MANUF. RECOMMENDATIONS
5. THERMOMETER.
6. HI–TEMP SENSOR PROBE – INSTALL 25' FROM MIXING VALVE LOCATION. (EMERG. ELEC. BRANCH)
7. BALL VALVE (TYP.).
8. HEATER LOOP CIRCULATING PUMP. 1/6 H.P. 120V, 1–PHASE.
9. HIGH TEMP ALARM PANEL. H.P. 120V, 1–PHASE.



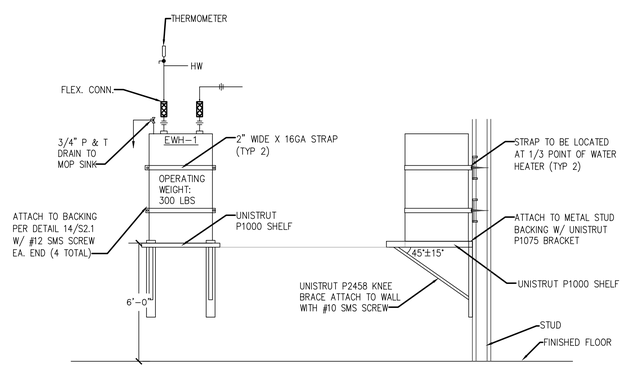
THERMOSTATIC MIXING VALVE, PIPING AND HI-TEMP ALARM AND PIPING

2



LAVATORY AND SINK PIPE CONNECTION

3



FRONT VIEW SIDE VIEW

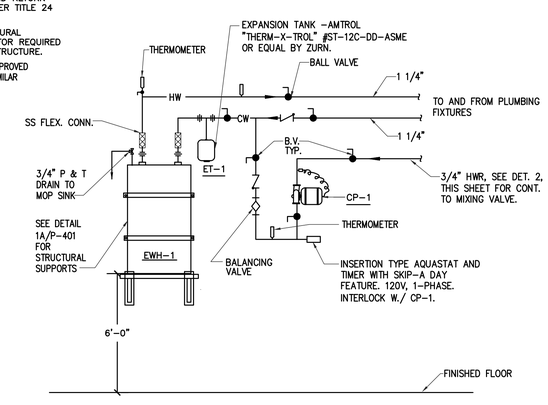
ELECTRIC WATER HEATER (EWH-1) STRUCTURAL SUPPORT DETAIL

1A

NOTES:
ALL HOT WATER SUPPLY AND RETURN PIPING TO BE INSULATED PER TITLE 24 REQUIREMENTS.

OBTAIN REGISTERED STRUCTURAL ENGINEER, STATE OF CAL. FOR REQUIRED WATER HEATER SUPPORT STRUCTURE.

PROVIDE AND INSTALL A.H.J APPROVED DIELECTRIC UNIONS BTW. DISSIMILAR MATERIALS AT ALL LOCATIONS.



FRONT VIEW SCHEMATIC

ELECTRIC WATER HEATER (EWH-1) (CP-1) (ET-1)

1

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APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/22	DSA SUBMITTAL

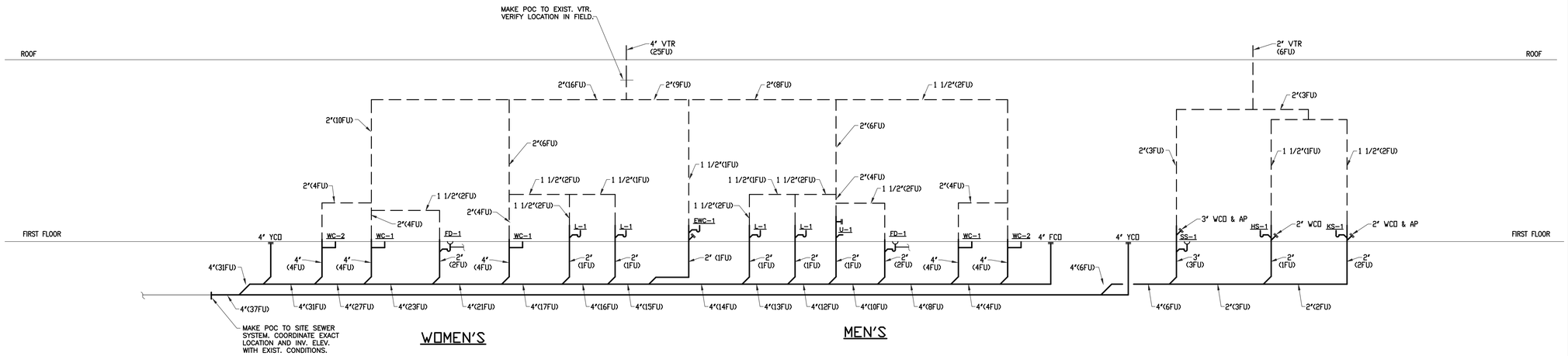
PROJECT NO.: **21095.01**

SHEET TITLE:

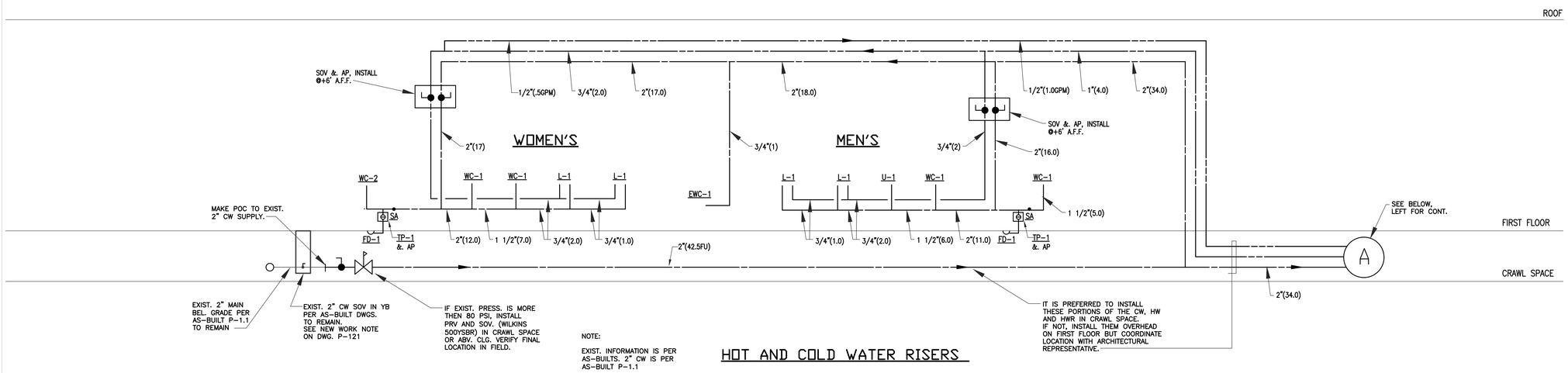
PLUMBING DETAILS

SHEET NO.:

P-401

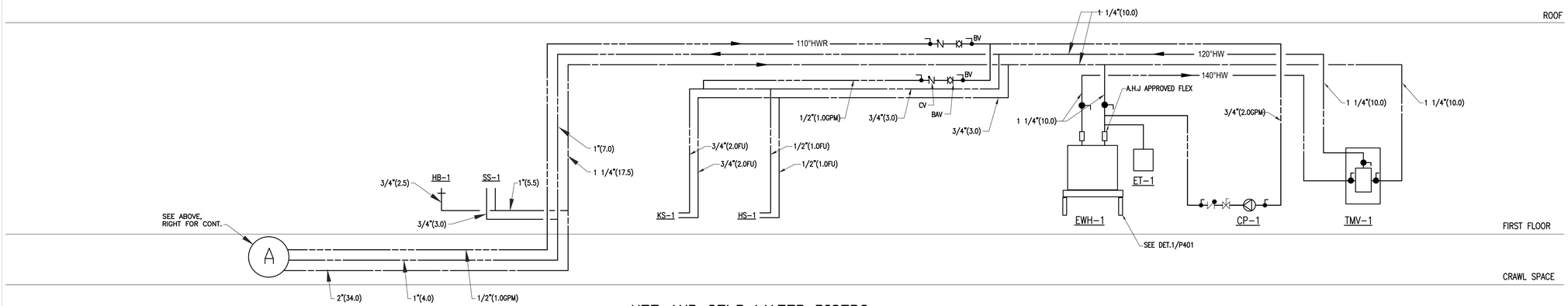


WASTE AND VENT RISERS



NOTE:
EXIST. INFORMATION IS PER AS-BUILTS. 2" CW IS PER AS-BUILT P-1.1

HOT AND COLD WATER RISERS



HOT AND COLD WATER RISERS

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MARK	DATE	DESCRIPTION
	07/15/22	DESIGN DEVELOPMENT
	12/07/22	DSA SUBMITTAL

PROJECT NO.: **21095.01**

SHEET TITLE:

PLUMBING
RISER DIAGRAMS

SHEET NO.:

P-500

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 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7–16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING 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.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY 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 ELECTRICAL COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

ELECTRICAL DISTRIBUTION 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 2019 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) DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

ELECTRICAL SYMBOLS LIST

SYMBOLS REPRESENT EQUIPMENT AND OUTLET BOXES TO WHICH CONDUIT AND WIRE IS RUN FOR CONNECTION TO FIXTURES AND DEVICES.

SYMBOL	GENERAL DESCRIPTION
	2' X 2' FLUORESCENT FIXTURE.
	1' X 4' FLUORESCENT FIXTURE.
	SURFACE OR CEILING MOUNTED FLUORESCENT FIXTURE. (USE 1–1/2" SPACERS ON COMBUSTIBLE CEILING)
	FLUORESCENT FIXTURE SUSPENDED BELOW CEILING (MOUNT AT DESIGNATED HEIGHT ABOVE FLOOR)
	FLUORESCENT STRIP LIGHT
	WALL MOUNTED FIXTURE.
	FLUORESCENT OR HID FIXTURE RECESSED IN CEILING (KEEP J–BOX ACCESSIBLE FROM WITHIN FIXTURE)
	FLUORESCENT OR HID FIXTURE WALL MOUNTED (CONFIRM HEIGHT OF OUTLET)
	LIGHT FIXTURE WITH EMERGENCY BACKUP BATTERY, OR CONNECTED TO EMERGENCY POWER SYSTEM.
	LIGHTED EXIT SIGN. CEILING, WALL MOUNTED OR RECESSED (ARROW SHOWS ROUTE TO LEGAL EXIT)
J	CEILING MOUNTED JUNCTION BOX, WITH COVER (4" SQUARE, DEEP, WITH PLASTER RING)
J	JUNCTION BOX, WALL MOUNTED, WITH COVER, +18"
	SINGLE OUTLET RECEPTACLE, RATING AND CONFIGURATION AS INDICATED ON PLAN. MOUNT AT20 AMP, 120 VOLT, COVER PLATE PER ARCHITECT INSTRUCTION +18" AFF
	DUPLEX RECEPTACLE, FLUSH IN WALL, GROUNDING TYPE +18"AFF (20 AMP, 120 VOLT, COVER PLATE PER ARCHITECT INSTRUCTION)
	15A, 125V, 1P, 3W NEMA 5–15R GROUND FAULT CIRCUIT INTERRUPTER (GFCI) DUPLEX RECEPTACLE
	15A, 125V, 1P, 3W NEMA 5–15R GROUND FAULT CIRCUIT INTERRUPTER (GFCI) DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
	DOUBLE DUPLEX RECEPTACLE, FLUSH IN WALL +18"AFF (20 AMP, 120 VOLT COVER PLATE PER ARCHITECT INSTRUCTION.)
W.P.	DUPLEX RECEPTACLE, WITH GROUND FAULT CIRCUIT INTERRUPTER AS IDENTIFIED IN CEC 210.8 (20 AMP. 120 VOLT, 3W) (WHEN W.P IS INDICATED, PROVIDE WEATHER PROOF TYPE)
	DOUBLE DUPLEX RECEPTACLE, WITH ISOLATED GROUND, FLUSH IN WALL +18"AFF (20 AMP. 120 VOLT)
	SPECIAL RECEPTACLE, MTD. AT +18" AFF, UON (NEMA CONFIGURATION AS SHOWN ON DRAWINGS)
+44	DUPLEX RECEPTACLE, FLUSH IN WALL, GROUNDING TYPE MOUNTED 44 INCHES ABOVE FINISHED FLOOR (20 AMP, 120 VOLT, COVER PLATE PER ARCHITECT INSTRUCTION)
	DOUBLE DUPLEX RECEPTACLE OUTLET, 20A 120 VOLT FLUSH IN FLOOR WITH HINGED BRASS COVER.
	DATA WITH 2 DATA OUTLETS. FLUSH IN FLOOR WITH HINGED BRASS COVER AND MINIMUM 1" C.O TO IDF CABINET
	CONDUIT SEAL
N	NEUTRAL BUS
G	GROUND BUS
	GROUND CONNECTION TO MAIN BLDG GROUND BUS
	PENDENT MOUNTED SUPPORT FOR CABLE TRAY.
	CABLE TRAY SOLID BOTTOM FOR WIDTH SEE SPECIFICATION
	CABLE TRAY LADDER TYPE.
(1) 2"C.O.	DATA WIRING WIRE MOLD FLUSH MOUNTED FURNITURE FEEDER POKE–THRU ASSEMBLED UNIT INCLUDE ALL ACCESSORY FOR CARPET FLOOR. PROVIDE 6"x6"x4"D NEMA–1 PULL BOX AT THE BOTTOM OF UNIT. WIRE MOLD CAT# RC9AM2TC–XX. SEE ARCHITECT FOR CARPET AND COLOR FINISHING. VERIFY AND COORDINATE FURNITURE FEED TYPE WITH FURNITURE MANUFACTURE. DATA POKE THRU UNIT WITH (1) 6"x6"x4"D PULL BOX AT THE BOTTOM OF POKE THRU UNIT.
J	6"x6"x4"D POWER JUNCTION BOX SURFACE MOUNTED ON THE COLUMN AT +18" ABOVE FLOOR WITH (2) 3/4"C FLEXIBLE CONDUITS WITH WIRES CONNECT TO PRE WIRED FURNITURE COORDINATE WITH FURNITURE MANUFACTURE/INSTALLER ON FINAL CONNECTION.VERIFY EXACT LOCATION ON SITE WITH ARCHITECT BEFORE INSTALLATION. MOUNTING HEIGHT TO THE BOTTOM OF JUNCTION BOX. PROVIDE FINAL CONNECTIONS.

NOT ALL SYMBOLS APPLY TO THIS PROJECT: DISREGARD THOSE NOT USED ON PLANS AND IN DETAILS.

SYMBOL	GENERAL DESCRIPTION
	DATA OUTLET FLUSH IN WALL +18" WITH (2) NETWORK DROPS WITH MINIMUM 3/4"C.O. TO NEAREST COMM PULLBOX.
	TELEPHONE OUTLET, FLUSH IN WALL +18" WITH MINIMUM 3/4"C.O. TO TTB.
WAP	WIRELESS ACCESS POINT BOX, CEILING MOUNTED.
CAM	WIRELESS ACCESS POINT BOX, CEILING MOUNTED.
PJ	PROJECTOR RECEPTACLE, CEILING MOUNTED
	TERMINAL BOARD OF 3/4" THICK PLYWOOD ON WALL (SIZE AS NOTED, PAINT TO MATCH WALL)
TV	TELEVISION CABLE OUTLET, FLUSH IN WALL +18" 4"X4" BACK BOX WITH MUD GUARD. PROVIDE 1"CO TO NEAREST CABLE TRAY CEILING LEVEL. SEE FLOOR PLAN ADDITIONAL INFORMATION.
T	THERMOSTAT, OUTLET, WALL MOUNTED, +48" (LOCATE SYMMETRICALLY WITH OTHER DEVICES)
Sa	SWITCH, FLUSH IN WALL, TOGGLE, SINGLE–POLE S.T. +42" (SUBSCRIPT DENOTES UNIT CONTROLLED)
S^D	FLUORESCENT DIMMER SWITCH, FLUSH IN WALL, TOGGLE, SINGLE–POLE S.T. +42" (SUBSCRIPT DENOTES UNIT CONTROLLED)
S^2	SWITCH, FLUSH IN WALL, TOGGLE, TWO–POLE S.T. +42"
S^3	SWITCH, FLUSH IN WALL, THREE WAY +42" (CONNECT TO MATCHING SWITCH FOR 3–WAY USE)
S^4	SWITCH, FLUSH IN WALL, FOUR WAY +42" (CONNECT TO MATCHING SWITCHES FOR 3–4 WAY USE)
S^K	SWITCH, FLUSH IN WALL, KEY OPERATED
S^M	SWITCH, FLUSH IN WALL, MOMENTARY CONTACT, S.P.S.T.
S^P	SWITCH, FLUSH IN WALL, WITH PILOT LIGHT (ENGRAVE PLATE WITH ITEM CONTROLLED)
S^T	MOTOR STARTER, WITH THERMAL OVERLOADS (POLES, NOTED, HORSEPOWER RATED)
S^{WP}	WEATHERPROOF SWITCH.
	COMBINATION DISCONNECT SWITCH AND MAGNETIC MOTOR–STARTER, THERMAL OVERLOADS,600V 3 POLES FVNR UON, NUMBER INDICATES NEMA SIZE(PROVIDE AUXILIARY CONTACTS & CONTROL TRANSFORMER)
	NOT FUSE DISCONNECT SWITCH, MANUAL EXO, H.P. RATED ("F" MEANS FUSED TO AMPERE RATING MARKED)
F	HEAVY DUTY DISCONNECT SWITCH HORSE POWER RATED 600V, 3 POLE "F" MEANS FUSED TO AMPERE RATING MARKED INDICATE FUSE TYPE AS INDICATED OR PER MANUFACTURER RECOMMENDATIONS
	OUTLET FOR MOTOR; CONFIRM DIRECTION OF ROTATION (PROVIDE FLEXIBLE CONNECTION TO J–BOX FROM MOTOR)
	CIRCUIT BREAKER OF POLES, VOLTS, TRIP–AMPS NOTED (CONFIRM INTERRUPTING CAPACITY NEEDED)
SP PA	COMBINATION SPEAKER, PA, AND CLOCK
PB	PULL BOX, CONFIRM ACTUAL SIZE AND LOCATION WITH USER.
ab	LOW VOLTAGE LIGHT DIMMER +42"ABOVE FINISHED FLOOR U.O.N. SEE SHEET 4–E401 FOR MORE DETAILS. ab = ZONE NUMBER "a" AND "b" THAT CONTROL THE LUMINARIES
TS ab	LOW VOLTAGE/TIMER SWITCH. +42"ABOVE FINISHED FLOOR –LOW VOLTAGE CONNECTION TO ROOM CONTROLLER. ab = ZONE NUMBER "a" AND "b" THAT CONTROL THE LUMINARIES
ab OS	CEILING MOUNTED DUAL–TECHNOLOGY OCCUPANCY SENSOR WITH INTEGRAL POWER UNITS–LOW VOLTAGE CONNECTION TO ROOM CONTROLLER. ab = ZONE NUMBER"a" AND "b" THAT CONTROL THE LUMINAIRE
ab PC	PHOTOCELL SENSOR – CEILING MOUNTED–LOW VOLTAGE CONNECTION TO ROOM CONTROLLER ab = ZONE NUMBER "a" AND "b" THAT CONTROL THE LUMINARIES
ab RC–1	ROOM CONTROLLER – LIGHTING CONTROL. ab = ZONE NUMBER "a" AND "b" THAT CONTROL THE LUMINARIES
RC–R	ROOM CONTROLLER – RECEPTACLE CONTROL.
F1 o a	LUMINAIRE MARKING CONVENTION LEGEND: F1 = LUMINAIRE TYPE IDENTIFICATION. SEE LUMINAIRE SCHEDULE. a = ONE NUMBER/LOWER LETTER INDICATES LOW VOLTAGE RELAY OR LIGHTING CONTACTOR THAT SERVES THE LUMINAIRE
	TRANSFORMER

MOUNTING HEIGHTS IN SYMBOL LIST APPLY UNLESS OTHERWISE NOTED ON DRAWINGS.

SYMBOL	GENERAL DESCRIPTION
	DISCONNECT SWITCH & FUSE, DIAGRAMMATIC
C	CONDUIT STUB–UP WITH COUPLING FLUSH IN FLOOR (TO PERMIT FUTURE REMOVAL)
	CONDUIT CONCEALED IN OR UNDER FLOOR: OR UNDERGROUND (CONFIRM DEPTH; GRADE TO DRAIN INTO PULL BOXES)
	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.
	3/4" CONDUIT WITH 2#12 WIRES, 1#12 GND AND 1#12 ISOLATED GROUND
	3/4" CONDUIT WITH 4#12 WIRES, 1#12 GND AND 1#12 ISOLATED GROUND
	ALL WIRING TO BE CU. THHN INSULATION & GROUND PER NEC 250–122 (B) CONCEALED IN WALL OR CEILING
#10	NUMBER INDICATES GAUGE OF WIRE IN CODE SIZED CONDUIT.
A–1,3	HOMERUN TO CIRCUITS #1 & #3 IN PANEL "A" (CROSSMARKS INDICATE NUMBER OF WIRES)
	CONDUIT DROPPING DOWN FROM RUN (IF CONDUIT IS USED KEEP COVER ACCESSIBLE)
	CONDUIT RISING UP FROM RUN (IF CONDUIT IS USED, KEEP COVER ACCESSIBLE)
	GROUND CONNECTION WITH ACCESSIBLE CLAMP (TO COLD WATER PIPE OR DRIVEN GROUND ROD)
	UFER GROUND
P.B.	PULL BOX WITH SCREW HELD METAL COVER PLATE (DIMENSIONS CODE–SIZED UNLESS NOTED)
	BRANCH PANELBOARD, WALL MOUNTED, SEE SCHEDULE
	DISTRIBUTION SUB–SWITCHBOARD, SEE SCHEDULE
	MAIN SWITCHBOARD, POWER OR LIGHT, FLOOR STANDING, ENCL. (SEE ONE LINE DIAGRAM & LOAD SUMMARY)
	PULL SECTION FOR UNDERGROUND SERVICE TO SWITCHBOARD (PROVIDE PERFORATED SCREW HEADS FOR UTILITY SEAL)
	CONTROL PANEL WITH DEVICES SHOWN OR DESCRIBED (MOUNT DEVICES INDEPENDENT FROM HINGED COVER)
T	3/4"C.O. FOR TELEPHONE SYSTEM.
D	3/4" C.O. FOR DATA OUTLET
1	NUMBERED NOTE FOR SHEET WHERE SHOWN
1	REFERENCE NOTE
101	ROOM NUMBER OR AREA DESIGNATION
A E–1	DETAIL DESIGNATION FOR ITEM & DRAWING NUMBER
(E)	EXISTING TO REMAIN.
	EXISTING CONDUIT AND CONDUCTORS TO REMAIN
	EXISTING CONDUIT AND CONDUCTORS, REMOVE CONDUCTORS. REMOVE CONDUIT
S	ELEVATOR PIT/SHAFT LIGHT WITH SWITCH AND RECEPTACLE. LIGHT SHALL BE 100W INCANDESCENT LIGHT FIXTURE 6–1/2"x4–1/2" WALL BRACKET CYLINDER WITH WIRE GUARD A19–100W
G	UFER GROUND 1#4/0, 40' MINIMUM
55	LOADS IN KVA
225B 225A	FEEDER SCHEDULE REFERENCE
STC–x	FLOOR DESIGNATION SECURITY TERMINAL CABINET 18"Wx18"Hx6"D WITH LOCKABLE DOOR NEMA1
TV	TELEVISION OUTLET BOX 4S, MOUNTING HEIGHT PER ARCHITECT. STUB 3/4" C.O. 6" ABOVE CEILING SPACE, PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARD LID CEILING, PROVIDE 3/4" C.O. BACK TO LOCATION OF CABLE TELEVISION TERMINAL OR COMMUNICATIONS CABINET.
	POWER CIRCUITS WIRE MOLD FLUSH MOUNTED. FURNITURE FEED POKE THRU ASSEMBLY INCLUDE ALL ACCESSORY AND FOR CARPET FLOOR POKE THRU UNIT INCLUDE JUNCTION BOX FOR CIRCUITS HOME RUN. WIRE MOLD CAT.# RC7AFF–TC–XX. SEE ARCHITECT FOR CARPET AND COLOR FINISH. VERIFY AND COORDINATE FURNITURE FEED TYPE WITH FURNITURE MANUFACTURE AND INSTALLER. CONTRACTOR TO PROVIDE FINAL POWER CONNECTIONS TO FURNITURE. POWER POKE THRU UNIT WITH POWER CIRCUIT HOME RUN SHOWN (SEE FLOOR PLAN FOR NUMBER OF HOME RUNS)

ABBREVIATION

AFF	ABOVE FINISHED FLOOR
C.O.	CONDUIT ONLY
DP	DISTRIBUTION PANEL
EM	EMERGENCY
EF	EXHAUST FAN
(E)	EXISTING
FA	FIRE ALARM
FLUOR	FLUORESCENT
GND	GROUND
HD	HEAVY DUTY
HP	HORSEPOWER RATING
J–BOX	JUNCTION BOX
KA	KILO AMPERES
KW	KILOWATT
KVA	KILO–VOLT AMPS
LTG	LIGHTING
LCL	"LONG CONTINUOUS LOAD"
L.O.	LUGS ONLY
LV	LOW VOLTAGE
SSD	METAL BOX 4–11/16" SQUARE (X) 2–1/8" DEEP
MH	MOUNTING HEIGHT (TO BOTTOM OF FIXTURE)
(+)X'–Y"	MOUNTING HEIGHT (TO CENTER OF DEVICE)
GFI/GFCI	GROUND FAULT CIRCUIT INTERRUPTER PER CEC 210.8.
MC	MOMENTARY CONTACT ACTION
M.L.O.	MAIN LUG ONLY
NEC	NATIONAL ELECTRICAL CODE
(N)	NEW
NL	NIGHT LIGHT
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PNL	PANEL BOARD
PEC	PHOTO ELECTRIC CELL
R	RADIUS
SA	SATIN ALUMINUM
SSS	SATIN STAINLESS STEEL
HOA	"HAND OFF AUTOMATIC"
TEL	TELEPHONE
TSC	TIME SWITCH CONTROL
TRANSF	TRANSFORMER
TL	TWIST–LOCK CONSTRUCTION
TYP	TYPICAL
(X) –	EXISTING FIRE ALARM 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
UON	UNLESS OTHERWISE NOTED
V	VOLTS
W/	WITH/
WP	WEATHERPROOF CONSTRUCTION
WT	WEATHERTIGHT CONSTRUCTION
WBE	WHITE BAKED ENAMEL
WPE	WHITE PORCELAIN ENAMEL
(XR)	REMOVE RELOCATE AS SHOWN
(R)	EXISTING DEVICE TO BE REMOVED
(AC)	HEAT DETECTOR TO BE PLACED ABOVE CEILING

ELECTRICAL DRAWING LIST

E–001	ELECTRICAL LEGENDS AND ABBREVIATIONS
E–002	ELECTRICAL PANEL SCHEDULES AND PARTIAL SINGLE LINE DIAGRAM
E–101D	ELECTRICAL LIGHTING DEMOLITION PLAN
E–201D	ELECTRICAL POWER DEMOLITION PLAN
E–101	ELECTRICAL LIGHTING PLAN
E–201	ELECTRICAL POWER PLAN
E–202	ELECTRICAL ROOF POWER PLAN
E–301	ELECTRICAL DETAILS

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MARK	DATE	DESCRIPTION
01	09-25-2023	ADDENDEM 01

PROJECT NO.: **21095.01**

SHEET TITLE:

ELECTRICAL COVER SHEET

SHEET NO.:

E-001

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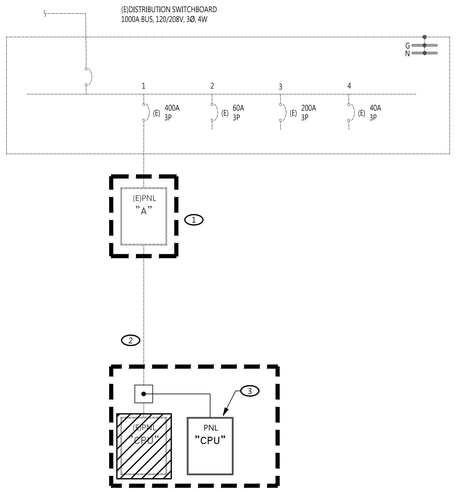

SINGLE LINE GENERAL NOTES

1. THIS DRAWING INDICATES EXISTING CONDITIONS WHICH WERE TAKEN FROM RECORD DRAWINGS. THE CONTRACTOR IS TO VERIFY ALL EXISTING CONDITIONS AND EXERCISE CAUTION IN THE DEMOLITION PROCESS AND PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES ENCOUNTERED.
2. ALL NEW CONDUCTORS SHALL BE COPPER.
3. CONDUCTORS/LUGS/TERMINATIONS SHALL BE RATED FOR 75° C.

SINGLE LINE KEY NOTES

1. PANELS USED UNDER THIS PROJECT.
2. EXISTING FEEDERS TO REMAIN.
3. EXISTING PANEL TO BE DEMO'D. PROVIDE NEMA 1 SPLICE BOX TO INTERCEPT EXISTING BRANCH CIRCUITS. EXTEND AND RECONNECT EXISTING BRANCH CIRCUIT WIRING AND CONDUITS TO NEW 30 CKT. PANEL IN SAME LOCATION. CONTRACTOR IS TO ENSURE THAT ALL ELECTRICAL EQUIPMENT THAT WILL BE REUSED IS CIRCUITED TO NEW PANEL. REFER TO REMODEL FLOOR PLAN FOR NEW PANEL LOCATION.

PARTIAL SINGLE LINE DIAGRAM

SCALE : N/A

DATE:	20-Sep-23	**PANEL VOLTAGE:**	208/120V
LOCATION:	IDF RM	**PHASE & WIRE:**	3PH. 4W
PANEL:	(E) A	**COPPER BUS:**	400A
AIC RATING:	EXISTING	**MAINS CB:**	400A

CIRCUIT CODE: 1=(CONTINUOUS) 2=(NON-CONTINUOUS) 3=(RECEPTACLES) 4=(KITCHEN) NO. OF EQUIP=

CKT NO.	CKT CODE	CB TRIP	CB POLE	LOAD DESIGNATION DESCRIPTION	MISC	REC	LITE	LOAD VA	PHASES A	PHASES B	PHASES C	LOAD VA	LITE	REC	MISC	LOAD DESIGNATION DESCRIPTION	CB POLE	CB TRIP	CKT CODE	CKT NO.
1	1	20	1	FLEXIBLE SPACE LTS				1084	1984			900		5		FLEXIBLE SPACE RECEPT.	1	20	3	2
3	1	20	1	RESTROOM LTS				272		2792		2520				GREENHOUSE PNL	3	30	3	4
5	1	20	1	CONF RM & BREAK RM LTS				416			2936	2520				-	-	30	-	6
7	2	80	3	CU-1 / FCU-1				8844	11364			2520				-	-	30	-	8
9	2	-	-	-				8844		10044		1200				SPARE	-	-	1	10
11	2	-	-	-				8844			9780	936				CU-4	2	15	3	12
13	2	30	2	CU-2 / FCU-2				1965.6	2901.6			936				-	-	-	3	14
15	2	-	-	-				1965.6		2685.6		720		4		FLEXIBLE SPACE RECEPT.	1	20	3	16
17	2	20	1	EF-1 / EF-3				317			1037	720		4		BREAK RM RECEPT	1	20	3	18
19	2	20	1	EF-2				1720	2980			1260		7		PATIENT/BREAK RM RECEPT	1	20	3	20
21	1	20	2	CU-3				1716		2076		360				CONFERENCE RM RECEPT	1	20	3	22
23	1	20	-	-				1716			2076	360				CONFERENCE RM RECEPT	1	20	3	24
25	2	15	2	FCU-3 / FCU-4				72	1152			1080				(E)RECEPTACLES	2	30	1	26
27	2	-	-	-				72		1152		1080				-	-	-	1	28
29	2	20	1	EWC-1				500			500					SPARE	1	20		30
31	1	20	1	(E)FIRE ALARM				200	1280			1080		6		FLEXIBLE SPACE MONITORS	1	20	3	32
33	2	20	2	FCU-100A / 100B/100C/100D				1414.4		2494.4		1080		6		FLEXIBLE SPACE MONITORS	1	20	3	34
35	2	-	-	-				1414.4			2650.4	1236				FCU-101 / FCU-102	2	20	2	36
37	2	30	2	WH-1				3016	4252			1236				-	-	20	2	38
39	2	-	-	-				3016		7768.8		4752.8				PNL CPU	2	100	2	40
41	2	20	1	CP-1				500			5252.8	4752.8				-	-	-	2	42
								TOTAL	25914	29013	24232									

CONNECTED KVA	87.1
CONN.KVA (CODE 1)	8.8
CONN.KVA (CODE 2)	54.5
CONN.KVA (CODE 3)	10.9
CONN.KVA (CODE 4)	0.0
	0.0
SPARE (DECIMAL)	SPARE KVA 0.0
FEEDER DEMAND KVA	75.9
FEEDER DEMAND AMPS	210.6
X'FMR. KVA	73.7

NOTES:

1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL BOARD. TYPE AND AIC RATING TO MATCH EXISTING. UPDATE PANELBOARD DIRECTORY PER GENERAL NOTE REQUIREMENTS.

DATE:	20-Sep-23	**PANEL VOLTAGE:**	208/120V
LOCATION:	IDF ROOM	**PHASE & WIRE:**	1PH. 3W
PANEL:	CPU	**COPPER BUS:**	100A
AIC RATING:	EXISTING	**MAINS CB:**	MLO

CIRCUIT CODE: 1=(CONTINUOUS) 2=(NON-CONTINUOUS) 3=(RECEPTACLES) 4=(KITCHEN) NO. OF EQUIP=

CKT NO.	CKT CODE	CB TRIP	CB POLE	LOAD DESIGNATION DESCRIPTION	MISC	REC	LITE	LOAD VA	PHASES A	PHASES B	LOAD VA	LITE	REC	MISC	LOAD DESIGNATION DESCRIPTION	CB POLE	CB TRIP	CKT CODE	CKT NO.
1	3	20	1	(E) FLOOR RECEPTACLES				1560	3120		1560				(E) FLOOR RECEPTACLES	1	20	3	2
3	3	20	1	(E) FLOOR RECEPTACLES				1560		3120	1560				(E) FLOOR RECEPTACLES	1	20	3	4
5	3	20	1	(E) FLOOR RECEPTACLES				1560			1560				(E) FLOOR RECEPTACLES	1	20	3	6
7	3	20	1	(E) FLOOR RECEPTACLES				1560	1632.8		72.8				BRANCH SELECTOR	2	20	2	8
9	3	20	1	(E) FLOOR RECEPTACLES				1560		1632.8	72.8				-	-	20		10
11	3	20	1	(E) FLOOR RECEPTACLES							360				CONFERENCE RM RECEPT	1	20	3	12
13		20	1	SPARE											SPARE	1	20		14
15		20	1	SPARE							720		2		CONF. RM TV	1	20	3	16
17		20	1	SPARE											SPARE	1	20		18
19		20	1	SPARE											SPARE	1	20		20
21		20	1	SPARE											SPARE	1	20		22
23		20	1	SPARE											SPARE	1	20		24
25				SPACE											SPACE				26
27				SPACE											SPACE				28
29				SPACE											SPACE				30
								TOTAL	4752.8	4752.8									

CONNECTED KVA	14.3
CONN.KVA (CODE 1)	0.0
CONN.KVA (CODE 2)	0.1
CONN.KVA (CODE 3)	13.6
CONN.KVA (CODE 4)	0.0
TENANT ALLOWANCE KVA	0.0
SPARE (DECIMAL)	SPARE KVA 0.0
FEEDER DEMAND KVA	11.9
FEEDER DEMAND AMPS	32.9
X'FMR. KVA	11.9

NOTES:

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MARK	DATE	DESCRIPTION
01	09-25-2023	ADDENDEM 01

PROJECT NO.: **21095.01**

SHEET TITLE:

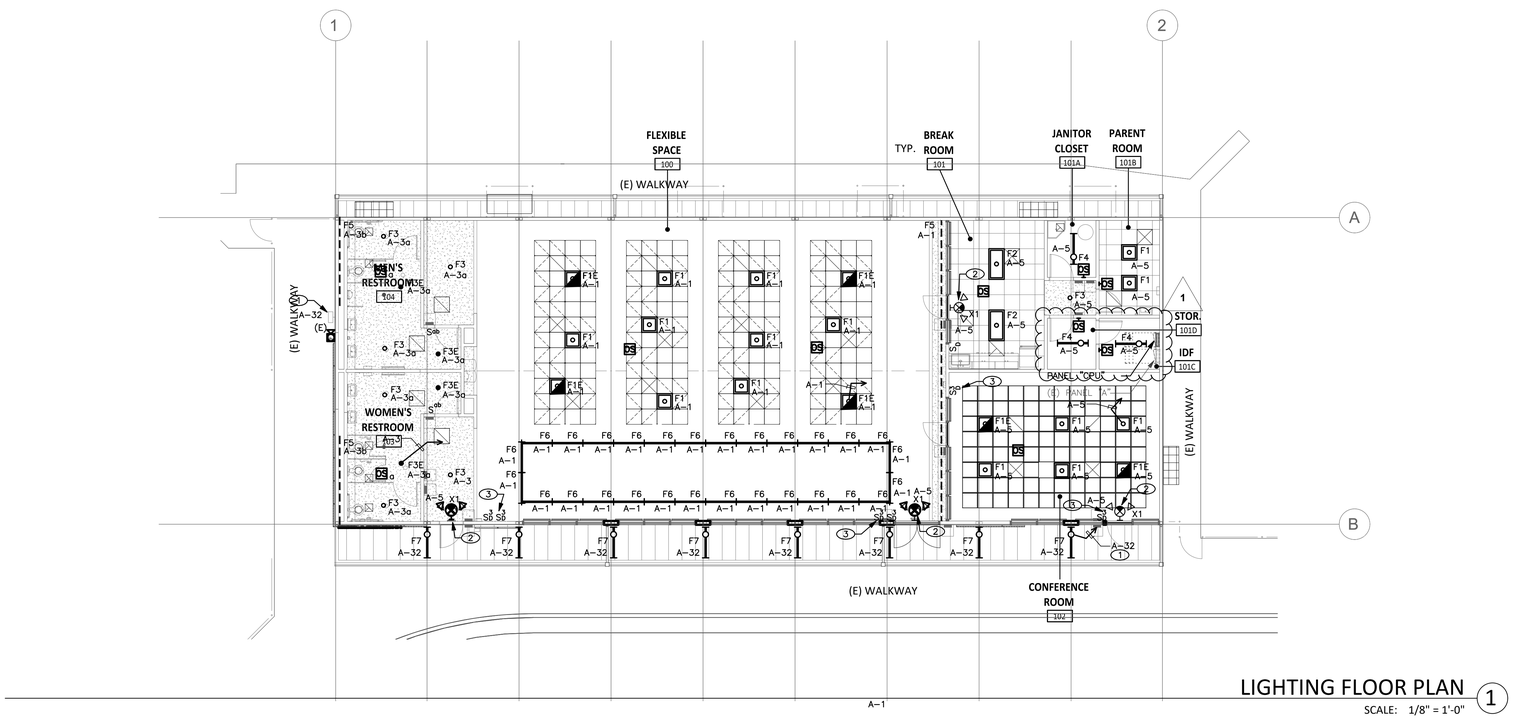
PARTIAL SINGLE LINE DIAGRAM AND PANEL SCHEDULES

SHEET NO.:

E-002

LIGHTING FIXTURE SCHEDULE

TYPE	SYMBOL	DESCRIPTION	INPUT VA	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	MANUFACTURER & CATALOG NO.
F1		2' X 2' RECESSED LED LIGHT FIXTURE	32	1	32	LED	COOPER LIGHTING #22CGT3540C
F1E		2' X 2' RECESSED LED LIGHT FIXTURE WITH 90 MIN, EMERGENCY BATTERY BACKUP BATTERY	32	1	32	LED	COOPER LIGHTING #22CGT3540C-EL14W
F2		2' X 4' RECESSED LED LIGHT FIXTURE	34	1	34	LED	COOPER LIGHTING #24RLN-LD5-45-UNV
F3		6" RECESSED LED DOWNLIGHT	20	1	20	LED	COOPER LIGHTING #HC6-20-D010
F3E		6" RECESSED LED DOWNLIGHT WITH 90 MIN, EMERGENCY BATTERY BACKUP BATTERY	20	1	20	LED	COOPER LIGHTING #HC6-20-D010-IEM14
F4		48" LONG PENDANT MOUNTED LED FIXTURE	24	1	24	LED	COOPER LIGHTING #2ST1L104OR
F5		LED COVE LIGHTING					COOPER LIGHTING #LM-10L-940-120-ID-UNV
F6		48" LONG PENDANT MOUNTED LED FIXTURE	25	1	25	LED	COOPER LIGHTING #RZL-NN-30L-9-40-1
F7		EXTERIOR 48" LONG SURFACE MOUNTED LED FIXTURE	32	–	32	LED	CALI LIGHTING #ALS500T-F-WH-4.0-8W-10V
X1		SINGLE FACE ILLUMINATED EXIT SIGN, WITH WHITE HOUSING AND RED LETTERS, WALL OR CEILING MOUNTED		–			LITHONIA LIGHTING LQM-S-W-3-R-MVOLT LED PROVIDES EMERGENCY POWER FOR 90 MINUTES OF ILLUMINATION



LIGHTING FLOOR PLAN 1

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

SHEET NOTES

1. THESE DRAWINGS INDICATE THE FINISHED REQUIREMENT FOR THE LIGHTING FIXTURES AND DEVICES, DUE TO THE STRUCTURAL CONDITION, MECHANICAL DUCT OR PIPING INTERFERENCE, RETAINED EXISTING FACILITY, OR FOR OTHER REASONS, THE CONTRACTOR MAY DESIRE TO INSTALL THE WORK IN A MANNER DIFFERENT FROM THAT SHOWN, SUCH CHANGES SHALL BE PRESENTED TO THE OWNERS REPRESENTATIVES FOR APPROVAL BEFORE PROCEEDING, AND THE RECORD DRAWINGS SHALL BE ACCURATELY REVISED TO SHOW THE CHANGES AS COMPLETED.
2. PROVIDE SEISMIC SUPPORT FOR ALL FIXTURES AND EQUIPMENT IN COMPLIANCE WITH CALIFORNIA BUILDING CODE AND LOCAL ORDINANCES.
3. UPON COMPLETION OF INSTALLATION, ALL FIXTURES, LENSES, DIFFUSERS AND REFLECTORS SHALL BE CLEANED TO REMOVE DIRT, DUST AND HANDLING MARKS.
4. ALL LIGHTING CONTROL DEVICES AND EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION.
5. EXISTING CIRCUITS NOT AFFECTED BY THIS PROJECT ARE TO REMAIN.
6. IN REWIRING EXISTING CONDUITS ALL CONDUCTORS MUST BE RECONNECTED TO PROVIDE SERVICE TO EXISTING FIXTURES AND OUTLETS.

KEYNOTES

1. ROUTE CIRCUIT THROUGH ASTRONOMICAL TIMECLOCK.
2. PROVIDE NON-SWITCHED "HOT" POWER WIRE TO BATTERY PACK CHARGING/SENSOR IN FIXTURE.
3. ROUTE TO OTHER 3-WAY SWITCH LOCATED ON OTHER SIDE OF ROOM.
4. CONTRACTOR SHALL CIRCUIT THIS EXISTING LIGHT FIXTURE WITH NEW EXTERIOR LIGHT FIXTURE SO THAT IT IS CONTROLLED VIA TIMECLOCK.

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MARK	DATE	DESCRIPTION
01	09-25-2023	ADDENDEM 01

PROJECT NO.: 21095.01

SHEET TITLE: LIGHTING FLOOR PLAN

SHEET NO.: E-101

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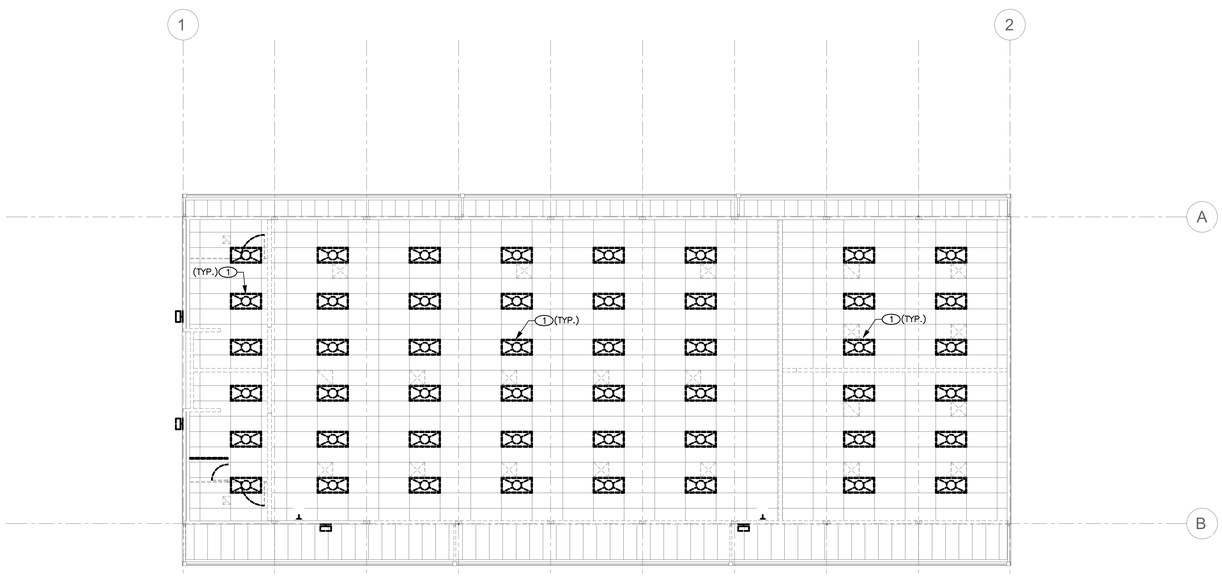

ELECTRICAL LIGHTING DEMOLITION PLAN (1)

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

SHEET NOTES

1. THESE DEMOLITION NOTES REFER TO ALL ELECTRICAL SHEETS WHERE DEMOLITION WORK IS BEING CARRIED OUT.
2. CONTRACTOR SHALL VISIT AND MAKE HIMSELF THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS AND VERIFY THE EXISTING SITE CONDITIONS PRIOR TO BIDDING.
3. DEMOLITION DEVICES/EQUIPMENT SHOWN ARE OBTAINED FROM VISUAL INSPECTION OF THE PROJECT SITE. CONTRACTOR SHALL FIELD VERIFY EXISTING DEVICES AT WALL/CEILING/ATTIC SPACES/DUCT (SUPPLY/RETURN) AND REMOVE AS PART OF THE DEMOLITION WORK.
4. INFORMATION GIVEN ON THE DRAWINGS ABOUT EXISTING INSTALLATIONS HAS BEEN OBTAINED FROM THE AS-BUILT DRAWINGS BUT CANNOT BE GUARANTEED ACCURATE IN ALL RESPECTS. VERIFY ALL SUCH INFORMATION BEFORE PROCEEDING WITH ANY NEW WORK THAT MAY BE AFFECTED. INCLUDE AS PART OF THE CONTRACT ALL WORK REQUIRED TO PRODUCE THE INDICATED RESULT.
5. CHECK PANEL SCHEDULE IDENTIFICATION FOR VALIDITY. RE-IDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD (INCLUDING EXISTING CIRCUITRY). WHILE PANEL COVER IS REMOVED, TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES AS INDICATED ON PANEL SCHEDULE CARD.
6. UNLESS OTHERWISE NOTED ON DRAWINGS ALL EXISTING WIRING, CONDUITS, BOXES, FIXTURES AND OTHER ELECTRICAL SYSTEM IN AREAS WHERE NEW WORK OCCURS SHALL BE REMOVED. EXCEPT WHEN SUCH ITEMS ARE REQUIRED TO MAINTAIN SERVICES TO OTHER AREAS, FIXTURES OR DEVICES. IN SUCH CASES CONTRACTOR SHALL PROVIDE HOMERUN CONDUIT AND WIRING WHERE REQUIRED TO ACCOMMODATE THESE AREAS, FIXTURES OR DEVICES. CONTRACTOR SHALL REMOVE ANY EXISTING ITEMS, WHEN SUCH ITEM IS CONCEALED AND DOES NOT INTERFERE WITH NEW WORK. CONTRACTOR TO VERIFY WITH OWNER AND DISPOSE ALL REMOVED DEVICES AND EQUIPMENT AS DIRECTED. CONTRACTOR TO FIELD VERIFY (E)DEVICES AND REMOVE COMPLETELY.
7. PROVIDE CIRCUIT IDENTIFICATION TO EXISTING DEVICES WHICH WILL REMAIN AFTER NEW WORK.
8. PROVIDE BLANK COVER PLATES TO REMOVED DEVICES. STAINLESS STEEL OR AS SELECTED BY OWNER. TYPICAL U.O.N.
9. ALL WORK REQUIRED TO CHANGE THE EXISTING ELECTRICAL INSTALLATION AS INDICATED SHALL BE PROVIDED.
10. REMOVE ALL EXISTING LIGHT FIXTURES, MISCELLANEOUS CONDUIT AND WIRES THAT INTERFERE WITH NEW CONSTRUCTION EXTEND AND RECONNECT ANY INTERRUPTED CIRCUITS TO OTHER EXISTING FIXTURES WHICH REMAIN. THE CONTRACTOR SHALL INCLUDE ALL COST AS PART OF THE CONTRACT FOR ALL NECESSARY WORK REQUIRED.
11. WHEN CEILING SUSPENSION SYSTEMS, EQUIPMENT'S SUPPORT SYSTEM, LIGHTING FIXTURES, J-BOXES, OR OTHER ITEMS MUST BE REMOVED TO PERFORM THE WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAINTING OR REPLACING ANY BROKEN OR DAMAGED ITEMS, INCLUDING PATCHING WALLS AND PAINTING AS REQUIRED, TO BRING THE AREA TO ITS ORIGINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY BROKEN/DAMAGED CEILING TILES DURING CONSTRUCTION. CONTRACTOR TO DOCUMENT EXISTING CONDITIONS WITH DIGITAL PICTURES PRIOR TO START WORK, FAILURE TO DOCUMENT EXISTING CONDITIONS CONTRACTOR ASSUMES TOTAL RESPONSIBILITY OF REPLACING DAMAGED CEILING TILES, REPLACED CEILING TILES SHALL MATCH EXISTING BY COLOR/TYPE/STYLE.
12. EXISTING CONDUIT MAY BE REUSED FOR NEW WORK WHERE SUITABLE. EXTEND CONDUIT AT NEW DEVICE LOCATIONS AS REQUIRED.
13. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL ELECTRICAL MATERIALS AND EQUIPMENT REMOVED FROM THE EXISTING INSTALLATIONS SHALL BE DISPOSED OF OFF SITE.
14. ALL ABANDONED WIRING INCLUDING RACEWAYS SHALL BE REMOVED COMPLETELY BACK TO THE SOURCE; CAPPING OFF STUBS THAT MAY REMAIN.
15. ASSOCIATED CIRCUITRY IS DEFINED AS ALL WIRES, CONDUIT, JUNCTION BOXES, WIRING DEVICES, DEVICE BOXES, DISCONNECT SWITCH, ETC. ASSOCIATED WITH THE ITEM SCHEDULED FOR REMOVAL.
16. ITEM REQUIRING EXTENSION OF CIRCUITRY, SHALL HAVE THEIR WIRE AND CONDUIT ROUTED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE USE OR AESTHETICS OF ANY AREA IN WHICH IT IS ROUTED.
17. UNLESS OTHERWISE NOTED, ALL ITEMS SCHEDULED FOR DEMOLITION SHALL HAVE THEIR ASSOCIATED CIRCUITRY REMOVED BACK TO THE PANELBOARD. THE PROTECTIVE DEVICE SHALL REMAIN IN PLACE AND BE RECONNECTED FOR NEW CIRCUITRY OR BECOME SPARES.
18. ANY EXISTING DEVICES, LIGHTING, OR EQUIPMENT THAT IS NOT DOCUMENTED OR IS NOT SHOWN AS BEING DEMOLISHED SHALL BE EXISTING TO REMAIN AND RECONNECTED AFTER WORK IS DONE TO MAINTAIN CONTINUITY IN THE CIRCUIT FEEDING IT.

KEYNOTES

(1) CONTRACTOR IS TO DEMO LIGHT FIXTURE AS SHOWN. CONTRACTOR IS TO PULL CONDUCTORS BACK TO NEAREST JUNCTION BOX FOR USE AT NEW LOCATION. REFER TO REMODEL PLAN FOR NEW LIGHTING LAYOUT.

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APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE:

ELECTRICAL LIGHTING DEMOLITION PLAN

SHEET NO.:

E-101D

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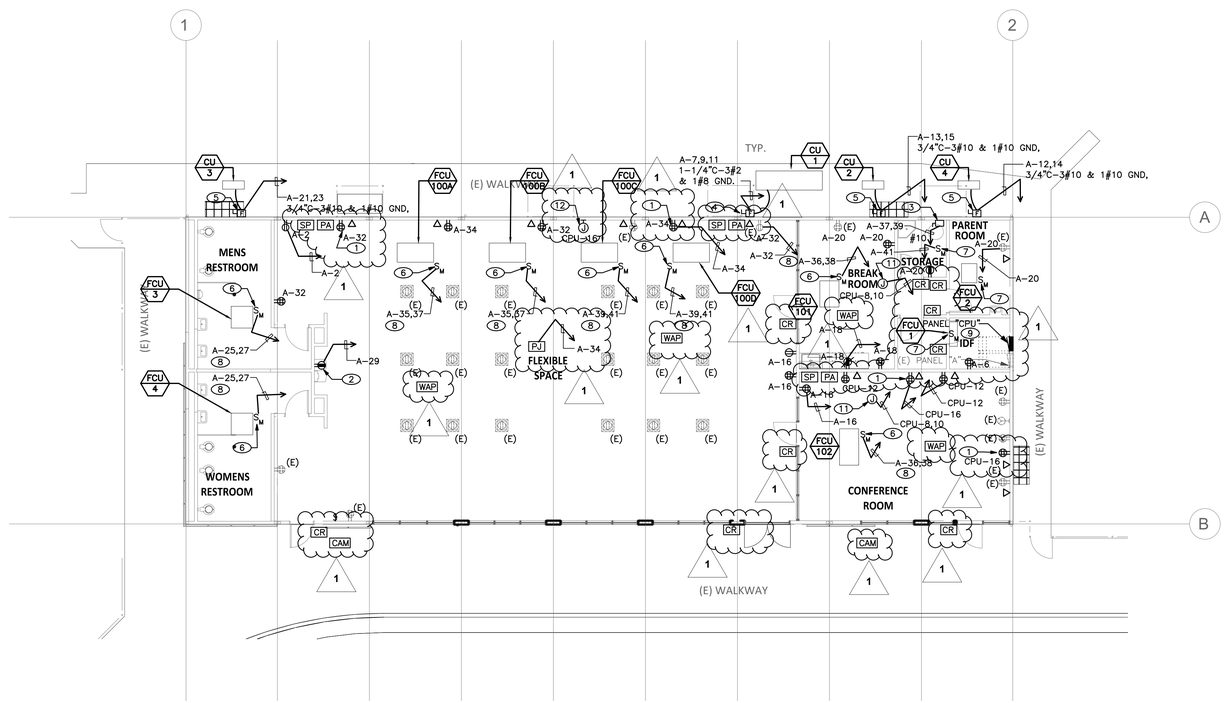

POWER FLOOR PLAN (1)

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

SHEET NOTES

1. EXISTING INFORMATION SHOWN IS BASED ON CURSORY FIELD SURVEY AND IS PROVIDED FOR REFERENCE ONLY. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. COORDINATE WITH OWNER'S REPRESENTATIVE FOR SCHEDULING CUTOVERS, ENERGIZING EQUIPMENT AND TEMPORARY POWER INTERRUPTIONS THAT ARE REQUIRED FOR THESE TASKS. SUBMIT METHOD OF PROCEDURES (MOP) FOR OWNER AND ENGINEERS' REVIEW AND APPROVAL (30) WORKING DAYS PRIOR TO TASK SCHEDULES.
3. CONTRACTOR SHALL MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN.
4. REFER TO SINGLE LINE DIAGRAM ON SHEET E–002 FOR ADDITIONAL INFORMATION.
5. ALL EXISTING SWITCHGEAR, ATS, GENERATOR, CIRCUIT BREAKERS, OTHER ELECTRICAL EQUIPMENT, CONDUITS AND WIRING TO REMAIN ARE INDICATED WITH LIGHT LINES. ALL EQUIPMENT TO BE DEMOLISHED ARE INDICATED WITH HATCH MARKS. ALL NEW EQUIPMENT IS SHOWN WITH HEAVY LINES.
6. COORDINATE POWER AND DATA DEVICE LOCATIONS, AND DEVICE PLATE COLOR WITH ARCHITECT.
7. REFER TO MECHANICAL AND PLUMBING PLANS FOR THE EXACT LOCATION OF HVAC EQUIPMENT AND ADDITIONAL WIRING REQUIREMENTS.
8. PROVIDE DUCT DETECTOR POWER AND CONNECTIONS AS INDICATED ON MECHANICAL DRAWINGS.
9. PROVED FLEXIBLE SEAL TYPE CONDUIT FOR CONNECTION TO ALL HVAC EQUIPMENT.
10. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE NEMA 3R.
11. ALL EXTERIOR RECEPTACLE OUTLETS SHALL BE GFCI TYPE.
12. PROVIDE HEAVY DUTY DISCONNECT SWITCHES WITH DUAL ELEMENT FUSES TO MATCH MOTOR H.P. RATING.
13. COORDINATE LOCATION/RELOCATION OF RECEPTACLE OUTLETS WITH ARCHITECT AND SCHOOL DISTRICT.

KEYNOTES

1. PROVIDE AND INSTALL QUAD RECEPTACLE AND DATA FOR TV MONITORS. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT.
2. PROVIDE AND INSTALL GFI RECEPTACLE FOR DRINKING FOUNTAIN.
3. 60A, 2P, 600V DISCONNECT SWITCH FOR CONNECTION TO ELECTRIC WATER HEATER. COORDINATE EXACT LOCATION WITH PLUMBING DRAWINGS.
4. PROVIDE AND INSTALL 100A 3P H.D. WEATHERPROOF NEMA 3R RATED FUSED DISCONNECT. FUSING PER MECHANICAL EQUIPMENT MANUFACTURERS REQUIREMENTS. VERIFY EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.
5. PROVIDE AND INSTALL 30A 3P H.D. WEATHERPROOF NEMA 3R RATED FUSED DISCONNECT. FUSING PER MECHANICAL EQUIPMENT MANUFACTURERS REQUIREMENTS. VERIFY EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.
6. PROVIDE AND INSTALL NEMA 1 2–POLE MOTOR RATED SNAP SWITCH.
7. FAN COIL TO BE POWERED BY CONDENSING UNIT (ON ROOF). REFER TO MECHANICAL PLANS FOR WIRING INFORMATION.
8. THIS CIRCUIT IS SHOWN IN MORE THAN ONE LOCATION. PROVIDE HOMERUN BACK TO COMMON JUNCTION BOX AT OR NEAR PANEL. DO NOT DOUBLE LUG ON BREAKER OR SPLICE IN PANEL BOARD ENCLOSURE.
9. REMOVE EXISTING PANEL AND PROVIDE NEW PANEL IN SAME LOCATION. PROVIDE NEMA 1 SPLICE BOX AS REQUIRED IN CEILING SPACE ABOVE PANEL. CONNECT EXISTING FEEDERS TO NEW PANEL. CONNECT ALL EXISTING ELECTRICAL LOADS THAT ARE TO BE REUSED TO NEW PANEL.
10. PROVIDE AND INSTALL NEMA 1 MOTOR RATED SNAP SWITCH FOR CIRCULATING PUMP. VERIFY EXACT LOCATION WITH PLUMBING DRAWINGS.
11. PROVIDE 208V–1PH POWER TO BRANCH SELECTOR. VERIFY EXACT LOCATION WITH MECHANICAL DRAWINGS.
12. PROVIDE POWER FOR PROJECTOR SCREEN. MAKE CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS.

AUTHORITY APPROVAL:

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MARK	DATE	DESCRIPTION
01	09-25-2023	ADDENDEM 01

PROJECT NO.: **21095.01**

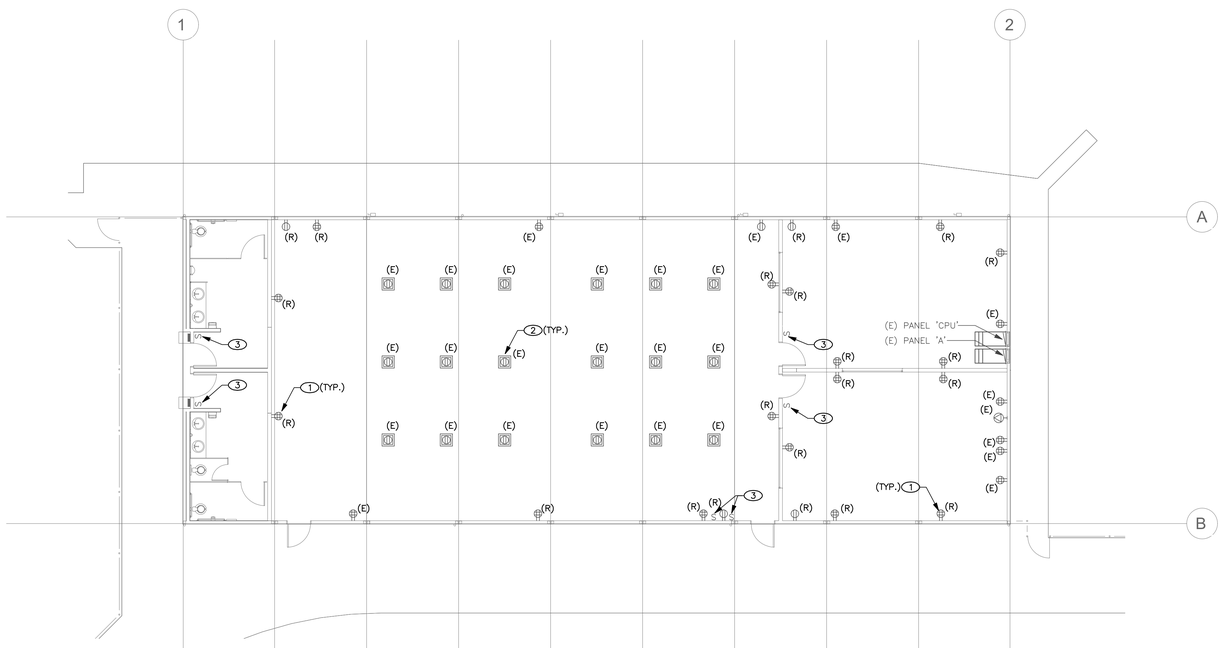
SHEET TITLE:

POWER FLOOR PLAN

SHEET NO.:

E-201

3/21/2022 9:02:26 AM



ELECTRICAL POWER DEMOLITION PLAN (1)

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

SHEET NOTES

1. THESE DEMOLITION NOTES REFER TO ALL ELECTRICAL SHEETS WHERE DEMOLITION WORK IS BEING CARRIED OUT.
2. CONTRACTOR SHALL VISIT AND MAKE HIMSELF THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS AND VERIFY THE EXISTING SITE CONDITIONS PRIOR TO BIDDING.
3. DEMOLITION DEVICES/EQUIPMENT SHOWN ARE OBTAINED FROM VISUAL INSPECTION OF THE PROJECT SITE. CONTRACTOR SHALL FIELD VERIFY EXISTING DEVICES AT WALL/CEILING/ATTIC SPACES/DUCT (SUPPLY/RETURN) AND REMOVE AS PART OF THE DEMOLITION WORK.
4. INFORMATION GIVEN ON THE DRAWINGS ABOUT EXISTING INSTALLATIONS HAS BEEN OBTAINED FROM THE AS-BUILT DRAWINGS BUT CANNOT BE GUARANTEED ACCURATE IN ALL RESPECTS. VERIFY ALL SUCH INFORMATION BEFORE PROCEEDING WITH ANY NEW WORK THAT MAY BE AFFECTED. INCLUDE AS PART OF THE CONTRACT ALL WORK REQUIRED TO PRODUCE THE INDICATED RESULT.
5. CHECK PANEL SCHEDULE IDENTIFICATION FOR VALIDITY. RE-IDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD (INCLUDING EXISTING CIRCUITRY). WHILE PANEL COVER IS REMOVED, TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES AS INDICATED ON PANEL SCHEDULE CARD.
6. UNLESS OTHERWISE NOTED ON DRAWINGS ALL EXISTING WIRING, CONDUITS, BOXES, FIXTURES AND OTHER ELECTRICAL SYSTEM IN AREAS WHERE NEW WORK OCCURS SHALL BE REMOVED. EXCEPT WHEN SUCH ITEMS ARE REQUIRED TO MAINTAIN SERVICES TO OTHER AREAS, FIXTURES OR DEVICES. IN SUCH CASES CONTRACTOR SHALL PROVIDE HOMERUN CONDUIT AND WIRING WHERE REQUIRED TO ACCOMMODATE THESE AREAS, FIXTURES OR DEVICES. CONTRACTOR SHALL REMOVE ANY EXISTING ITEMS, WHEN SUCH ITEM IS CONCEALED AND DOES NOT INTERFERE WITH NEW WORK. CONTRACTOR TO VERIFY WITH OWNER AND DISPOSE ALL REMOVED DEVICES AND EQUIPMENT AS DIRECTED. CONTRACTOR TO FIELD VERIFY (E)DEVICES AND REMOVE COMPLETELY.
7. PROVIDE CIRCUIT IDENTIFICATION TO EXISTING DEVICES WHICH WILL REMAIN AFTER NEW WORK.
8. PROVIDE BLANK COVER PLATES TO REMOVED DEVICES. STAINLESS STEEL OR AS SELECTED BY OWNER. TYPICAL U.O.N.
9. ALL WORK REQUIRED TO CHANGE THE EXISTING ELECTRICAL INSTALLATION AS INDICATED SHALL BE PROVIDED.
10. REMOVE ALL EXISTING LIGHT FIXTURES, MISCELLANEOUS CONDUIT AND WIRES THAT INTERFERE WITH NEW CONSTRUCTION EXTEND AND RECONNECT ANY INTERRUPTED CIRCUITS TO OTHER EXISTING FIXTURES WHICH REMAIN. THE CONTRACTOR SHALL INCLUDE ALL COST AS PART OF THE CONTRACT FOR ALL NECESSARY WORK REQUIRED.
11. WHEN CEILING SUSPENSION SYSTEMS, EQUIPMENT'S SUPPORT SYSTEM, LIGHTING FIXTURES, J-BOXES, OR OTHER ITEMS MUST BE REMOVED TO PERFORM THE WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAINTING OR REPLACING ANY BROKEN OR DAMAGED ITEMS, INCLUDING PATCHING WALLS AND PAINTING AS REQUIRED, TO BRING THE AREA TO ITS ORIGINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY BROKEN/DAMAGED CEILING TILES DURING CONSTRUCTION. CONTRACTOR TO DOCUMENT EXISTING CONDITIONS WITH DIGITAL PICTURES PRIOR TO START WORK, FAILURE TO DOCUMENT EXISTING CONDITIONS CONTRACTOR ASSUMES TOTAL RESPONSIBILITY OF REPLACING DAMAGED CEILING TILES, REPLACED CEILING TILES SHALL MATCH EXISTING BY COLOR/TYPE/STYLE.
12. EXISTING CONDUIT MAY BE REUSED FOR NEW WORK WHERE SUITABLE. EXTEND CONDUIT AT NEW DEVICE LOCATIONS AS REQUIRED.
13. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL ELECTRICAL MATERIALS AND EQUIPMENT REMOVED FROM THE EXISTING INSTALLATIONS SHALL BE DISPOSED OF OFF SITE.
14. ALL ABANDONED WIRING INCLUDING RACEWAYS SHALL BE REMOVED COMPLETELY BACK TO THE SOURCE; CAPPING OFF STUBS THAT MAY REMAIN.
15. ASSOCIATED CIRCUITRY IS DEFINED AS ALL WIRES, CONDUIT, JUNCTION BOXES, WIRING DEVICES, DEVICE BOXES, DISCONNECT SWITCH, ETC. ASSOCIATED WITH THE ITEM SCHEDULED FOR REMOVAL.
16. ITEM REQUIRING EXTENSION OF CIRCUITRY, SHALL HAVE THEIR WIRE AND CONDUIT ROUTED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE USE OR AESTHETICS OF ANY AREA IN WHICH IT IS ROUTED.
17. UNLESS OTHERWISE NOTED, ALL ITEMS SCHEDULED FOR DEMOLITION SHALL HAVE THEIR ASSOCIATED CIRCUITRY REMOVED BACK TO THE PANELBOARD. THE PROTECTIVE DEVICE SHALL REMAIN IN PLACE AND BE RECONNECTED FOR NEW CIRCUITRY OR BECOME SPARES.
18. ANY EXISTING DEVICES, LIGHTING, OR EQUIPMENT THAT IS NOT DOCUMENTED OR IS NOT SHOWN AS BEING DEMOLISHED SHALL BE EXISTING TO REMAIN AND RECONNECTED AFTER WORK IS DONE TO MAINTAIN CONTINUITY IN THE CIRCUIT FEEDING IT.

KEYNOTES

1. CONTRACTOR IS TO DEMO WALL RECEPTACLES AS SHOWN. CONTRACTOR IS TO PULL CONDUCTORS BACK TO NEAREST JUNCTION BOX FOR USE AT NEW LOCATION. REFER TO REMODEL PLAN FOR NEW RECEPTACLE LAYOUT.
2. EXISTING FLOOR RECEPTACLES TO REMAIN. CONTRACTOR TO PROTECT BOXES AND CIRCUITS IN PLACE.
3. CONTRACTOR IS TO DEMO LIGHT SWITCH AS SHOWN. CONTRACTOR IS TO PULL CONDUCTORS BACK TO NEAREST JUNCTION BOX FOR USE AT NEW LOCATION. REFER TO REMODEL PLAN FOR NEW LIGHTING LAYOUT AND SWITCH LOCATIONS.

AUTHORITY APPROVAL:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
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MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

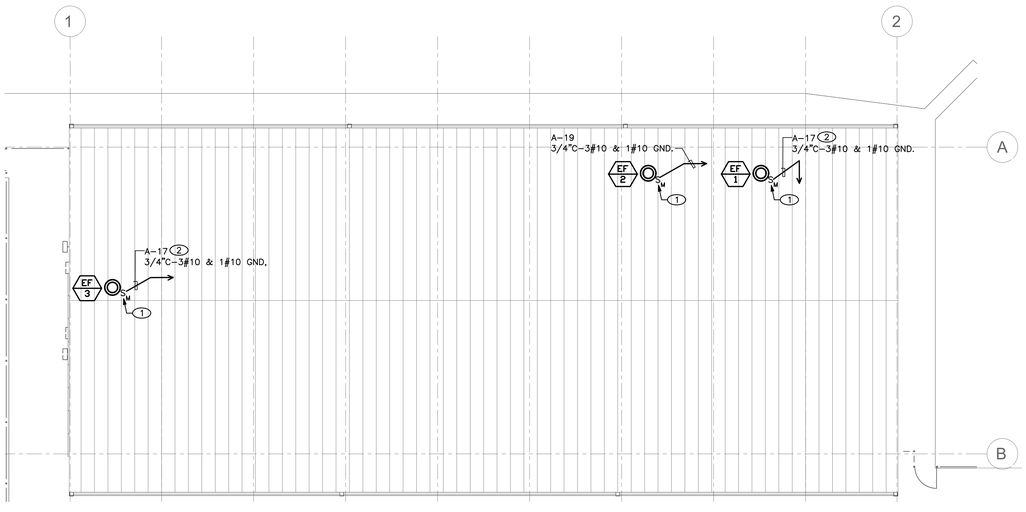
SHEET TITLE:

ELECTRICAL POWER DEMOLITION PLAN

SHEET NO.:

E-201D

3/21/2022 9:02:26 AM



ELECTRICAL ROOF PLAN 1

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

KEYNOTES

1. PROVIDE AND INSTALL NEMA 3R MOTOR RATED SNAP SWITCH.
2. THIS CIRCUIT IS SHOWN IN MORE THAN ONE LOCATION. PROVIDE HOMERUN BACK TO COMMON JUNCTION BOX AT OR NEAR PANEL. DO NOT DOUBLE LUG ON BREAKER OR SPLICE IN PANEL BOARD ENCLOSURE.

AUTHORITY APPROVAL:

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PROJECT NAME:

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MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

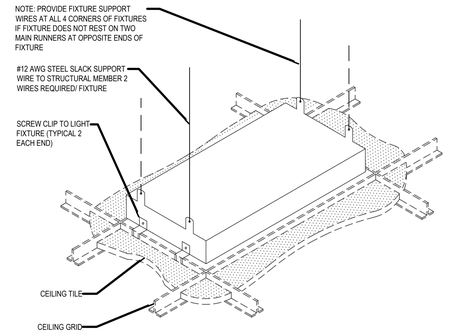
SHEET TITLE:

ELECTRICAL ROOF PLAN

SHEET NO.:

E-202

3/21/2022 9:02:26 AM

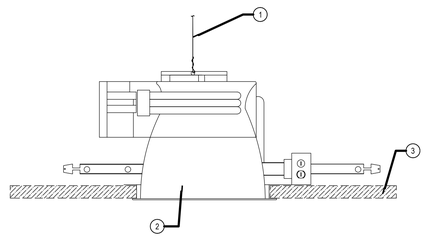


GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF CEILING GRID AND TILE SYSTEM.

1 LIGHTING FIXTURE SUSPENSION

SCALE: NONE

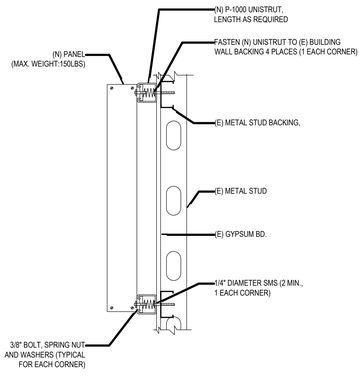


CONSTRUCTION NOTES:

1. DENOTES FIXTURE SUPPORT WIRE (MINIMUM #10) FROM LUMINARIE ATTACHED TO BUILDING STRUCTURE ABOVE.
2. DENOTES RECESSED FLUORESCENT OR LED DOWNLIGHT.
3. DENOTES CEILING BY OTHERS.

2 DOWNLIGHT FIXTURE DETAIL

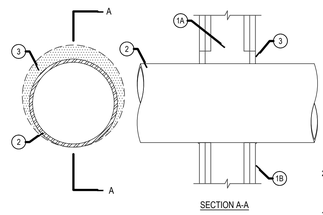
SCALE: NONE



3 PANEL MOUNTING DETAIL

SCALE: NONE

SYSTEM NO. W-L-1222
F RATINGS - 1 AND 2 HR (SEE ITEM 1)
T RATINGS - 1/4, 3/4 AND 1 HR (SEE ITEM 2)



SECTION A-A

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 OR U400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
   A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC. STEEL STUDS TO BE MIN 3-1/2 IN. (89 MM) WIDE AND SPACED MAX 24 IN. (610 MM) OC.
   B. GYPSUM BOARD* - THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX DIAM OF OPENING IS 10-5/8 IN. (270 MM).

   THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.
2. THROUGH PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBE TO BE INSTALLED ECCENTRICALLY OR CONCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45 DEGREES FROM PERPENDICULAR. THE ANNULAR SPACE BETWEEN THE PIPE, CONDUIT OR TUBE AND THE PERIPHERY OF THE OPENING SHALL BE MIN 0 IN. (0 MM, POINT CONTACT) TO MAX 2 IN. (51 MM). PIPE, CONDUIT OR TUBE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS AND TUBES MAY BE USED:
   A. STEEL PIPE - NOM 8 IN. (203 MM) DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.
   B. IRON PIPE - NOM 8 IN. (203 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   C. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) RIGID STEEL CONDUIT, NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING (EMT) OR NOM 4 IN. (102 MM) DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT.
   D. COPPER PIPE - NOM 4 IN. (102 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
   E. COPPER TUBE - NOM 4 IN. (102 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE.

TYPE OF PENETRANT	MAX DIAM	T RATING
STEEL OR IRON PIPE, STEEL CONDUIT OR EMT	2 in. (51 mm)	1 HR
STEEL OR IRON PIPE, STEEL CONDUIT OR EMT	8 in. (203 mm)	3/4 HR
COPPER PIPE OR TUBE	4 in. (102 mm)	1/4 HR

2A. THROUGH PENETRATING PRODUCT* - FLEXIBLE METAL PIPING - AS AN ALTERNATE TO ITEM 2, ONE NOM 1-1/4 IN. (32 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL PIPE TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE PIPE AND THE PERIPHERY OF THE OPENING SHALL BE MIN 0 IN. (0 MM, POINT CONTACT) TO MAX 2 IN. (51 MM). PIPE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY. (OMEGA FLEX INC & GASTITE, DIV OF TITEFLEX & WARD MFG L.L.C.)

3. FILL, VOID OR CAVITY MATERIAL* - SEALANT - MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY. AT POINT CONTACT LOCATION, MIN 1/4 IN. (6 MM) DIAM BEAD OF FILL MATERIAL APPLIED AT METALLIC PIPE/GYPSUM BOARD INTERFACE ON BOTH SURFACES OF WALL. (SPECIFIED TECHNOLOGIES INC - SPECSEAL LCI SEALANT)

   * INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

3 CONDUIT SLEEVE THROUGH FIRE RATED WALL

SCALE: NONE

3/21/2022 9:02:26 AM

AUTHORITY APPROVAL:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

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PROJECT NAME:

EMUHSD PDC IMPROVEMENTS

1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE:

ELECTRICAL DETAILS

SHEET NO.:

E-301

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
This document is used to demonstrate compliance with requirements in §110.9, §110.12(c), §130.0, §130.1, §140.6, and §141.0(b)2 for indoor lighting scopes using the prescriptive path.	
Project Name: EMUHSD PDC IMPROVEMENTS	Report Page: Page 1 of 7
Project Address: 1001 DURFEE AVE. SOUTH EL MONTE, CA 91733	Date Prepared: 07/28/2022

A. GENERAL INFORMATION

01	Project Location (city)	SOUTH EL MONTE	04	Total Conditioned Floor Area (ft²)	4,264
02	Climate Zone	6	05	Total Unconditioned Floor Area (ft²)	
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	

☐ Office ☐ Retail ☐ Warehouse ☐ Hotel/Motel ☑ School ☐ Support Areas
☐ Parking Garage ☐ High-Rise Residential ☐ Relocatable ☐ Healthcare ☐ Other (write in):

B. PROJECT SCOPE
Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☐ New Lighting System				
☑ Altered Lighting System	Area Category	4,264		
Total Area of Work (ft²)	**4,264**			

C. COMPLIANCE RESULTS
Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1.	Allowed Lighting Power per §140.6(b) (Watts)							Adjusted Lighting Power per §140.6(a) (Watts)				Compliance Results
	01	02	03	04		05		06	07		08	09
	Complete Building §140.6(c)1	Area Category §140.6(c)2	Area Category Additional §140.6(c)2G (+)	Tailored §140.6(c)3 (+)	=	Total Allowed (Watts)	≥	Total Designed (Watts)	Adjustments PAF Control Credits §140.6(a)2 (-)	=	Total Adjusted (Watts) *Includes Adjustments	05 Must be ≥ 08 §140.6
	(See Table I)	(See Table I)	(See Table J)	(See Table K)				(See Table F)	(See Table P)			
Conditioned:		3,598.8	0		=	**3,598.8**	≥	2,605		=	**2,605**	**COMPLIES**
Unconditioned:					=		≥			=		

Table Continued

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: EMUHSD PDC IMPROVEMENTS	Report Page: Page 2 of 7
Project Address: 1001 DURFEE AVE. SOUTH EL MONTE, CA 91733	Date Prepared: 07/28/2022

Controls Compliance (See Table H for Details)	**COMPLIES**
Rated Power Reduction Compliance (See Table Q for Details)	**Not Applicable**

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Selections made in Table T have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. INDOOR LIGHTING FIXTURE SCHEDULE
Table Instructions: Include all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change¹	Watts per luminaire²	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)3	Design Watts	Field Inspector Pass	Fail
F1	2X2 RECESSED LED	☐	☐	32	Mfr. Spec²	20	☐	640	☐	☐
F2	2X4 RECESSED LED	☐	☐	26	Mfr. Spec²	2	☐	52	☐	☐
F3	LED DOWNLIGHT	☐	☐	20	Mfr. Spec²	6	☐	120	☐	☐
F4	SURFACE MOUNT LED STRIP	☐	☐	11	Mfr. Spec²	3	☐	33	☐	☐
F5	SURFACE MOUNT LED LINEAR	☐	☐	32	Mfr. Spec²	6	☐	192	☐	☐
F6	LED COVE LIGHTING	☐	☐	56	Mfr. Spec²	28	☐	1,568	☐	☐
		☐	☐				☐	0	☐	☐
		☐	☐				☐	0	☐	☐
							Total Designed Watts CONDITIONED SPACES:	**2,605**		

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: EMUHSD PDC IMPROVEMENTS	Report Page: Page 3 of 7
Project Address: 1001 DURFEE AVE. SOUTH EL MONTE, CA 91733	Date Prepared: 07/28/2022

¹ FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)4B is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.
² Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.

H. INDOOR LIGHTING CONTROLS (Not Including PAFs)
*Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.*

Building Level Controls

01	02	03	
Mandatory Demand Response §110.12(c)	Shut-Off Controls §130.1(c)	Field Inspector Pass	Fail
Not Required ≤ 10,000 SF	See Area/Space Level Controls	☐	☐

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(a)	Multi-Level Controls §130.1(b)	Shut-Off Controls §130.1(c)	Primary/Skylit Daylighting §130.1(d)	Secondary Daylighting §140.6(d)	Interlocked Systems §140.6(a)1	Field Inspector Pass	Fail
Offices	Office (≤ 250 square feet)	Manual ON/OFF	Dimmer	Occ. Sensor	NA	NA	☐	☐	☐
Break Rm	Lounge	Manual ON/OFF	Dimmer	Occ. Sensor	NA	NA	☐	☐	☐
Conference Room	Convention, Conference, Multipurpose, and Meeting Center	Manual ON/OFF	Dimmer	Occ. Sensor	NA	NA	☐	☐	☐

*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)2

13 Plan Sheet Showing Daylit Zones: NA

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Conditioned Spaces

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
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01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowances / Adjustment: Area Category	PAF
Offices	Office (≤ 250 square feet)	0.7	100	70	☐	☐
Conference Rm	Convention, Conference, Multipurpose, and Meeting Center	0.85	522	443.7	☐	☐
Flex Space	Convention, Conference, Multipurpose, and Meeting Center	0.85	2,385	2,027.25	☐	☐
Restrooms	Restroom	0.65	665	432.25	☐	☐
IDF Room	Electrical, Mechanical, Telephone Rooms	0.4	100	40	☐	☐
Break Room	Lounge	0.65	240	156	☐	☐
Storage Room	Commercial and Industrial Storage	0.6	716	429.6	☐	☐
				0	☐	☐
				0	☐	☐
				0	☐	☐
		TOTAL:	**4,728**	**3,598.8**	See Tables J or P for detail	

J. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM
Table Instructions: Please complete the table for all areas indicated in Table I as using an additional allowance per the Area Category Method in Table 140.6-C.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This Section Does Not Apply

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This Section Does Not Apply

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
This Section Does Not Apply

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O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))
This Section Does Not Apply

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS
This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS
This Section Does Not Apply

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
This Section Does Not Apply

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://ww2.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

YES	NO	Form/Title	Field Inspector Pass	Fail
◉	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐	☐
◉	○	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐	☐

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U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

YES	NO	Form/Title	Field Inspector Pass	Fail
◉	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐	☐
○	◉	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐	☐
○	◉	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐	☐
○	◉	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	☐	☐
○	◉	NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).	☐	☐

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CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name:	Michael Ho	Documentation Author Signature:	
Company:	TX ENGNEERING	Signature Date:	09/20/2021
Address:	2866 BIRCH LANE	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip:	POMONA, CA 91767	Phone:	213.295.5532

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. **The information provided on this Certificate of Compliance is true and correct.**
2. **I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)**
3. **The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.**
4. **The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.**
5. **I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.**

Responsible Designer Name:	Michael Ho	Responsible Designer Signature:	
Company :	TX ENGINEERING	Date Signed:	09/20/2021
Address:	2866 BIRCH LANE	License:	E-21695
City/State/Zip:	POMONA, CA 91767	Phone:	213.295.5532

AUTHORITY APPROVAL:
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122825 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/23/2023

CSDA DESIGN GROUP
LISTEN COLLABORATE CREATE

610 E. Franklin Ave
El Segundo, CA 90245
T: 415.689.9800
www.csdadesigngroup.com

ARCHITECT STAMP

CONSULTANT:
TX ENGINEERING
ADD: 2866 BIRCH LANE, POMONA, CA 91767
TEL: 213-295-5532
EMAL: ADMIN@TXECORP.COM

CONSULTANT STAMP
REGISTERED PROFESSIONAL ENGINEER MICHAEL C. HO No. E-21695 Exp. 12-31-24 ELECTRICAL STATE OF CALIFORNIA

PROJECT OWNER:
EL MONTE UNION HIGH SCHOOL DISTRICT
3537 JOHNSON AVENUE
EL MONTE, CA 91731
(626) 444-9005
emuhsd.org

PROJECT NAME:
EMUHSD PDC IMPROVEMENTS
1001 DURFEE AVE
SOUTH EL MONTE, CA 91733

MARK	DATE	DESCRIPTION

PROJECT NO.: **21095.01**

SHEET TITLE:
TITLE 24 COMPLIANCE FORMS

SHEET NO.:
E-401

3/21/2022 9:02:26 AM