

PROJECT INFORMATION

PROJECT ADDRESS:
4080 LEMON ST, RIVERSIDE, CA 92501
JURISDICTION REQUESTING THE DRAWINGS:
COUNTY OF RIVERSIDE
EXISTING BUILDING CONSTRUCTION TYPE:
TYPE I.F.R FULLY SPRINKLED
OCCUPANCY CLASSIFICATION:
GROUP B
HANDICAP ACCESSIBILITY:
THIS PROJECT HAS BEEN DESIGNED TO BE
COMPLIANCE WITH THE STATE OF CALIFORNIA TITLE
24ACCESSIBILITY REQUIREMENTS.

FIRE DEPARTMENT NOTES

**BUILDING IS PROVIDED WITH AN EXISTING FIRE
SPRINKLER SYSTEM AND FIRE ALARM SYSTEM.
ANY OBSTRUCTED COVERAGE TO EXISTING FIRE
SPRINKLER SYSTEM AND FIRE ALARM SYSTEM
SHALL REQUIRE SEPARATE PLANS TO BE
SUBMITTED FOR REVIEW AND APPROVAL PRIOR
TO THE WORK BEING CONDUCTED.**

DESIGN & ENGINEERING

ACC & ENGINEERING
O: 714-844-2140
C: 951-903-2284

PROJECT'S TEAM

BEN HAMED, ASSOC.AIA
PRINCIPAL
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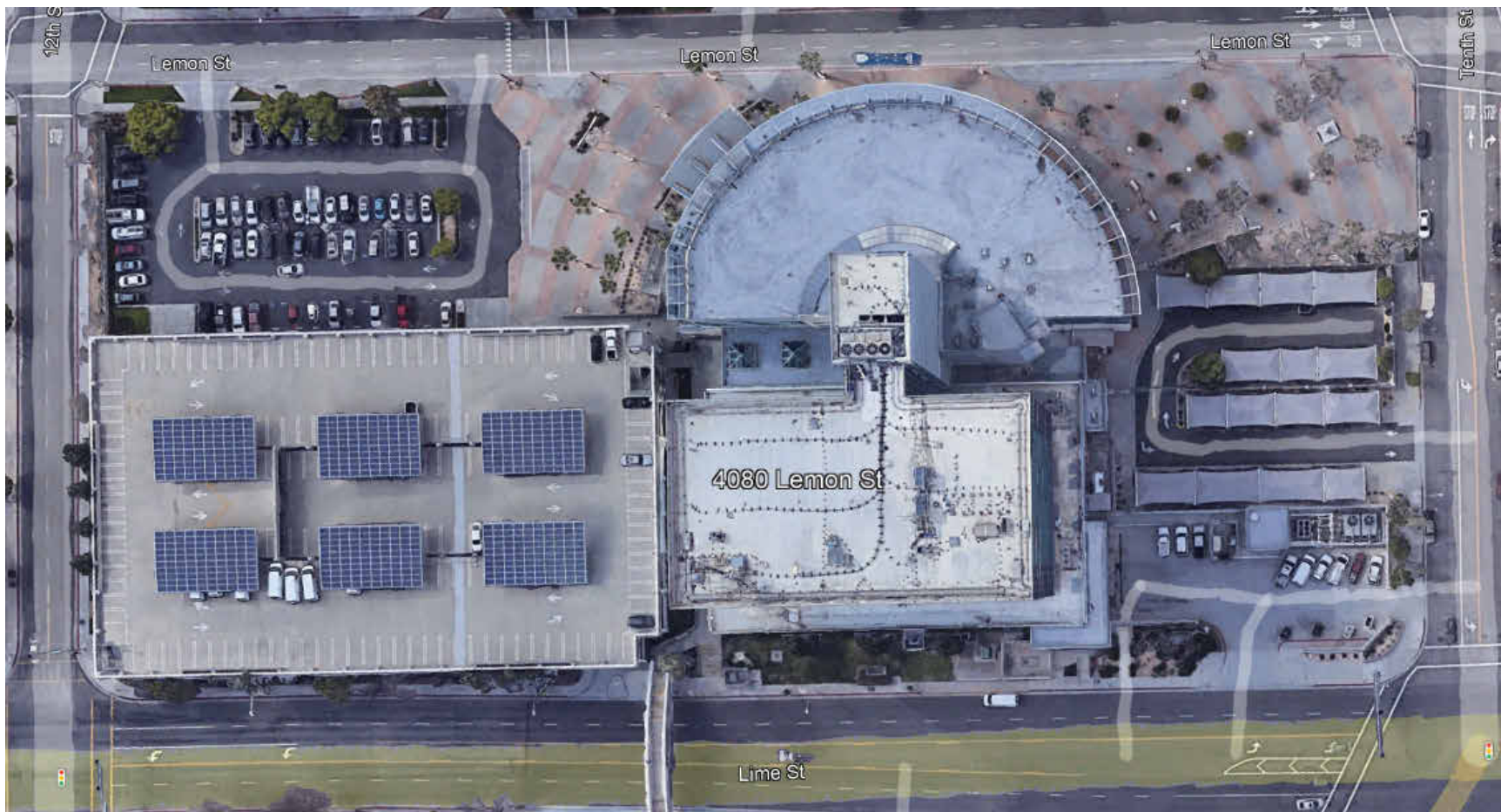
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PROJECT'S SATELLITE MAP



4080 LEMON ST, RIVERSIDE, CA 92501

CAC BASEMENT SERVER ROOM UPGRADE

FM08140012075

PROJECT'S SCOPE

**UPGRADE EXISTING STORAGE ROOM IN THE BASEMENT FLOOR TO A SERVER ROOM PER
CURRENT BUILDING CODES, COUNTY STANDARDS & NFPA 75 - FIRE PROTECTION AND
SUPPRESSION IN DATA CENTERS**

**FURROUT NEW METAL STUD FRAMING RATED WALLS , INSTALL NEW SPLIT UNIT & NEW
LIGHT FIXTURES.**

INSTALL NEW COOLING ONLY DUCTLESS MINI-SPLIT UNIT.

SHEET NAME	SHEET NUMBER
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STRUCTURAL DETAILS	AS-2.0
STRUCTURAL DETAILS	AS-3.0
SPECIFICATIONS	AS-4.0
ELECTRICAL SPECIFICATION	E-00
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SINGLE LINE DIAGRAMS, SCHEDULES, AND DETAILS	E-03
MECHANICAL NOTES & EQUIPMENT SCHEDULES	M000
MECHANICAL FLOOR PLAN	M001
MECHANICAL SITE PLAN	M002
MECHANICAL ROOF PLAN	M003
MECHANICAL DETAILS	M004
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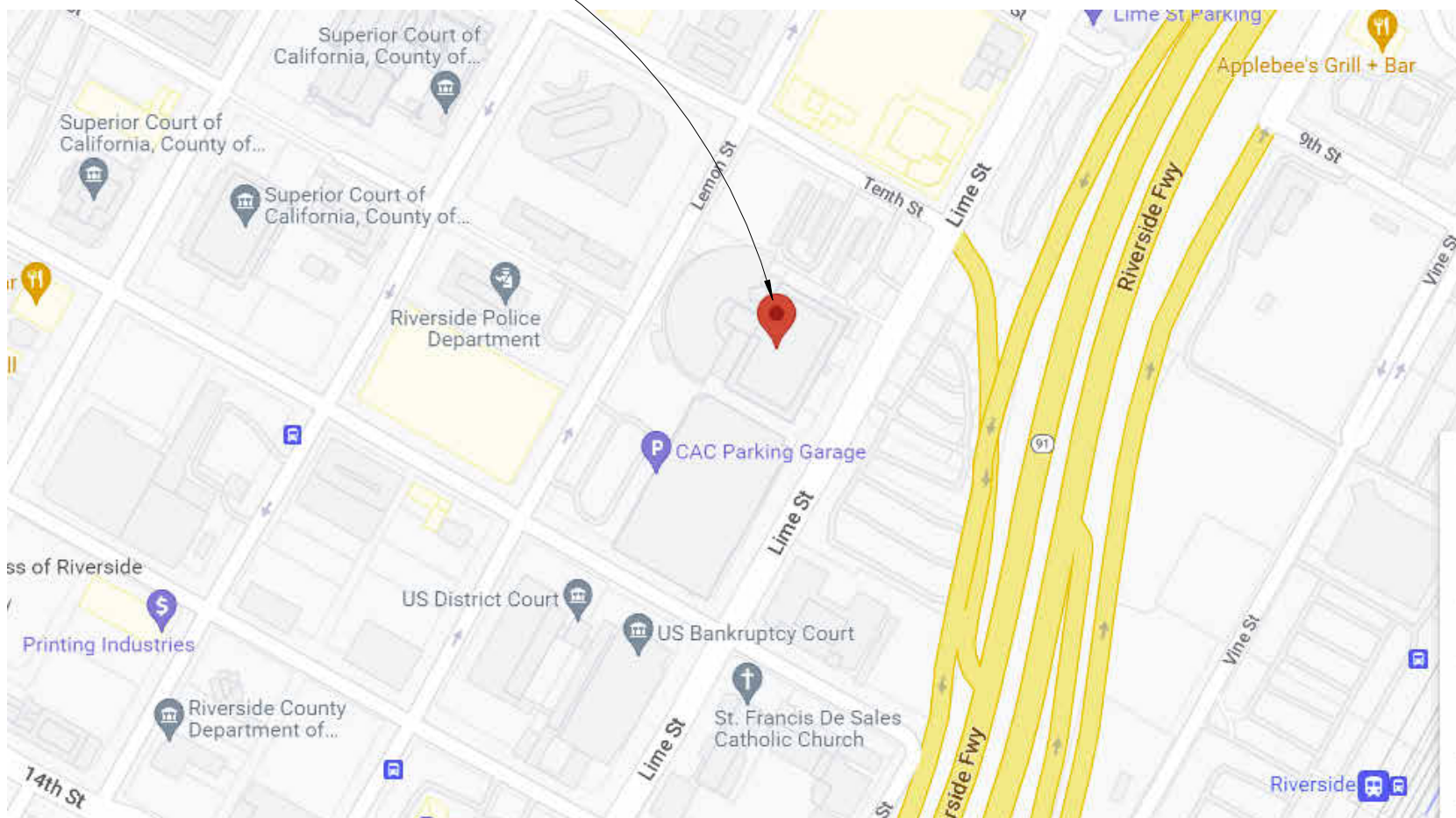
TOTAL SHEETS: 20

APPLICABLE CODES

- 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24, OCC
- 2019 CALIFORNIA BUILDING CODE (C.B.C.), TITLE 24, C.C.R.
(2019 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL
CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)
- 2022 CALIFORNIA ELECTRICAL CODE (C.E.C.), 2001, TITLE 24, C.C.R.
(2019 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE
PROTECTION AGENCY, NFPA)
- 2022 CALIFORNIA MECHANICAL CODE (C.M.C.), TITLE 24, C.C.R.
(2019 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL
ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
- 2022 CALIFORNIA PLUMBING CODE (C.P.C.), TITLE 24, C.C.R.
(2019 UNIFORM PLUMBING CODE OF THE INTERNATIONAL
ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
- 2022 CALIFORNIA ENERGY CODE (C.P.C.), TITLE 24, C.C.R.
- 2022 CALIFORNIA FIRE CODE (C.F.C.), TITLE 24, C.C.R.
(2019 INTERNATIONAL FIRE CODE OF THE INT'L CODE COUNCIL)
- 2022 CALIFORNIA EXISTING BUILDING CODE, TITLE 24, C.C.R.
(2019 INTERNATIONAL EXISTING BUILDING CODE OF THE
INTERNATIONAL CODE COUNCIL WITH AMENDMENTS)
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, TITLE 24, C.C.R.
- 2022 CALIFORNIA REFERENCED STANDARDS CODE, TITLE 24, C.C.R.

PROJECT VICINITY MAP

PROJECT'S LOCATION



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PROJECT NAME LOCATION OWNER

CAC BASEMENT SERVER ROOM UPGRADE

4080 LEMON ST, RIVERSIDE, CA 92501

TREASURY AND TAX COLLECTION

OWNER



ENGINEER OF RECORD
REVIEWED BY SEAL / STAMP



THE SIGNATURE AND SEAL OF A
PROFESSIONAL ENGINEER IS THE LEGAL
REPRESENTATION THAT THE ENGINEERING
DRAWINGS, PLANS, AND SPECIFICATIONS
WERE PREPARED UNDER THE
RESPONSIBLE CHARGE (THE DIRECT
CONTROL AND PERSONAL SUPERVISION)
OF THE PROFESSIONAL ENGINEER AND
CERTIFIES THAT THE WORK WAS
PERFORMED COMPETENTLY, MEETS THE
PROFESSIONAL STANDARD OF CARE, AND
ACCEPTABLE STANDARDS OF PRACTICE.

JURISDICTION HAVING AUTHORITY
COUNTY OF RIVERSIDE
FM08140012075

1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
COVER PAGE - SHEET
INDEX

SHEET NUMBER

G00

ABBREVIATIONS

TYPICAL SYMBOLS

SITE ACCESSIBILITY LEGEND

PROJECT'S GENERAL NOTES

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COUNTY OF RIVERSIDE
PMB014001/02015

1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
GENERAL NOTES-
SYMBOLS &
ABBREVIATIONS.

SHEET NUMBER

G0.1

1. ALL WORK MUST BE COORDINATED AND SCHEDULED WITH THE OWNER AND OCCUPANTS OF THIS BUILDING SO AS TO PROVIDE THE LEAST AMOUNT OF DISRUPTION OF BUILDING ACTIVITIES AS POSSIBLE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD PLANS OF RIVERSIDE COUNTY AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION (GREEN BOOK), AND (STANDARD PLANS ORDINANCE NO. 461, 2017 EDITION), OR LATEST EDITION AND ANY CITY ISSUED INDIVIDUAL STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, REPLACEMENT OR RELOCATION OF ALL REGULATORY, WARNING AND GUIDE SIGNS IN A MANNER CONSISTENT WITH THE TRAFFIC MANUAL AND ALL ADA, AND/OR APPLICABLE CITY REGULATIONS.
4. ALL TRAVELED WAYS MUST BE CLEANED DAILY OF ALL DIRT, MUD AND DEBRIS DEPOSITED ON THEM AS A RESULT OF THE CONSTRUCTION OPERATIONS.
5. VERIFY JOB SITE CONDITIONS AND DIMENSIONS BEFORE BEGINNING WORK. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
6. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
7. ALL CUTTING AND PATCHING SHALL BE CLOSELY COORDINATED WITH THE G.C.
8. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRE STOPPED BY THE TRADE MAKING THE PENETRATION. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
9. THIS IS A LIFE SAFETY BUILDING WHICH MEANS IT SHALL REMAIN REASONABLY OPERATIONAL IN THE CASE OF A SEISMIC EVENT. THEREFORE ALL STATIONARY EQUIPMENT ON THE FLOOR SHALL BE FIXED RIGIDLY TO THE STRUCTURE. ALL HANGING PIPING SHALL BE BRACED TO THE STRUCTURE.
10. THE CONTRACTOR SHALL REPLACE ANY EXISTING-TO-REMAIN MATERIALS AND FINISHES (CEILING GRID, CEILING TILE, GYPSUM BOARD, FINISHES, DOORS, FRAMES, WALL PROTECTION ETC. WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION.
11. PATCH ALL CUTS, OPENINGS AND DAMAGED AREAS THAT OCCUR DURING DEMOLITION. ALL PATCHING SHALL CONFORM TO THE ADJOINING WORK, MATCHING THE FINISH AND QUALITY OF WORKMANSHIP OF THE ADJACENT MATERIALS.
12. CONTRACTOR SHALL MINIMIZE CONSTRUCTION AND DUST WHEREVER POSSIBLE.
13. CONTRACTOR SHALL COORDINATE ANY SYSTEMS SHUT OFF FOR MECHANICAL, ELECTRICAL, PLUMBING OR FIRE PROTECTION AT ANY TIME DURING CONSTRUCTION.

NFPA 75 AND FIRE PROTECTION AND SUPPRESSION IN DATA CENTERS

AUTOMATIC DETECTION SYSTEMS (REF: NFPA 75, 8.2)
INSTALL AUTOMATIC FIRE DETECTION EQUIPMENT AT THE CEILING LEVEL AND BELOW A RAISED FLOOR HOUSING CABLES. SMOKE DETECTION SYSTEMS MUST OPERATE SMOKE DAMPERS.

PORTABLE EXTINGUISHERS AND HOSE LINES (REF: NFPA 75, 8.3)
DEPLOY LISTED PORTABLE FIRE EXTINGUISHERS, EITHER CARBON DIOXIDE OR HALOGEN-BASED, TO PROTECT IT EQUIPMENT. SIGNAGE MUST INDICATE THE TYPE OF FIRE FOR WHICH EACH TYPE OF EXTINGUISHER IS INTENDED. DRY CHEMICAL EXTINGUISHERS ARE NOT PERMITTED.

WATER MIST FIRE PROTECTION SYSTEMS (REF: NFPA 75, 8.8)
ADHERE TO REQUIREMENTS FOR WATER MIST FIRE PROTECTION SYSTEMS WHERE INSTALLED.

UTILITIES (REF: NFPA 75, CHAPTER 10)
COMPLY WITH MAXIMUM PERMISSIBLE FLAME SPREAD AND SMOKE DEVELOPED INDEXES FOR DUCT INSULATION AND LININGS. HVAC SYSTEM DAMPERS MUST OPERATE UPON THE ACTIVATION OF SMOKE DETECTORS. EQUIP COOLANT SYSTEMS WITH AN ALARM TO INDICATE A LOSS OF FLUID. ALL ELECTRICAL SERVICE WIRING MUST COMPLY WITH THE REQUIREMENTS OF NFPA 70, NATIONAL ELECTRICAL CODE.

SUPPLY CIRCUITS AND INTERCONNECTING CABLES (REF: NFPA 75, 10.4)
ALLOW THE INTERCONNECTION OF SEPARATE IT EQUIPMENT WITH LISTED CABLES AND CABLE ASSEMBLIES. PROVIDE A METHOD TO DISCONNECT POWER TO ALL ELECTRONIC EQUIPMENT IN THE IT EQUIPMENT AREA OR ROOM. INCLUDE PROVISIONS FOR REMOTE POWER DISCONNECT CONTROLS.

EMERGENCY AND RECOVERY PROCEDURES (REF: NFPA 75, CHAPTER 11)
DEVELOP A MANAGEMENT-APPROVED EMERGENCY FIRE PLAN, A DAMAGE CONTROL PLAN, AND A RECOVERY PROCEDURES PLAN FOR CONTINUED OPERATIONS.

TRAINING
TRAIN IT EQUIPMENT AREA PERSONNEL ON RESPONSE TO ALARM CONDITIONS, FUNCTIONING OF THE ALARM SYSTEM, AND THE LOCATION OF ALL EMERGENCY EQUIPMENT, TOOLS, AND EXTINGUISHERS.

RECORDS KEPT OR STORED IN IT EQUIPMENT ROOMS (REF: NFPA 75, CHAPTER 9)
PROTECT AND STORE VITAL OR IMPORTANT RECORDS WITHIN THE IT EQUIPMENT ROOM. STORE DUPLICATE COPIES OF THOSE RECORDS OFFSITE.

TEST EACH PLAN ANNUALLY.
PROVIDE THE LOCAL FIRE DEPARTMENT WITH INFORMATION ABOUT IT EQUIPMENT, A CURRENT FLOORPLAN, AND STRATEGIES AND TACTICS TO ADDRESS THE RISK OF A FIRE INCIDENT.

REFER TO THE INFORMATIVE ANNEXES INCLUDED IN NFPA 75 FOR ADDITIONAL EXPLANATORY INFORMATION ABOUT THE STANDARD'S REQUIREMENTS AND A LIST OF SUGGESTED REFERENCE DOCUMENTS.

DEMOLITION GENERAL NOTES

CONTRACTOR TO FOLLOW STRICT SAFETY PROTOCOLS TO MINIMIZE THE RISK OF ASBESTOS EXPOSURE.

DEMOLITION GENERAL NOTES FOR ROOM'S VCT WITH ASBESTOS:

ASBESTOS ASSESSMENT: CONTRACTOR TO CONDUCT A THOROUGH ASBESTOS ASSESSMENT BY HIRING A CERTIFIED ASBESTOS INSPECTOR TO DETERMINE THE PRESENCE AND EXTENT OF ASBESTOS IN THE VCT. THIS ASSESSMENT WILL GUIDE THE DEMOLITION PROCESS AND HELP IDENTIFY NECESSARY PRECAUTIONS.

ASBESTOS ABATEMENT SPECIALISTS: CONTRACTOR TO ENGAGE LICENSED ASBESTOS ABATEMENT SPECIALISTS WHO ARE TRAINED AND EQUIPPED TO HANDLE ASBESTOS-CONTAINING MATERIALS (ACMS). THEIR EXPERTISE ENSURES COMPLIANCE WITH REGULATORY REQUIREMENTS AND ENSURES SAFE REMOVAL.

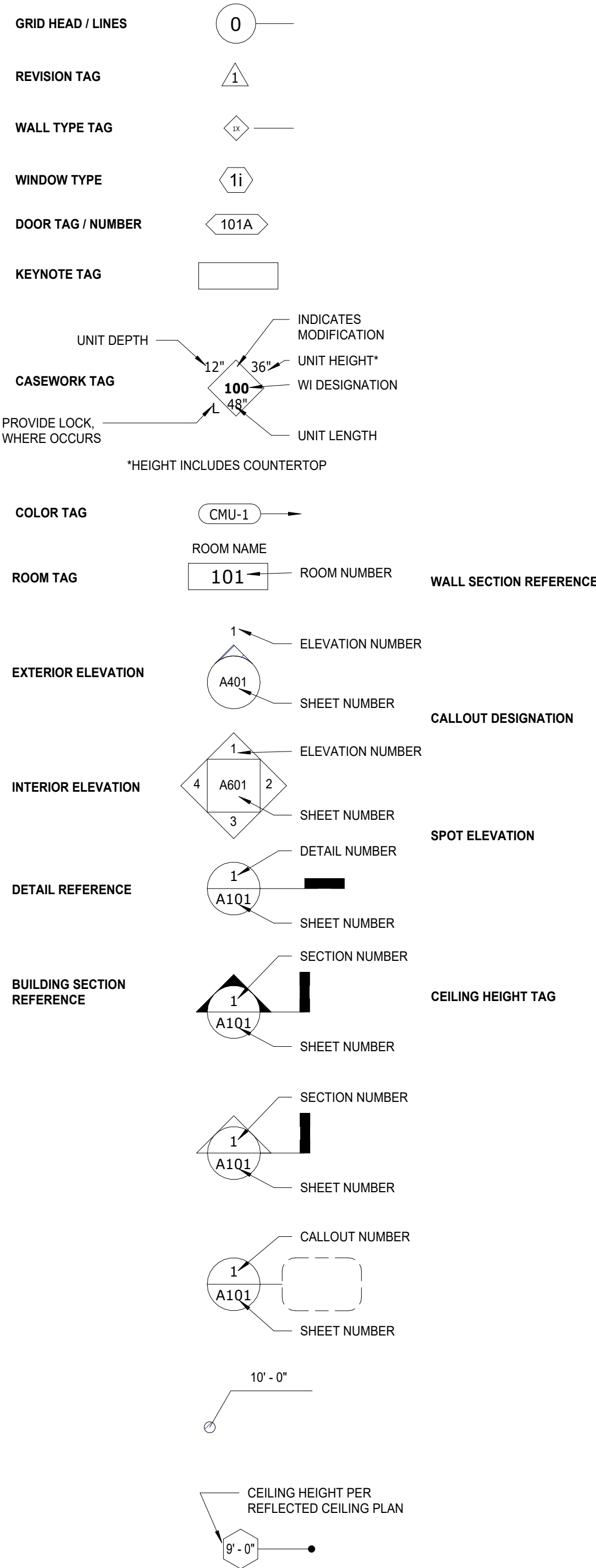
REGULATORY COMPLIANCE: CONTRACTOR TO COORDINATE WITH LOCAL, STATE, AND FEDERAL REGULATIONS PERTAINING TO ASBESTOS REMOVAL AND DISPOSAL. ADHERE TO ALL RELEVANT LAWS, PERMITS, AND NOTIFICATION REQUIREMENTS BEFORE COMMENCING THE DEMOLITION PROCESS.

WORK AREA ISOLATION: CONTRACTOR TO ESTABLISH PROPER CONTAINMENT MEASURES TO ISOLATE THE WORK AREA FROM THE REST OF THE BUILDING. THIS PREVENTS THE SPREAD OF ASBESTOS FIBERS TO OTHER AREAS AND PROTECTS OCCUPANTS' HEALTH. USE PLASTIC SHEETING AND NEGATIVE AIR PRESSURE UNITS TO CREATE A SEALED CONTAINMENT ZONE.

PERSONAL PROTECTIVE EQUIPMENT (PPE): ALL PERSONNEL INVOLVED IN THE DEMOLITION MUST WEAR APPROPRIATE PPE, INCLUDING DISPOSABLE COVERALLS, RESPIRATORS WITH HIGH-EFFICIENCY PARTICULATE AIR (HEPA) FILTERS, GLOVES, AND PROTECTIVE EYEWEAR. FOLLOW PROPER DRESSING AND DOFFING PROCEDURES FOR PPE TO MINIMIZE CROSS-CONTAMINATION.

NOTE
ASBESTOS HANDLING AND REMOVAL REQUIRE SPECIALIZED TRAINING AND EXPERTISE. IT IS THE CONTRACTOR RESPONSIBILITY TO CONSULT WITH ASBESTOS PROFESSIONALS AND REGULATORY AUTHORITIES TO ENSURE THE SAFE AND PROPER EXECUTION OF DEMOLITION PLANS FOR VCT CONTAINING ASBESTOS.

- EXISTING BUILDING(S) REMODEL WORK
- EXISTING BUILDING(S) NO WORK
- PROPERTY LINE
- EXISTING BARRIER FREE PATH OF TRAVEL
- ACCESSIBLE FEATURE CALLOUT

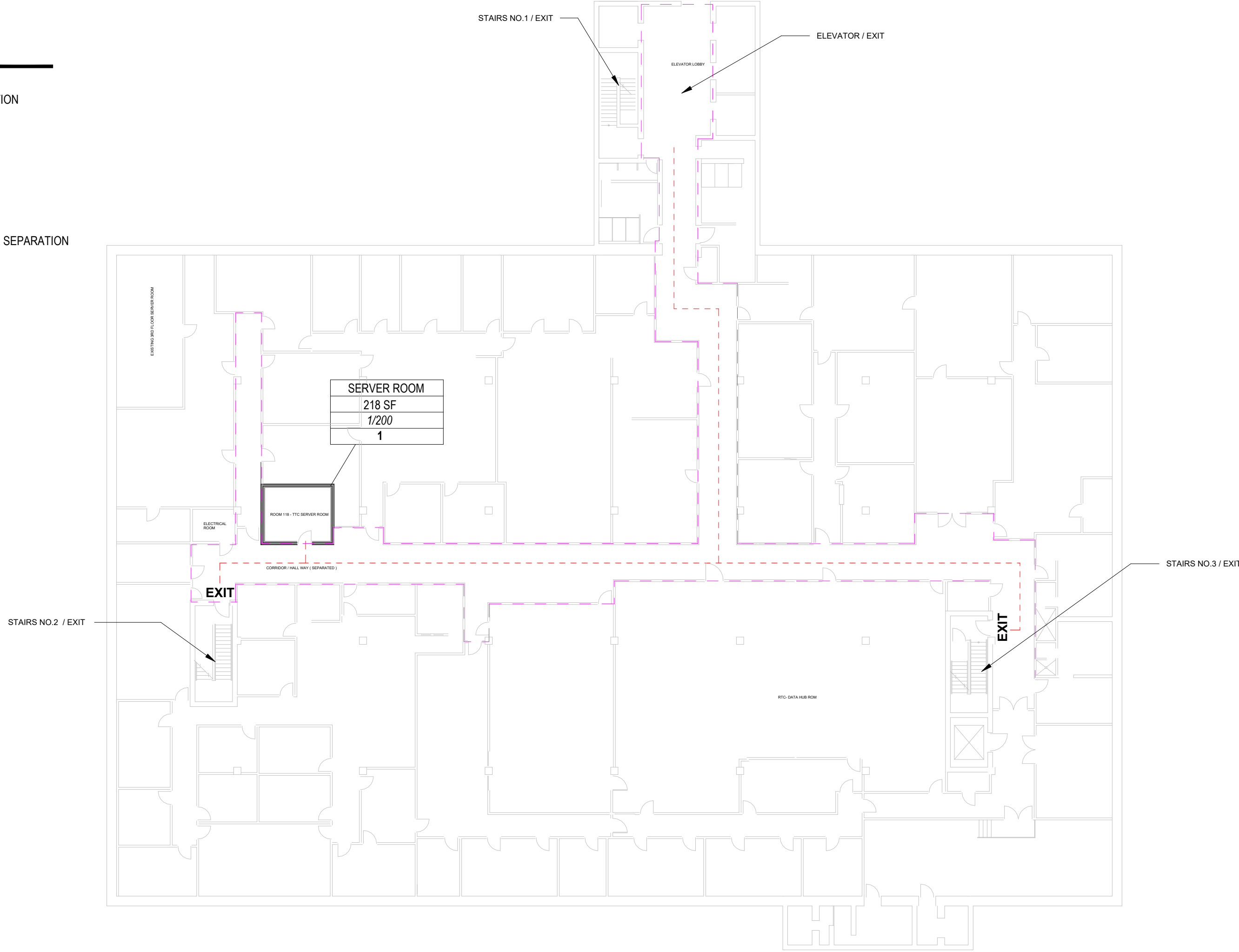


MATERIAL LEGEND

- CONCRETE
- GRAVEL
- GYPSUM
- BRICK
- EARTH
- CLAY TILE
- BATT INSULATION
- CMU
- RIGID INSULATION
- STEEL
- WOOD
- PLYWOOD

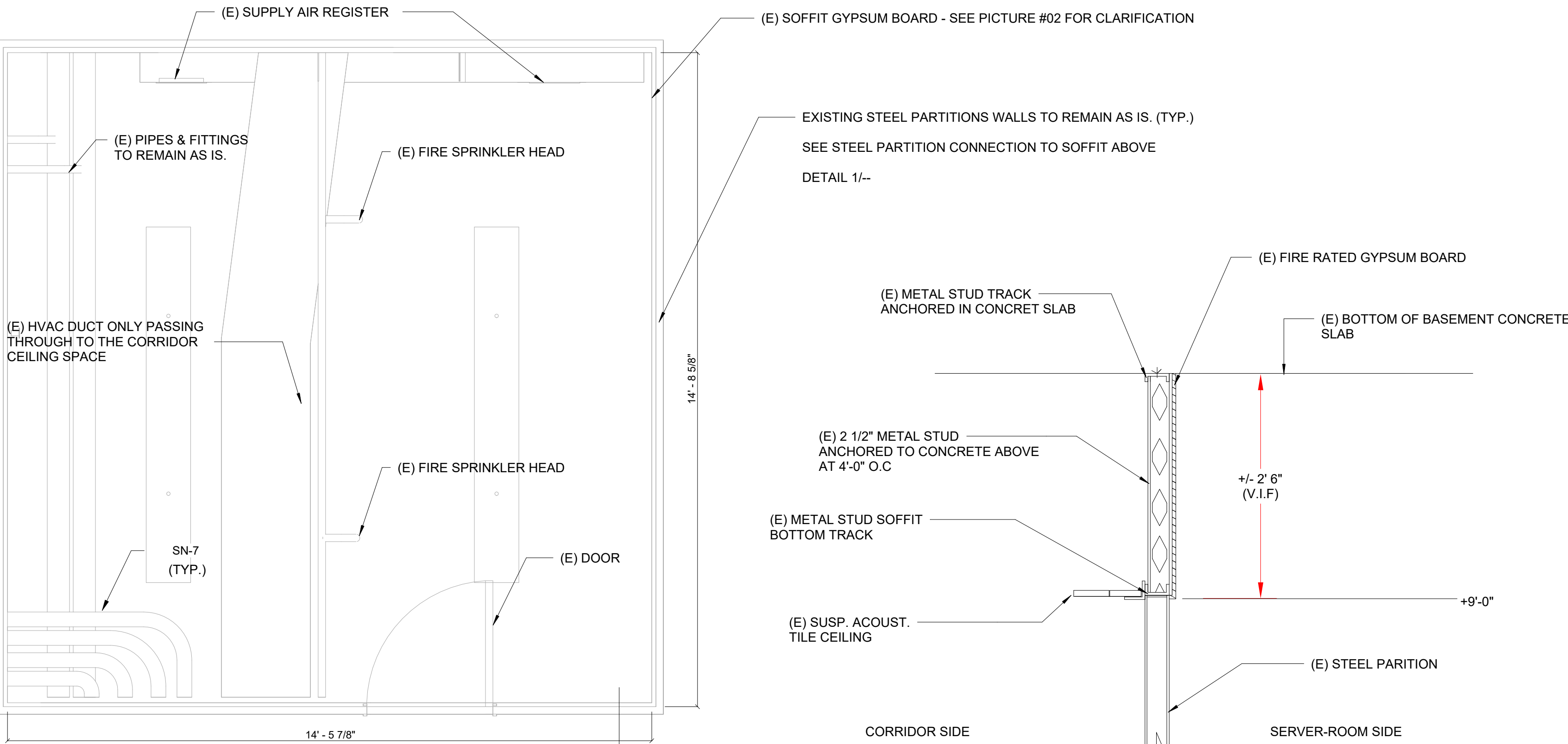
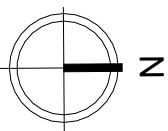
SYMBOLS LEGEND

EXISTING 1-HR RATED CEILING SEPARATION	
SPACE	FUNCTION
201 SF	AREA
1/100	OCCUPANT LOAD FACTOR
2	OCCUPANT LOAD
	EXISTING EGRESS PATH
	EXISTING CORRIDOR CEILING FIRE SEPARATION



AREA / ANALYSIS LAYOUT PLAN

N.T.S



EXISTING ENLARGED SERVER ROOM
PLAN
1/2" = 1'-0"

1 EXISTING STEEL PARTITION DETAIL

N.T.S

EGRESS & OCCUPANCY CODE ANALYSIS

SPACE NAME	OCCUPANCY GROUP	FUNCTION OF SPACE	DESIGNED AREA (GROSS)
SERVER ROOM	B	SERVER ROOM	218 ft.
SPRINKLER TYPE	TYPE OF CONSTRUCTION	FIRE SEPARATION	WALLS RATINGS NFPA 75
TYPE I SPRINKLER	A-2	SEPARATED CORRIDOR & WALLS	1 HR

MIN. EXITS PER SPACE

FOR OCCUPANCY LOAD LESS THAN 49, ONE EXIT IS ALLOWED.

OLF	OCCUPANT LOAD
200	1

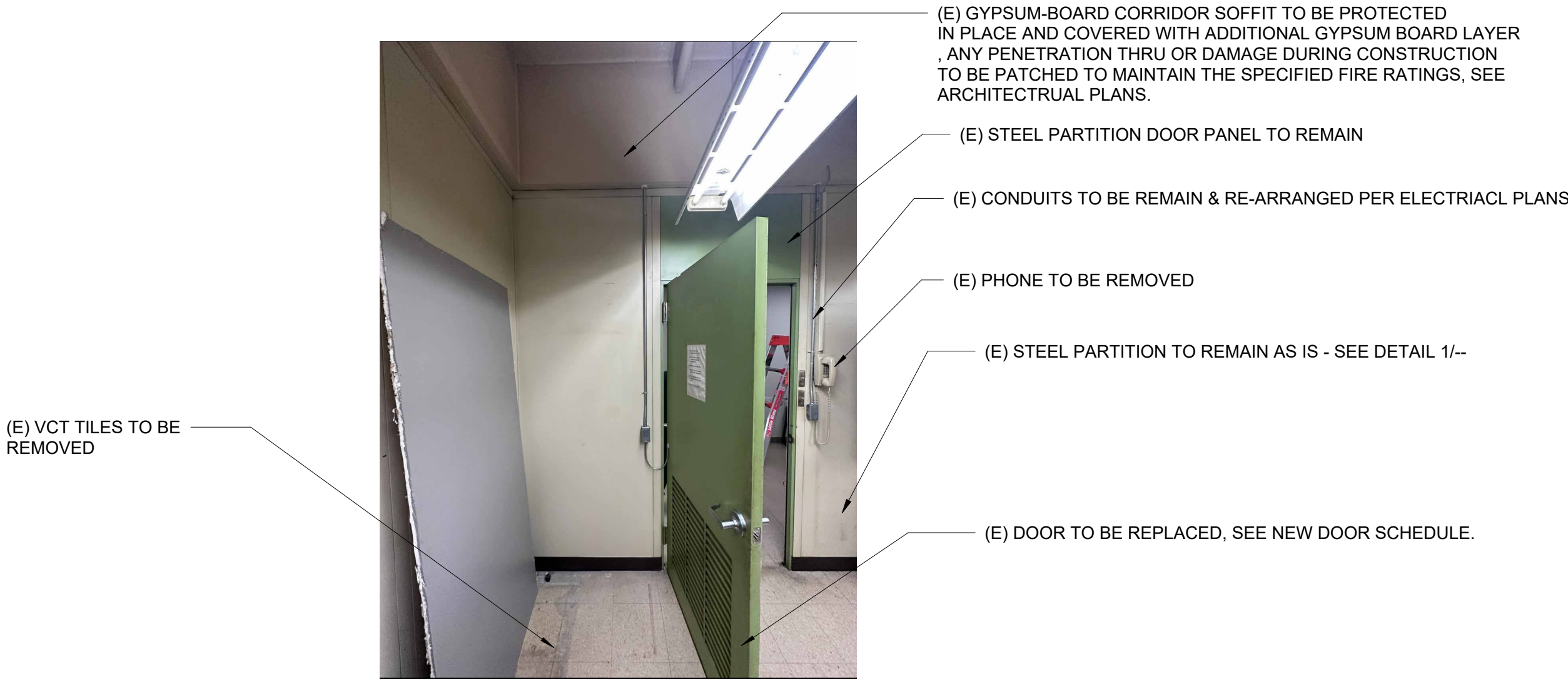
MIN. FIRE WALL RATINGS PER OCCUPANCY

ANY FIRE WALLS PRESENT MUST MEET THE MINIMUM FIRE RESISTANCE RATINGS BELOW BY OCCUPANCY GROUP

OCCUPANCY GROUP	MIN. FIRE WALL RESISTANCE RATING (HRS.)
B	1

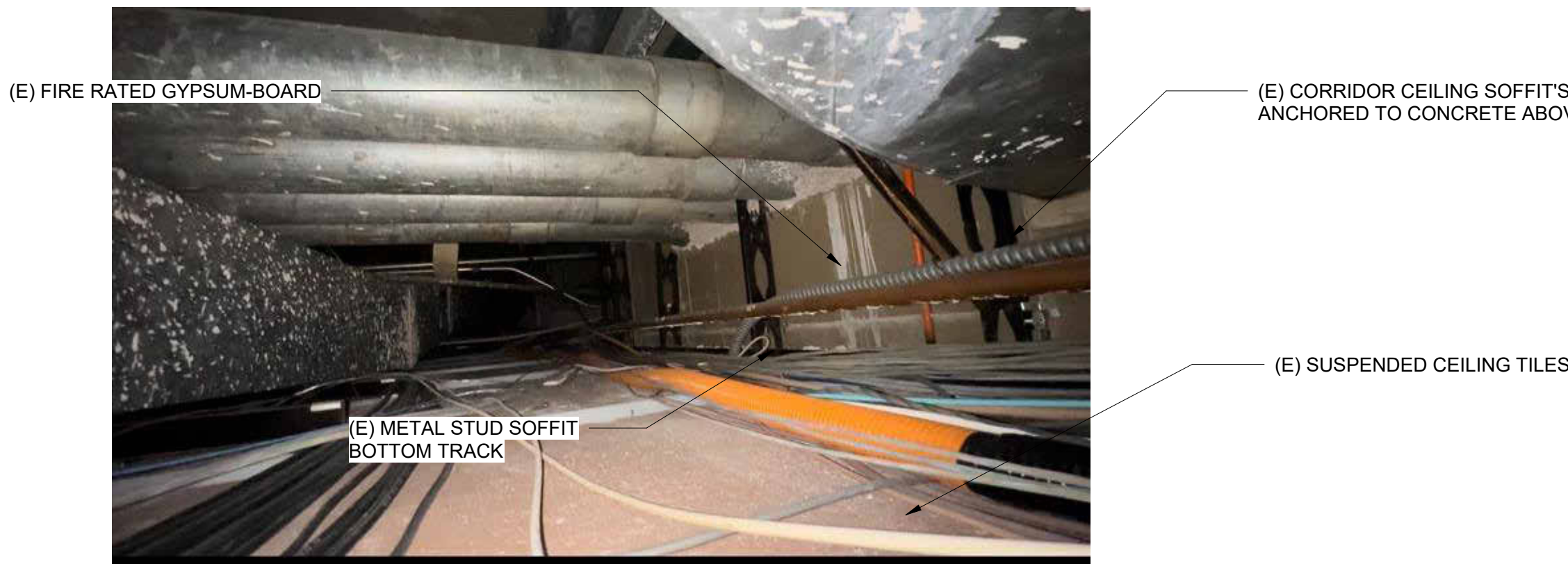
NOTES

- CORRIDOR CEILING TO REMAIN AS IS. NO CHANGE TO ADJACENT ROOMS OCCUPANCIES NOR FIRE SEPARATION REQUIREMENTS SHALL BE PART OF THIS PROJECT'S SCOPE.
- SEE ENLARGED SERVER ROOM FLOOR PLAN FOR MORE INFO.



2 PICTURE INSIDE ROOM FOR CLARIFICATION

N.T.S



1 EXISTING CORRIDOR CEILING

N.T.S

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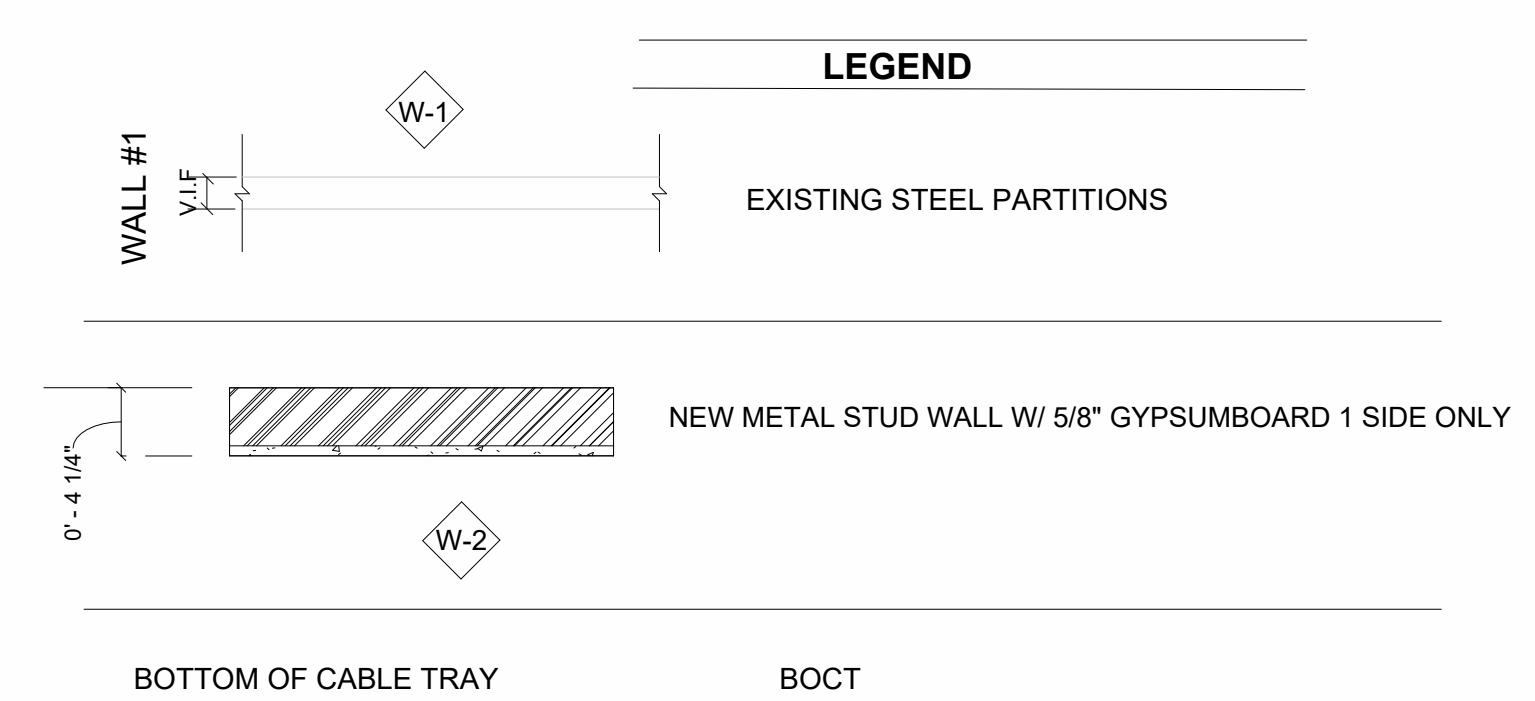
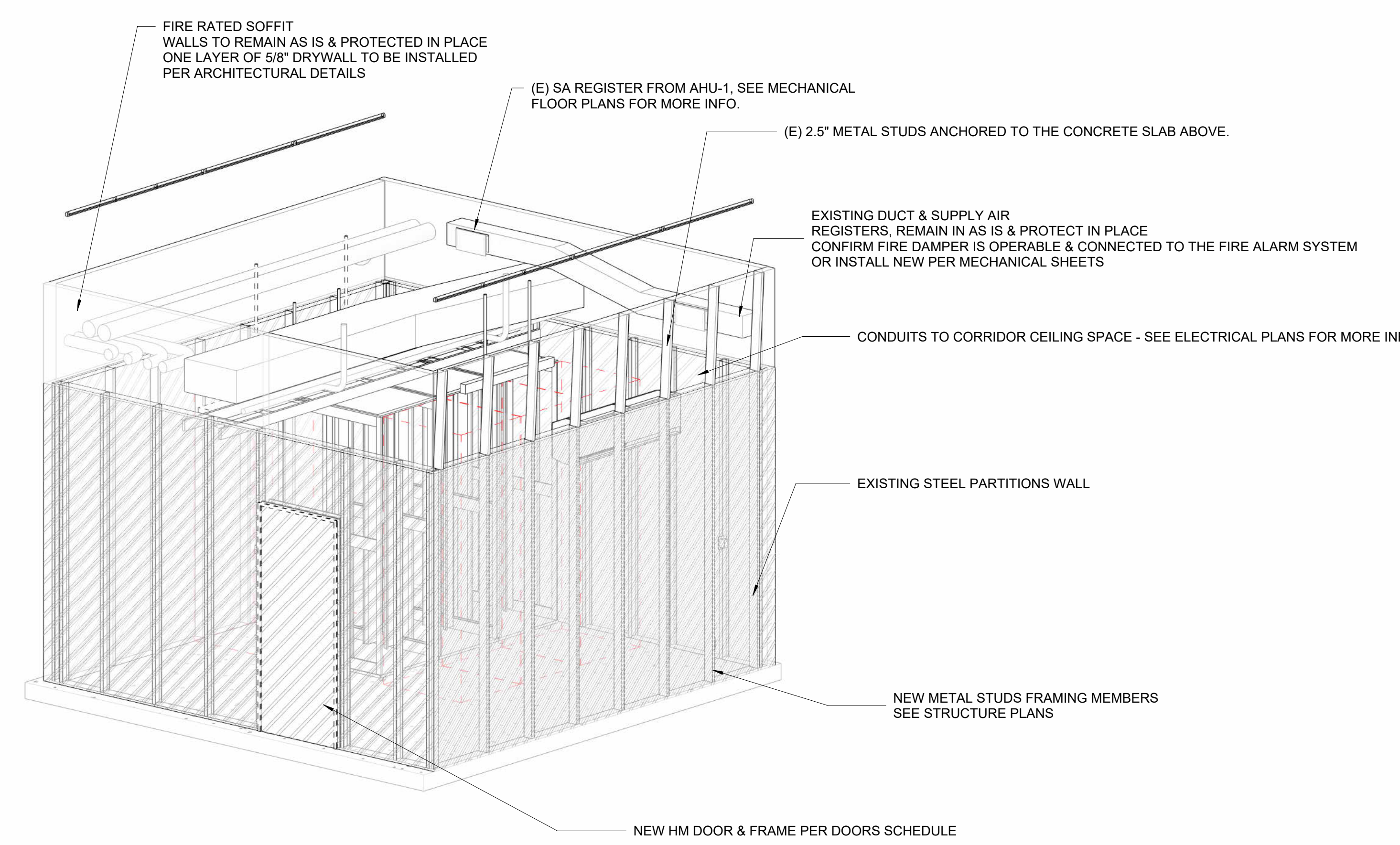
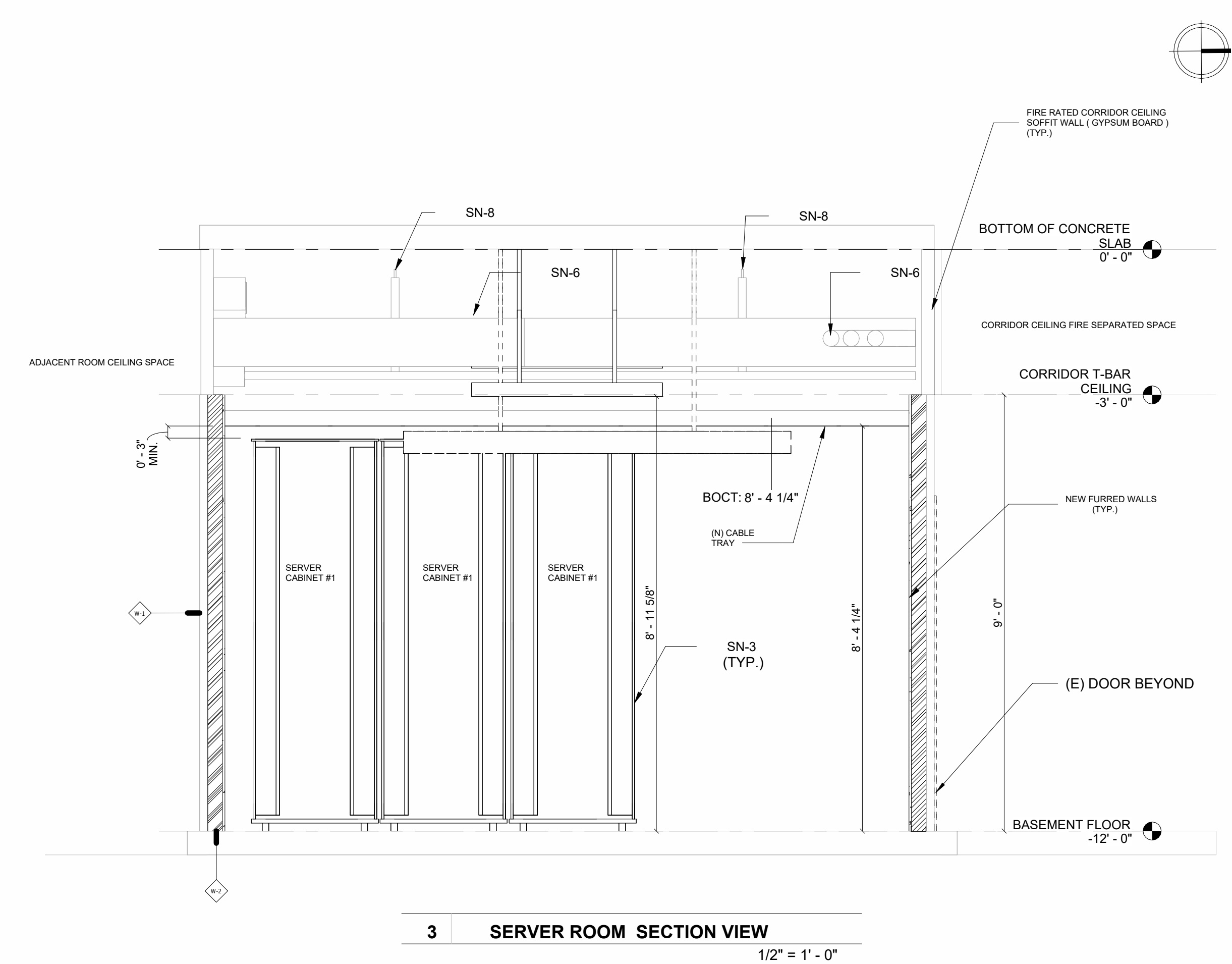
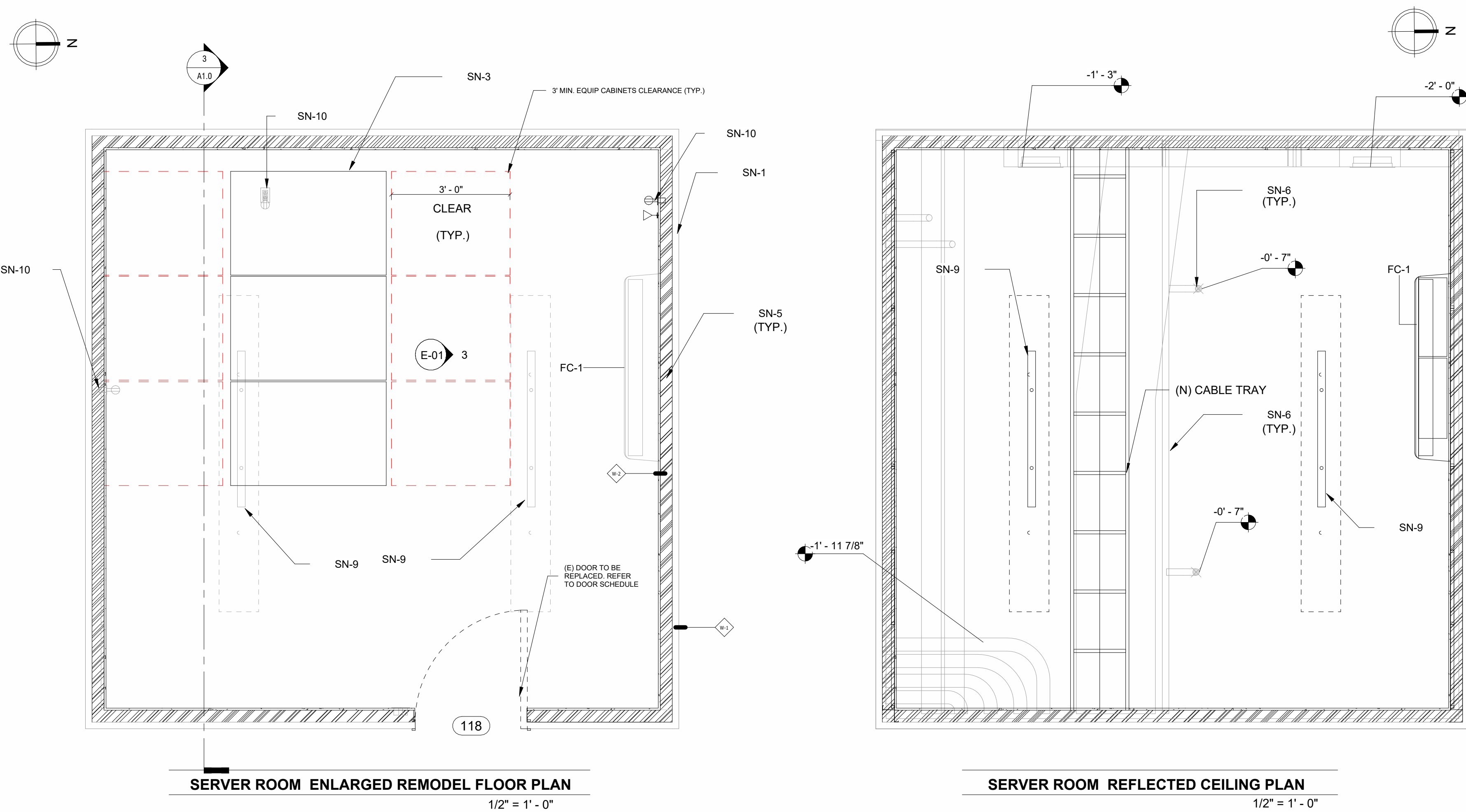
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COUNTY OF RIVERSIDE
PMB0140012075

1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
CODE ANALYSIS &
EXISTING
CONDITIONS

SHEET NUMBER
G1.0



REMODEL SHEET NOTES (SN)	
KEYNOTE TAG	KEYNOTE DESCRIPTION
SN-1	EXISTING STEEL MODULAR PARTITION WALLS TO REMAIN AS IS
SN-3	NEW ZETAFRAME CABINETS - SEE TECHNOLOGY PLANS
SN-5	NEW METAL STUD NON-LOAD BEARING PARTIAL HEIGHT WALLS, SEE STRUCTURAL FRAMING PLANS AND DETAILS FOR MORE INFO.
SN-6	(E) FIRE SPRINKLER PIPES, HVAC DUCTS PASSING THROUGH, ELECTRICAL & DATA CONDUITS AT (E) CEILING TO REMAIN AS IS . PROTECT IN PLACE DURING CONSTRUCTION
SN-8	(E) FIRE PROTECTION SPRINKLER HEAD
SN-9	NEW L.E.D SUSPENDED LIGHT FIXTURE / SEE ELECTRICAL DRAWINGS
SN-10	NEW & EXISTING RELOCATED POWER & DATA, SEE ELECTRICAL & TECHNOLOGY DRAWINGS.

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Design | Engineering | Construction

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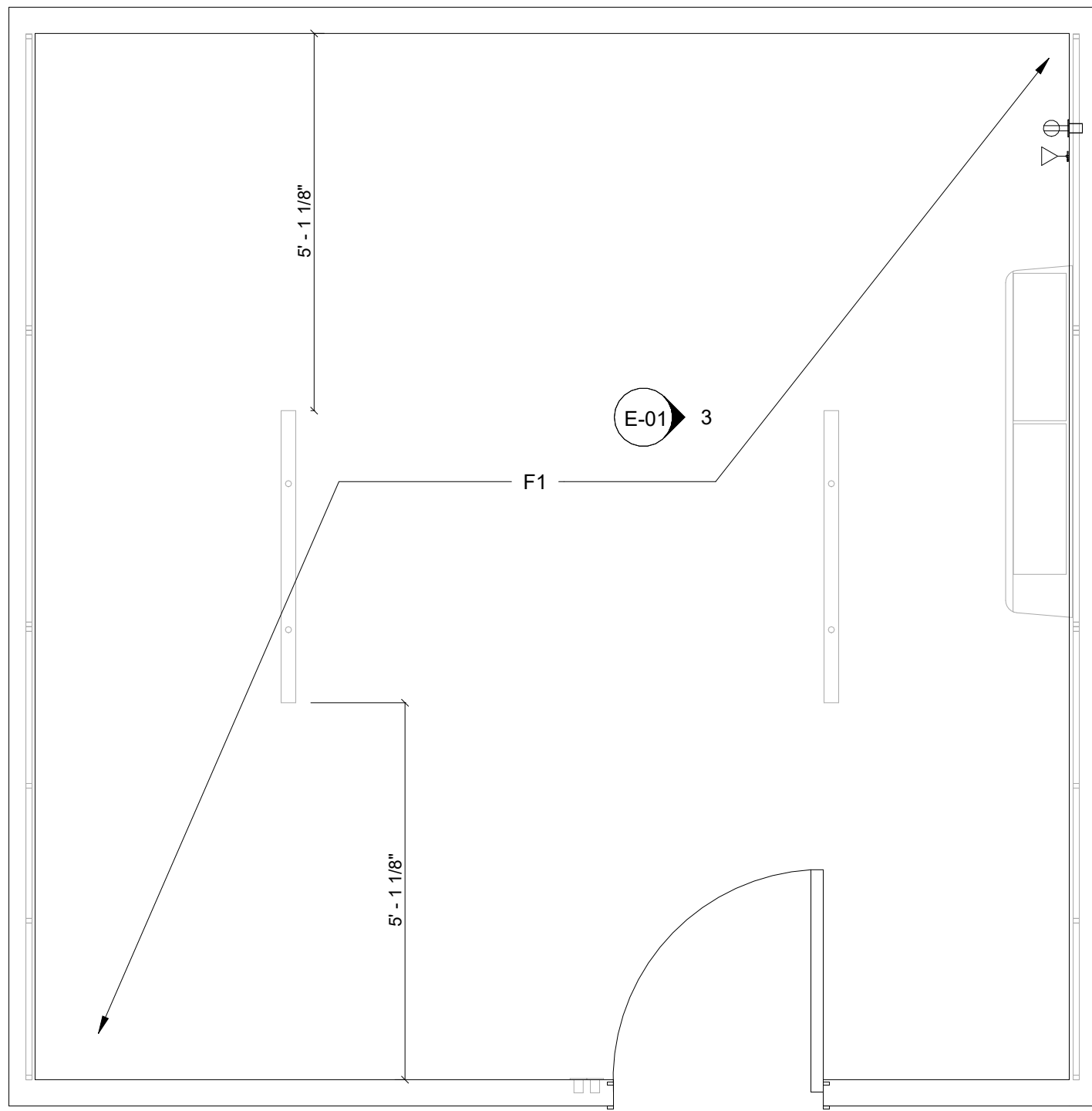
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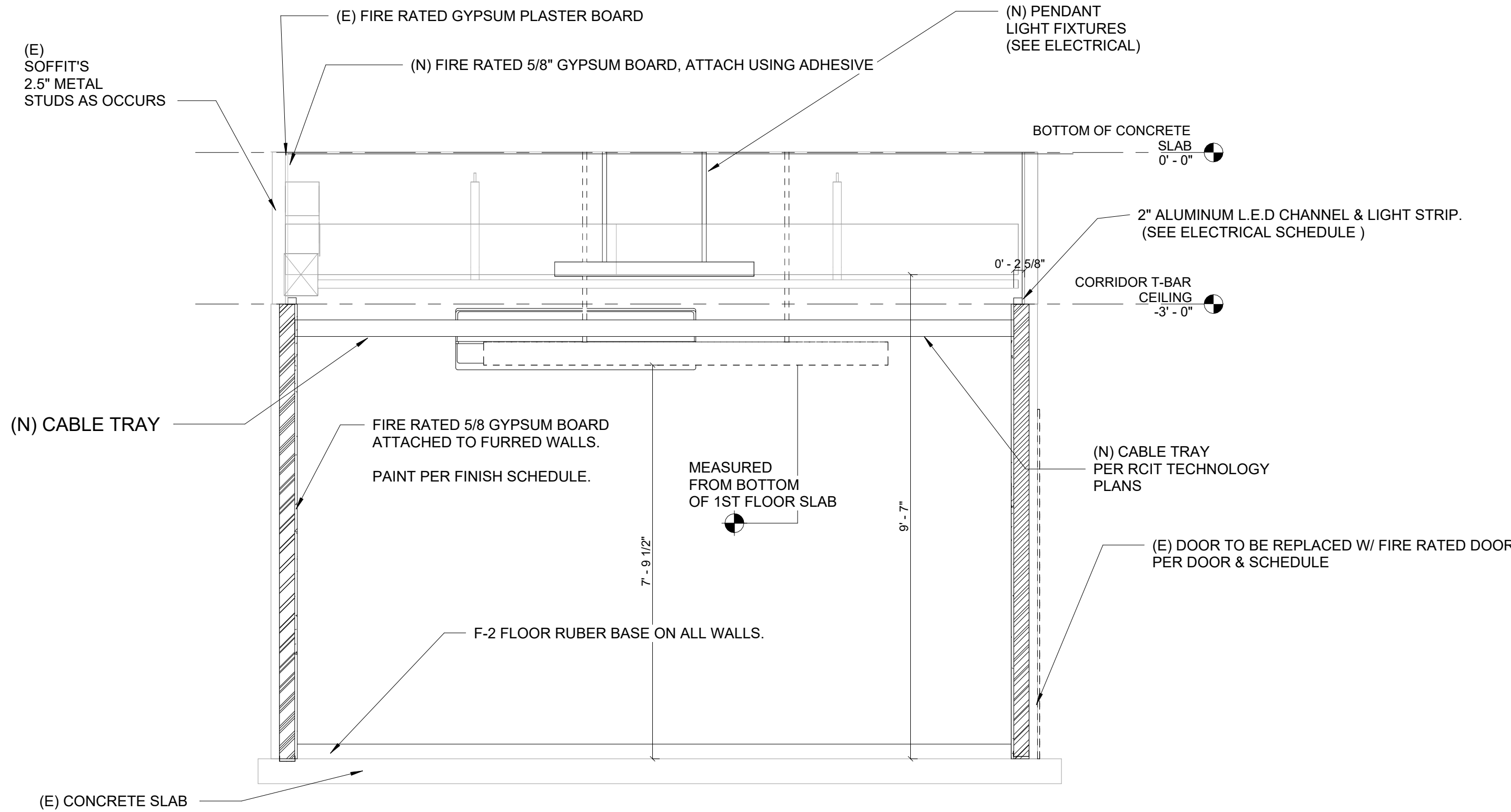
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SHEET NAME
PROPOSED ROOM PLANS
SHEET NUMBER
A1.0



1 BASEMENT FLOOR.
1/2" = 1'-0"



2 ELEVATION -1
1/2" = 1'-0"

FINISH FLOOR PLAN NOTES

- INTERIOR FINISHES TO BE PER ROOM FINISH SCHEDULE ON THIS SHEET.
- CONTRACTOR TO COORDINATE WITH MECHANICAL & ELECTRICAL DRAWINGS PRIOR TO CLOSING FURRED WALLS .REFER
- HORIZONTAL DIMENSIONS ARE TO FINISH FACE OF WALL OR FACE OF CONCRETE UNLESS OTHERWISE NOTED. VERTICAL DIMENSIONS AND ELEVATIONS ARE TO FINISH MATERIALS UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY EQUIPMENT REQUIREMENTS WITH THE EQUIPMENT MANUFACTURERS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORT FOR ALL FIXTURES, EQUIPMENT, CABINETRY, FURNISHINGS AND ALL OTHER ITEMS.

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SHEET NAME
ROOM FINISH PLAN

SHEET NUMBER

A2.0

DOOR SCHEDULE

MARK	SIZE	DESCRIPTION	FIRE RATING	FRAME	NOTES	RATING	HARDWARE
108	EXISTING	EXISTING HM DOOR	1 HOUR	METAL	FIELD VERIFY EXISTING CONDITIONS USE (E) ACCESS CONTROL HARDWARE.	N/A	NUMBER 1

HARDWARE SCHEDULE

HARDWARE SET	DESCRIPTION	QTY.
1	LOCKSET W/ LEVER HAND OR REPLACE CYLINDER	1 EA
	LEVER CLOSER HINGES	1 EA 1 EA 1 SET 1 EA 1 EA

HARDWARE NOTES

- ALL HARDWARE SHALL BE IN ACCORDANCE WITH LOCAL AND STATE ACCESSIBILITY STANDARDS, AND AMERICANS WITH DISABILITY STANDARDS.

MATERIAL INFORMATION

CONCRETE POLISH AND STAIN
SCOFIELD CONCRETE PRODUCTS/ 1-800-800-8900 FORMULA ONE LIQUID DYE CONCENTRATE SEALED WITH FINISH HARDENER: FORMULA ONE LITHIUM DENSIFIER. A CERTIFIED SCOFIELD INSTALLER IS RECOMMENDED. CONTACT CUSTOMER SERVICE FOR LOCAL INSTALLER AT THE NUMBER SPECIFIED ABOVE
*REFER TO THE ADDITIONAL CONCRETE FLOOR FINISH NOTES.

PAINT
MATCH EXISTING COLOR & FINISH

ADDITIONAL MATERIAL FINISH NOTES:

- ALL FINISH MATERIALS TO COMPLY W/ THE FLAME SPREAD CLASSIFICATION RATING AS SPECIFIED IN THE BUILDING CODES INDICATED ON THE COVER SHEET, G00.

ADDITIONAL CONCRETE FLOOR FINISH NOTES:

- THE G.C. SHALL INSPECT THE EXIST. FLOOR PRIOR TO ANY INSTALLATION PROCEDURES & NOTIFY ACC OF ANY SERIOUS DEFECTS W/ THE EXIST CONCRETE.
- MECHANICALLY GRIND FLOOR & EDGES W/ 50-HYBRID DIAMONDS TO BEGIN PROCESS OF PROFILING THE CONC.
- CLEAN & PATCH FLOOR.
- MECHANICALLY GRIND FLOOR & EDGES W/ 100-HYBRID DIAMONDS TO BEGIN THE PROCESS OF PROFILING THE CONC.
- MASK OFF WALLS AND APPLY SCOFIELD FORMULA ONE LIQUID DYE CONCENTRATE TO FLOOR.
- APPLY SCOFIELD FORMULA ONE LITHIUM DENSIFIER TO FLOOR.
- MECHANICALLY GRIND FLOOR & EDGES W/ 400/800-HYBRID DIAMONDS TO BEGIN PROCESS OF POLISHING THE CONC.
- APPLY (1) ONE COAT OF SCOFIELD CONCRETE GUARD - BURNISH FLOOR W/ 1500 GRIT DIAMOND PADS.
- APPLY SECOND COAT OF SCOFIELD FORMULA ONE GUARD & BURNISH W/ 3000 GRIT DIAMOND PADS.

ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING	REMARKS
118	TTC SERVER ROOM	F1	F5,F7	W5,W1,W3	C1	-

FINISH TYPES

PATCH, REPAIR AND REFINISH EXISTING CONCRETE FLOOR WITH NEW COLOR, EPOXY, AND ANTI-SLIP POLYURETHANE GLOSS SEAL, INSTALLED PER MANUFACTURER SPECIFICATIONS.

- A. 75# TEXTURE 50 ANTI-SLIP
B. METALLIC COLOR T.B.D
C. POLYURETHANE HS PART A & B, EZ, CLEAR
D. A RESIN, CLEAR TOP SHELF EPOXY PART A & B

FLOORS

F1) EXISTING CONCRETE SLAB TO BE DYED: COLOR-DRIFTWOOD #1395 OR TO BE SELECTED BY OWNER.

F7) BURKE BASE. 6" COVED RUBBER BASE. COLOR T.B.D

WALLS

- W1) 1X6 BC SOUTHERN YELLOW PINE 10'-12' LONG BOARDS - SANDED UP TO 220 GRIT. (1) COAT (SEMI TRANSPARENT STAIN COLOR T.B.D) - (2) COATS OF MINWAX FAST DRYING POLYURETHANE CLEAR SATIN - PROVIDED & INSTALLED BY CONTRACTOR
W2) (F.R.P.) (FIBERGLASS REINFORCED PANELING) PEBBLED FINISH - #P199, COLOR: WHITE
W3) PLASTIC LAMINATE, MATTE SURFACE- COLOR: T.B.D

W5) WALL SURFACE FINISH- LEVEL 03 SMOOTH FINISH

PAINT SCHEDULE

(P-1) COLOR: T.B.D , PROMAR 200 ZERO VOC SEMI-GLOSS

CEILING

C1 CEILING TO REMAIN AS IS (PAINTED)

SECTION 09 01 90 -REPAIRING AND PAINTING OF EXISTING PAINTED SURFACES

- A. SECTION INCLUDES
1. SUPPLY AND APPLY INTERIOR PAINTING TO EXISTING SURFACES.
2. PREPARING AND REPAIRING EXISTING SURFACES.
- B. SUBMITTALS
1. COMPLETE LIST OF ALL MATERIALS TO BE FURNISHED.
2. MANUFACTURER'S STANDARD COLOR SAMPLES FOR EACH TYPE OF PAINT SPECIFIED.SUBMIT FOUR (4) SAMPLES OF EACH COLOR SELECTED FOR EACH TYPE OF PAINT, ON STANDARD 8-1/2 BY 11 INCHES FOR THE REQUIRED SHEEN, COLOR, AND TEXTURE.
- C. QUALITY ASSURANCE
1. CERTIFICATION OF MATERIALS: MANUFACTURER SHALL CERTIFY THAT MATERIALS COMPLY WITH REQUIREMENTS OF THIS SECTION.
2. Paint materials shall comply with applicable requirements of the Food and Drug Administration's Lead Law and the California Air Resources Board and the Environmental Protection Agency.
3. Company specializing in manufacturing quality paints and finishes products with three years experience.
4. Applicator: Company specializing in commercial painting and finishing with three years documented experience.
5. Provide primers and undercoat paint produced by the same manufacturer as the finish coat.
- D. DELIVERY, STORAGE AND HANDLING
1. Materials shall be delivered to project site in original unbroken containers bearing manufacturer's name, brand number and batch number.
- E. ENVIRONMENTAL CONDITIONS
1. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during and 48 hours after application of finishes.
2. Do not apply exterior coatings during rain, or when relative humidity is above 50 percent, unless permitted otherwise by manufacturer's instructions.
3. Provide lighting level sufficient to conduct painting operations.
- F. PAINT MATERIALS
1. Dunn-Edwards Corporation, Los Angeles, CA.
2. Sherwin-Williams Company
3. Vista Paints, Fullerton, CA.
4. Behr Paints
5. PPG Paints
- G. PREPARATION OF EXISTING PAINTED SURFACES
1. Examine surfaces to receive paint finish. Surfaces which are not properly prepared and cleaned or which are not in condition to receive the finish specified, shall be corrected before paint is applied.
2. Remove electrical plates, hardware, light fixture trim and fittings prior to preparing surfaces for finishing.
3. Ascertain that new paint system is compatible with existing coatings, gloss and high-gloss, and oil based paint systems to insure proper adhesion. Apply a "test patch"of 3 square feet and allow to dry for a week before testing adhesion in accordance with ASTM D3359.
4. Existing interior painted surfaces indicated to be painted, prepared as follows:

a. Clean all interior surfaces, remove surface contaminants without damaging the substrates or adjacent areas such as oils, grease, loose paint, cracking, blistering, peeling or flaking paint, dirt, foreign matter, rust, mold, mildew, and all other surface contaminants that will interfere with adhesion of subsequent coats. Let dry thoroughly, LIGHT SAND all surfaces to receive new finishes. Repair existing minor defects, prime bare areas with specified primer.

b. Gypsum Board: remove contamination from surfaces and prime to show defects, if any. Prepare surfaces to align and to match adjacent surfaces. Feather edges into the existing adjacent surface. Repair cracks, holes, gouges and damaged spots larger than 1/2", per Section 09 29 00-Gypsum Board.

c. Work by experienced skilled craftsmen only. Apply finishes evenly and be free from runs, sags, crawls, or other defects.

d. Glossy surfaces of existing paint films must be cleaned and dulled before repainting. Wash thoroughly as specified and dull by sanding. Degloss all glossy and previously enameled surfaces to provide a roughened surface or "tooth"for good adhesion of subsequent coats.

e. Apply separation coats to prevent non-compatible coatings from having contact approved by the coating manufacturer. Paint as scheduled.
6. Before any work is started, cover all floors completely with canvas or a non-staining film (red crape paper or plastic) cover and protect all surfaces and any unpainted surfaces.
7. Ceilings: Air blow, broom, rag and dust all surfaces to remove as much dust and dirt as possible. Hand scrape and machine wire tool to remove all loose and peeling paint to a tight edge.
8. Interior Walls: Prepare all walls after ceilings are completed.
9. Except where scheduled for complete painting, apply finish coats over plane surface to nearest break in plane, such as corner, reveal, or frame.
10. In existing rooms and areas where alterations occur, clean existing stained and natural finished wood, retouch abraded surfaces apply entire surfaces one coat of polyurethane varnish (PV).
11. Refinish areas as specified for new work to match adjoining work unless specified or scheduled otherwise.
- H. PROTECTION
1. Protect work of other trades or existing adjacent surfaces or areas, whether to be coated or not, against damage from coating. Correct damage by cleaning, repairing, replacing and recoating as acceptable to the Inspector. Leave in an undamaged condition.
2. Provide sufficient drop cloths, shields, and protective equipment to prevent spray or droppings from fouling surfaces, furniture, equipment, cabinets, etc. in all areas required to complete the work.
3. Protect prefinished surfaces, lawns, shrubbery and adjacent surfaces against paint and damage.
4. Protect surfaces, equipment and fixtures from damage resulting from use of fixed, movable and hanging scaffolding, planking and staging.
5. Place all waste materials, cloths, and material that may constitute a fire hazard in closed metal containers and remove daily from the site.

6. Remove electrical plates, surface hardware, fittings and fastenings, prior to painting operations. These items are to be carefully inventoried and marked, stored, cleaned, and replaced at the completion or work in each area. Do not use solvent to clean hardware or items that may remove permanent lacquer finish.
7. Provide "WET PAINT"signs, barricades and other devices required to protect newly coated finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of coating operations.
- K. CLEANING, TOUCH-UP AND REFINISHING
1. As work proceeds and upon completion, promptly remove paint where spilled, splashed, or spattered.
2. During progress of work keep premises free from any unnecessary accumulation of tools, equipment, surplus materials, and debris.
3. Upon completion of work remove all rubbish, paint cans and accumulated materials resulting from work in each space or room. All areas shall be left in a clean, orderly condition to the satisfaction of the Owner.
4. Upon completion of painting, clean glass and paint spattered surfaces. Remove spattered paint by washing, scrapping or other professional methods using care not to scratch or damage adjacent finished surfaces.
- L. SCHEDULE: INTERIOR SURFACES
1. Gypsum Board -Flat -Acrylic (Skim Coat Required for Level 5 Finish):

a. Primer, 1 Coat

1) Vista 5001

2) Behr 73

3) Dunn-Edwards VNPL00

4) Sherwin Williams B28W2600

5) PPG 6-4900XI

b. Finish, 2 Coats

1) Vista 5100

2) Behr 310

3) Dunn-Edwards SWLL10

4) Sherwin Williams B30W-2600

5) PPG 6-4110XI
2. Gypsum Board -Eggshell -Acrylic (Skim Coat Required for Level 5 Finish):

a. Primer, 1 Coat

1) Vista 5001

2) Behr 73

3) Dunn-Edwards VNPL00

4) Sherwin Williams B28W2600

5) PPG 6-4900XI

b. Finish, 2 Coats

1) Vista 5300

2) Behr 330

3) Dunn-Edwards SWLL30

4) Sherwin Williams B20-2600

5) PPG 6-4310XI Series
3. Gypsum Board -Semi-Gloss -Acrylic (Skim Coat Required for Level 5 Finish):

a. Primer, 1 Coat

1) Vista 5001

2) Behr 73

3) Dunn-Edwards VNPL00

4) Sherwin Williams B28W2600

5) PPG 6-4900XI

b. Finish, 2 Coats

1) Vista 5400

2) Behr 370

3) Dunn-Edwards SWLL50

4) Sherwin Williams B31-2600

5) PPG 6-4510XI Series

4. Gypsum Board -Gloss-Acrylic (Skim Coat Required for Level 5 Finish):

a. Primer, 1 Coat

1) Vista 5001

2) Behr 73

3) Dunn-Edwards VNPL00

4) Sherwin Williams B28W2600

5) PPG 6-4900XI

b. Finish, 2 Coats

1) Vista 8500

2) Behr 2-8050

3) Dunn-Edwards EVSH60

4) Sherwin Williams B21-12650

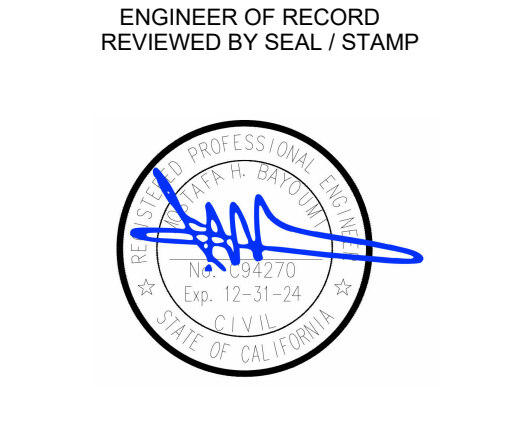
5) PPG Break Through! V71-610 Series

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PROJECT NAME	LOCATION	OWNER
CAC BASEMENT SERVER ROOM UPGRADE	4080 LEMON ST, RIVERSIDE, CA 92501	TREASURY AND TAX COLLECTION



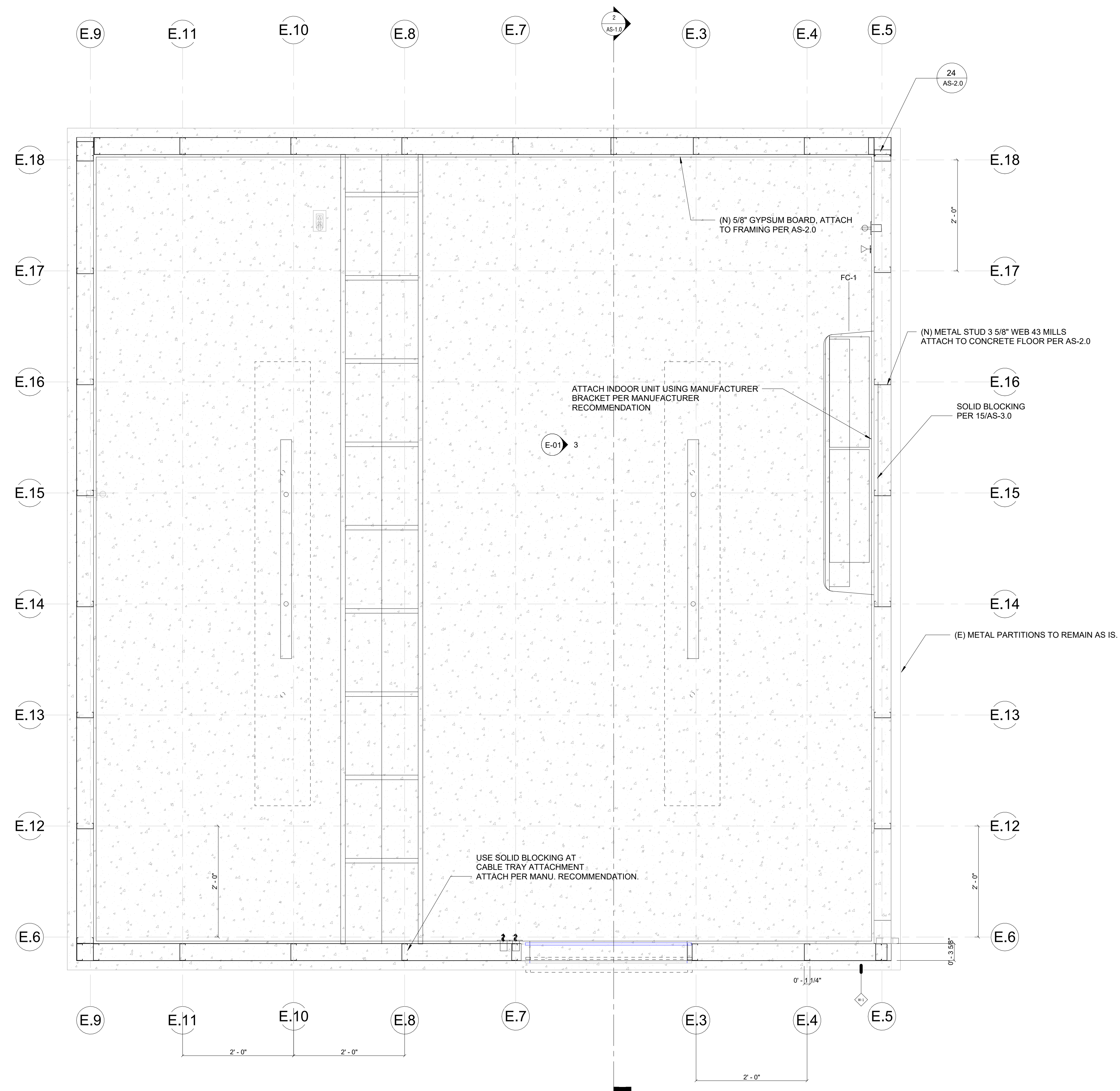
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JURISDICTION HAVING AUTHORITY
COUNTY OF RIVERSIDE
PMB014001/0275

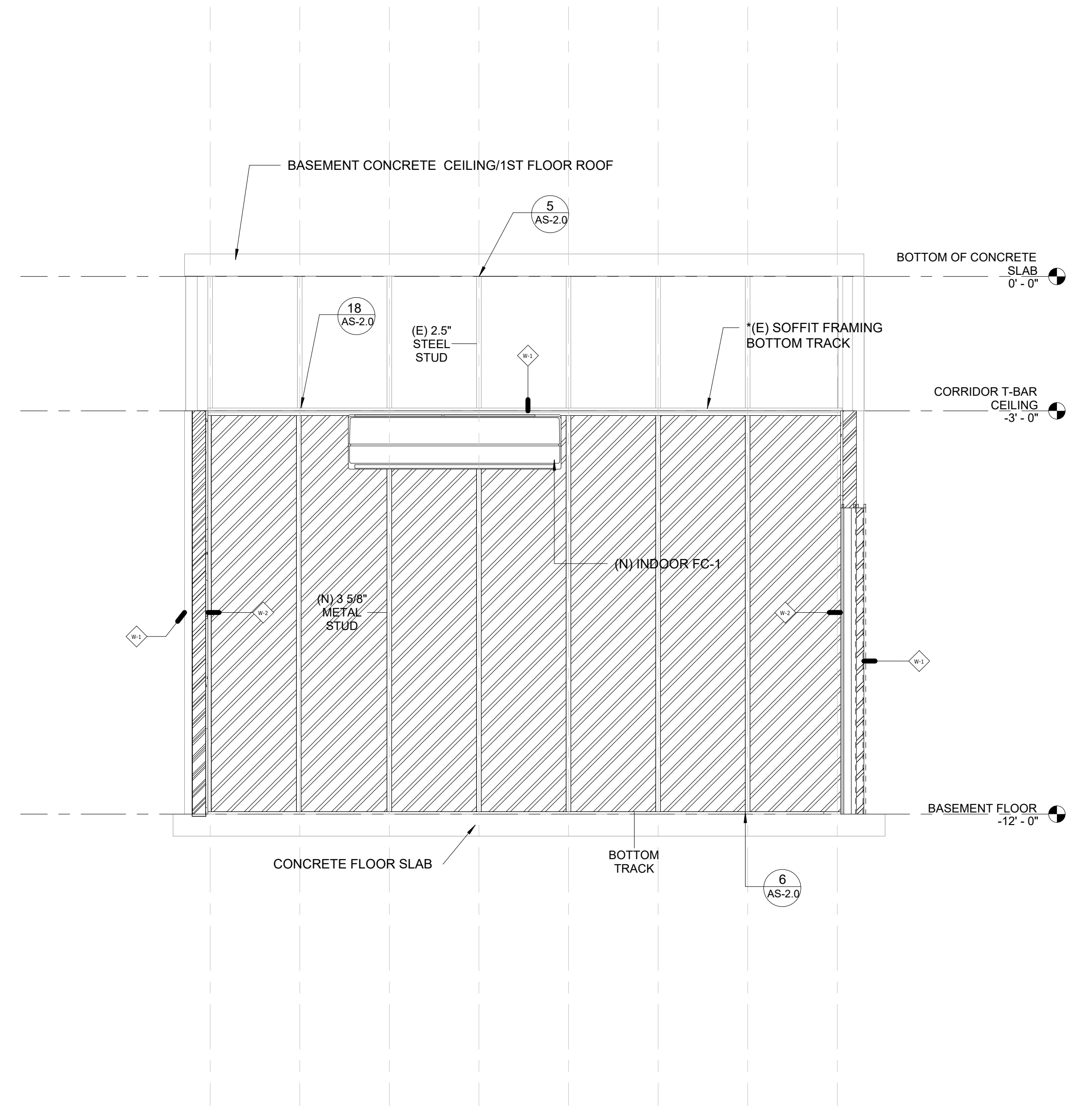
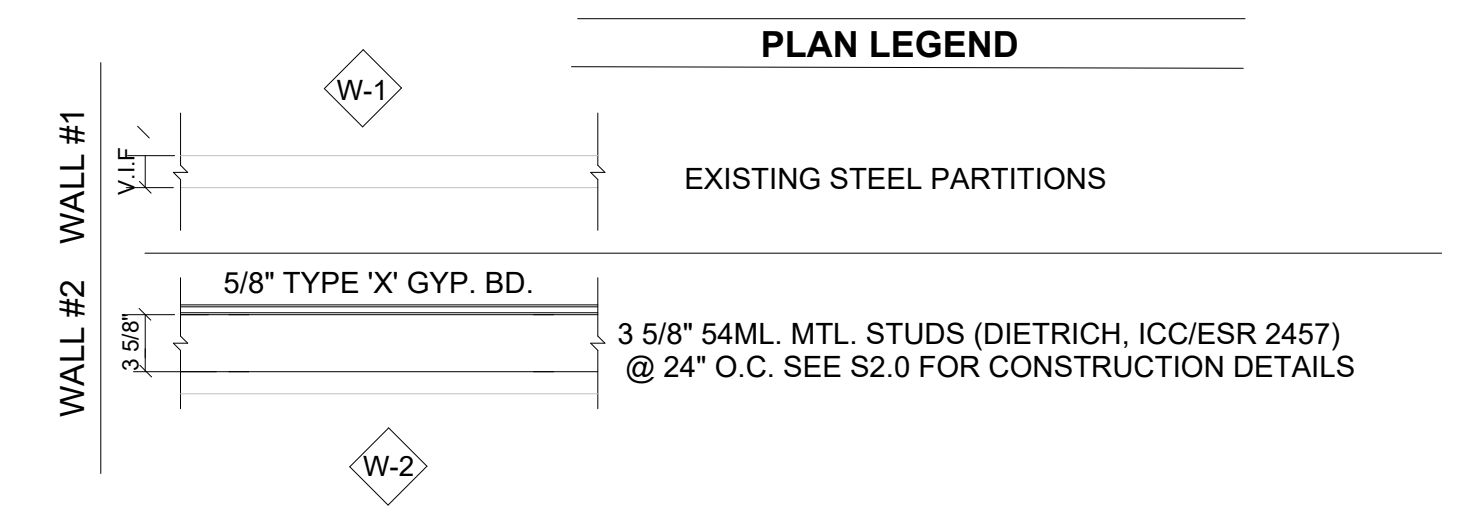
1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
SPECIFICATIONS

SHEET NUMBER
A3.0



1 FRAMING PLAN
1" = 1'-0"



2 Section 2
1/2" = 1'-0"

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PROJECT NAME	LOCATION	OWNER
CAC BASEMENT SERVER ROOM UPGRADE	4080 LEMON ST, RIVERSIDE, CA 92501	TREASURY AND TAX COLLECTION

OWNER

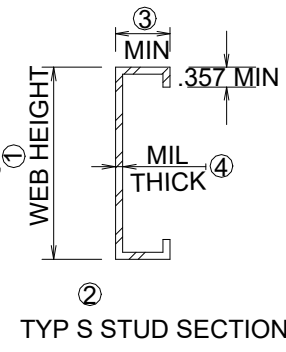
ENGINEER OF RECORD
REVIEWED BY SEAL / STAMP

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JURISDICTION HAVING AUTHORITY COUNTY OF RIVERSIDE PMB#142012075
1ST SUBMITTAL: REVISION#01 REVISION#02
SHEET NAME FRAMING PLAN
SHEET NUMBER AS-1.0

GENERAL NOTES:

- METAL STUDS SHALL COMPLY WITH ICC-ESR-3064P
-METAL STUD EFFECTIVE PROPERTIES ARE:
-F_y=50ksi 54 MIL SECTIONS
-F_y= 33ksi FOR 43 AND 33 MILS SECTIONS.
- 3625137-33 SEE MANUFACTURES CALL-OUT FOR 1 STUD DEPTH, 2 STUD STYLE, 3 FLANGE WIDTH, AND 4 STUD THICKNESS, REFER TO TYP STUD SECTION BELOW



PARTITIONS:

- ALL TRACKS TO BE ONE MIL THICKER THAN STUDS OR JOIST FRAMING TO THEM UNLESS THICKER MILS REQUIRED AS NOTED BELOW OR NOTED OTHERWISE:
A) PERIMETER WALLS = 54 MILS MIN
- ALL STUDS SUPPORTING DBL JOIST TO BE 54 MILS.
- ALL PARTITIONS SUPPORTING ANY OF THE FOLLOWING ITEMS SHALL BE 54 MILS:
A) HUNG CABINETS
B) FREE STANDING CABINETS AND EQUIPMENT TALLER THAN 36" SHALL BE ANCHORED TO WALL.

MAXIMUM SPAN FOR CEILING JOIST INTERIOR STEEL STUD SECTIONS				METAL TRACK DEEP LEG SECTION PROPERTIES				'HDS' HEADER SECTION PROPERTIES			
TYPE	SPAN	33	43	SECTION	SxX 3"	Ixx 3"		SECTION	SxX 3"	Ixx 3"	
400S137	12"	11'-10"	13'-0"	250T200-54	0.228	0.396		HDS 3.58" x 20GA	0.228	0.396	
	16"	11'-0"	12'-0"	362T200-54	0.372	0.879		HDS 3.58" x 18GA	0.372	0.879	
600S137	12"	13'-4"	14'-6"	400T200-54	0.379	1.037		HDS 6" x 20GA	0.379	1.037	
	16"	12'-4"	13'-4"	600T200-54	0.717	2.641		HDS 6" x 18GA	0.717	2.641	

MAXIMUM HEIGHT FOR NON-BEARING INTERIOR STEEL STUDS - 3" SECTION					METAL STUD SECTION PROPERTIES					
TYPE	SPAN	HEIGHT			SECTION	Sxx 3"	Ixx 3"	SECTION	Sxx 3"	Ixx 3"
		33	43	54						
362S137	12"	16'-9"	-	-	250S137-33	0.156	0.203	400S137-33	0.290	0.603
	16"	16'-9"	-	-	250S137-43	0.205	0.261	400S137-43	0.382	0.776
	12"	19'-11"	-	-	362S137-54	0.255	0.338	400S137-54	0.477	0.853
400S137	12"	19'-11"	-	-	362S137-33	0.254	0.479	600S137-33	0.510	1.582
	16"	19'-11"	-	-	362S137-43	0.334	0.616	600S137-43	0.70	2.042
	12"	27'-2"	-	-	362S137-54	0.417	0.756	600S137-54	0.839	2.518
600S137	16"	24'-11"	-	-						

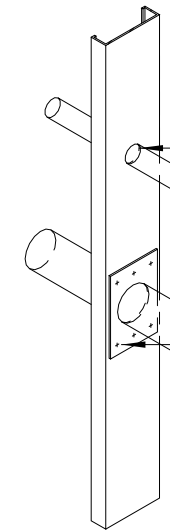
GENERAL STUD NOTES

N.T.S

1

NOTES:

- FLANGES SHALL NOT BE NOTCHED OR CUT.
- PRIOR VERIFICATION IS REQUIRED FOR ANY OPENINGS LOCATED AT CONCENTRATED LOADS AND BEARING ENDS.
- FOR UNPUNCHED MEMBERS OBTAIN APPROVAL PRIOR TO ANY FIELD PENETRATIONS.



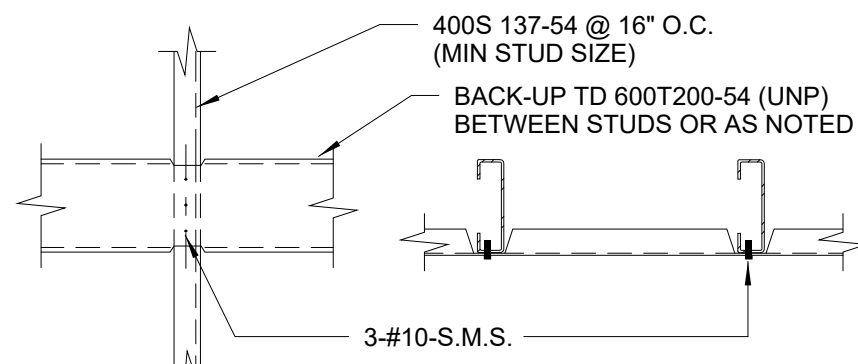
OPENING CENTERED IN WEB

REINFORCEMENT REQUIRED - FOR PENETRATIONS GREATER THAN PUNCH-OUT DEPTH USE 54 MIL. SQ. PLATE SIZE OF STUD WITH 6-#8 S.M.S. AS SHOWN, MAX OPENING 1/2" STUD WIDTH.

STUD WEB PENETRATIONS

N.T.S

19

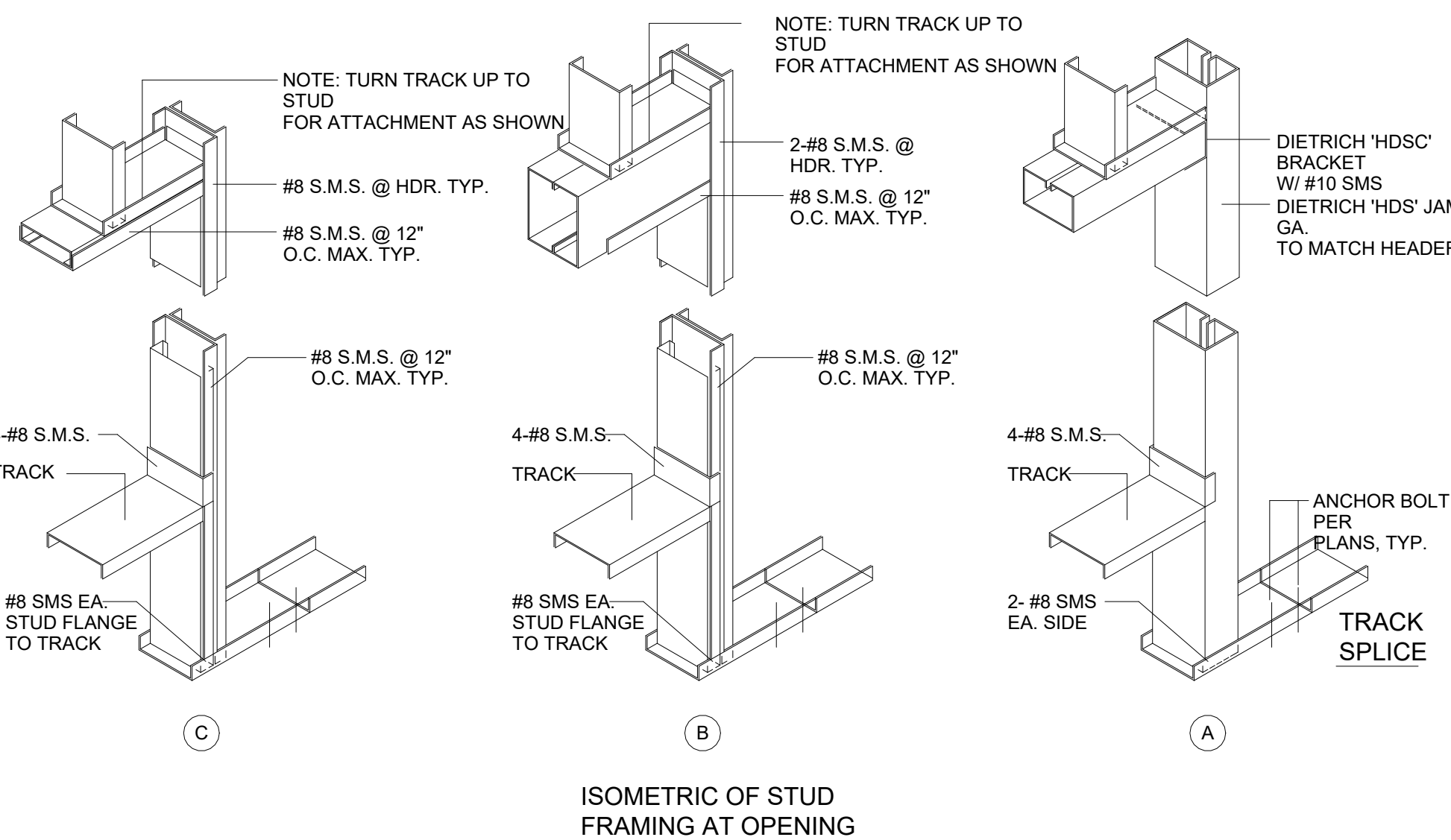


TD 6X54 MIL BACK-UP WITH SCREWS

STUD BACKUP DETAIL

N.T.S

2



ISOMETRIC OF STUD FRAMING AT OPENING

WALL INTERSECTIONS

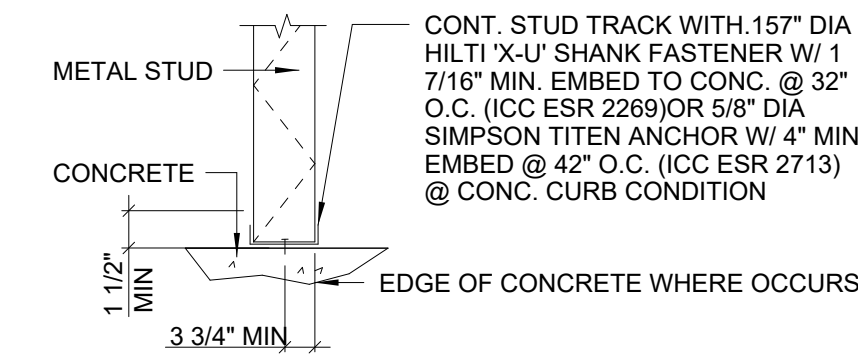
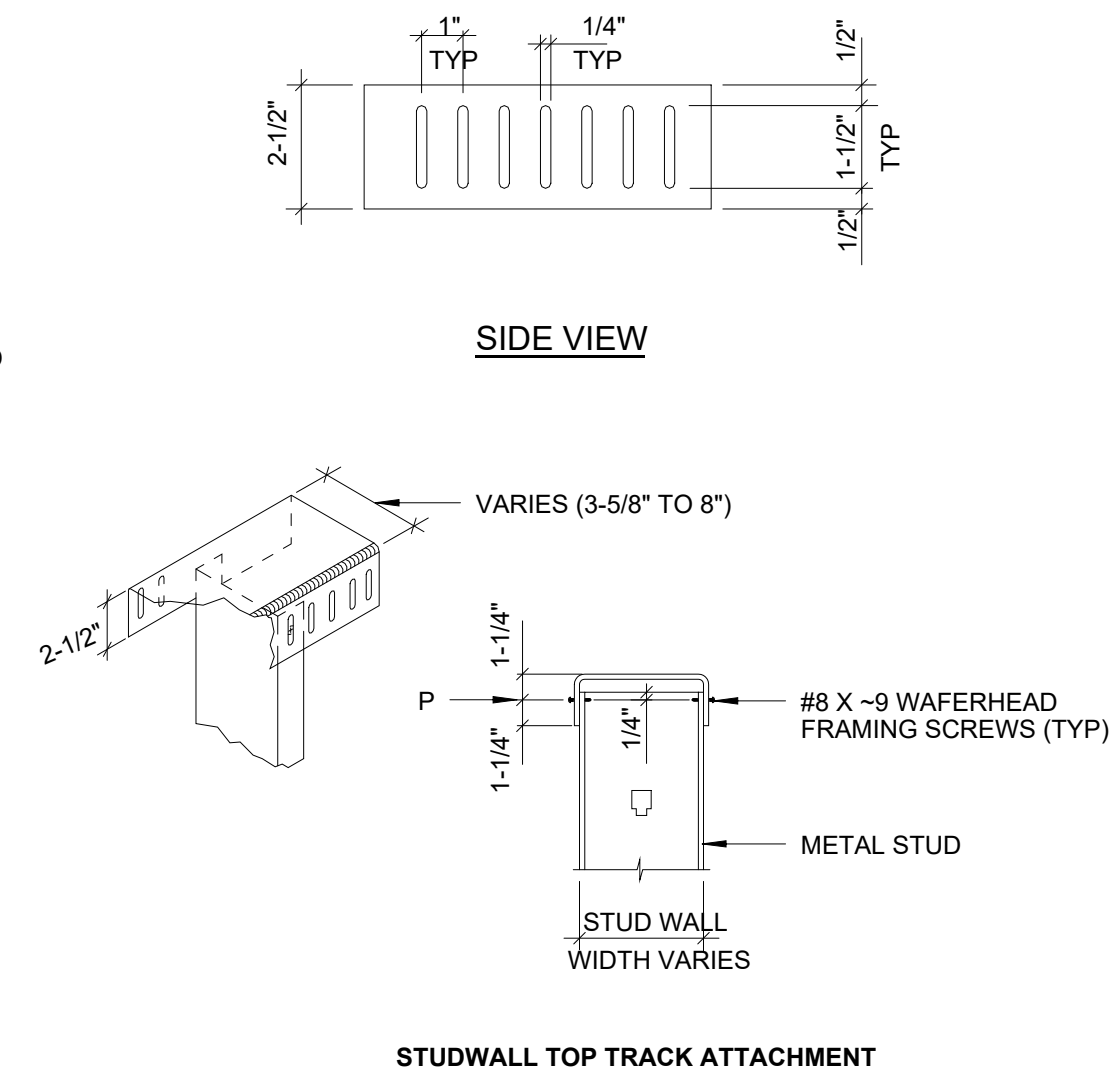
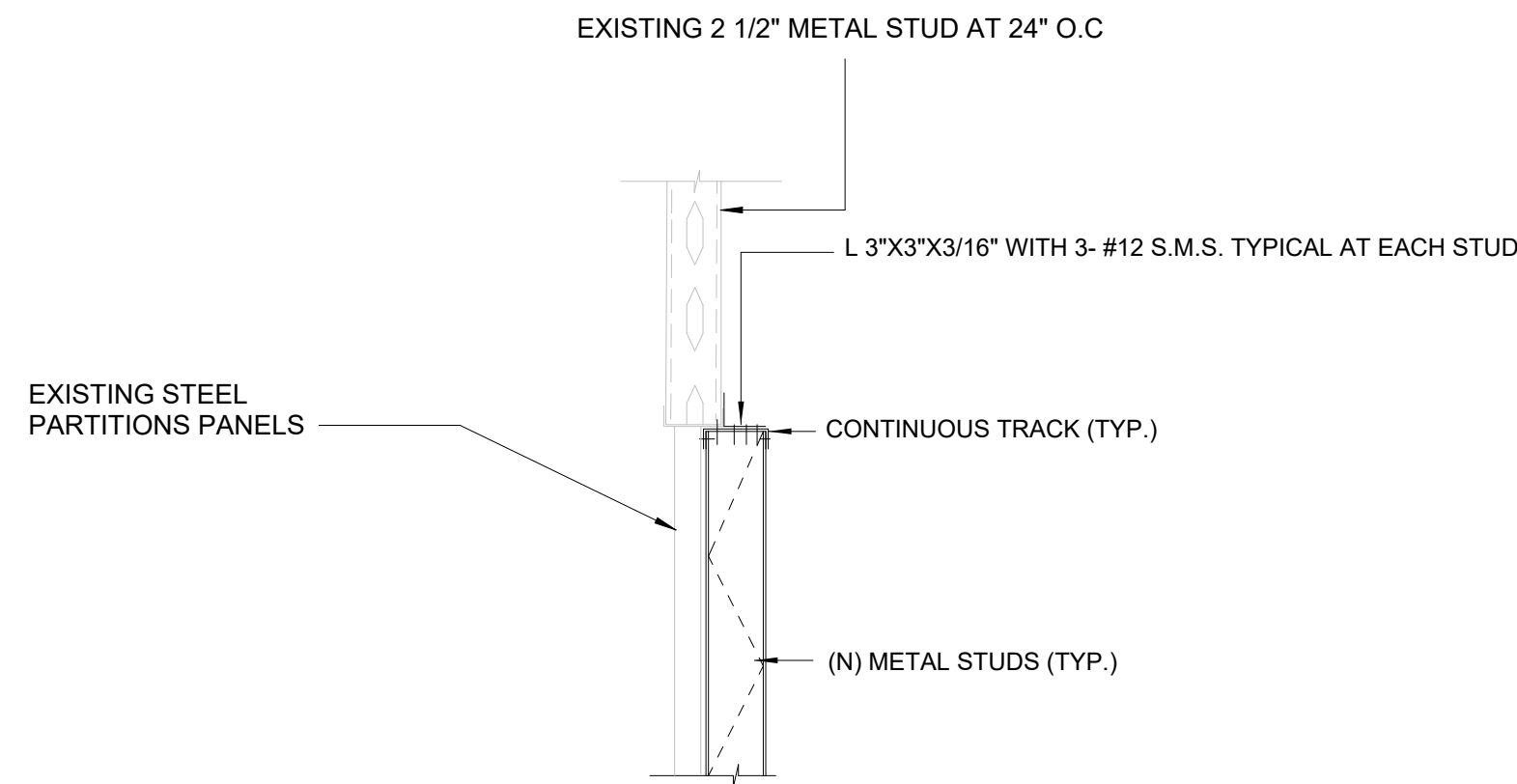
1" = 1'-0"

24

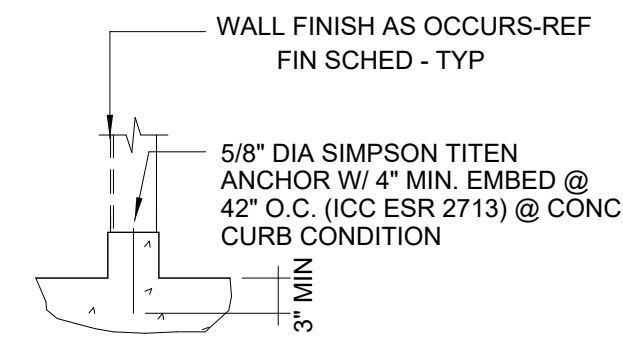
NON-BEARING PARTIAL HEIGHT WALL BRACING DETAIL

N.T.S

18



BASE CONNECTION DETAIL



F - AT CURB IF OCCURS

(E) STEEL STUD - TOP CONNECTION AT

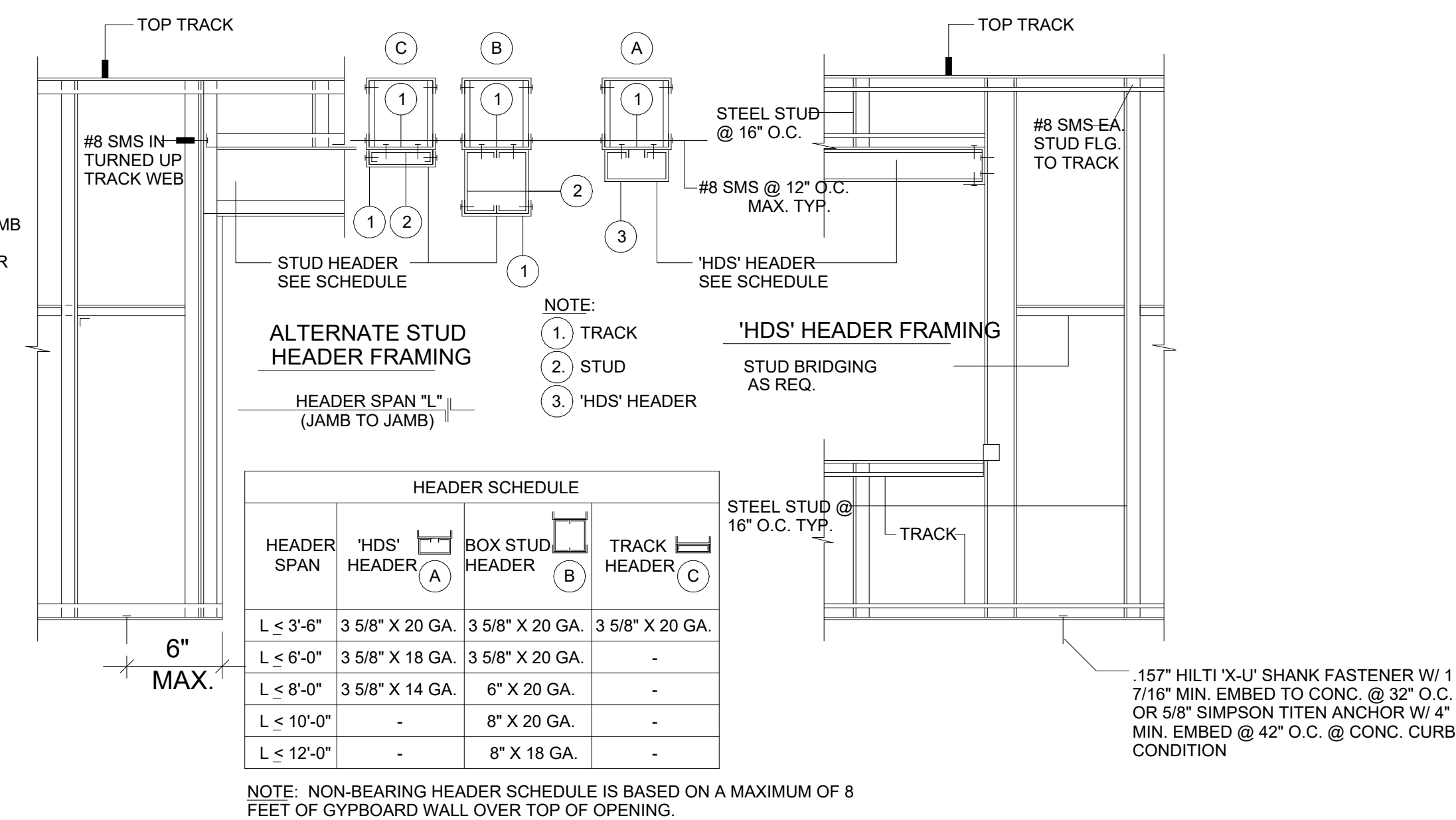
N.T.S

5

(N) STEEL STUD CONNECTION DETAILS

N.T.S

6



TYPICAL INTERIOR METAL STUD DETAILS

1 1/2" = 1'-0"

4

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PROJECT NAME LOCATION OWNER

CAC BASEMENT SERVER ROOM UPGRADE

4080 LEMON ST., RIVERSIDE, CA 92501

TREASURY AND TAX COLLECTION

OWNER

ENGINEER OF RECORD
REVIEWED BY SEAL / STAMP

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JURISDICTION HAVING AUTHORITY
COUNTY OF RIVERSIDE
PMB014001/02015

1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
STRUCTURAL
DETAILS

SHEET NUMBER

AS-2.0

1. WHERE BLOCKING MATERIAL THICKNESS ALLOWS, NOTCH AND BEND TRACK 90 DEGREES FOR CONNECTION.
2. WHERE PROVISIONS ARE PROVIDED FOR TRANSFER OF FLANGE FORCES TO SOLID BLOCKING, BLOCKING NEED NOT BE THE FULL DEPTH OF THE MEMBER.



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PROJECT NAME	LOCATION	OWNER
CAC BASEMENT SERVER ROOM UPGRADE	4080 LEMON ST, RIVERSIDE, CA 92501	TREASURY AND TAX COLLECTION

OWNER

The logo for the County of Riverside Facilities Management is a circular emblem. The outer ring contains the text "COUNTY OF RIVERSIDE" at the top and "FACILITIES MANAGEMENT" at the bottom, both in blue capital letters. The center of the logo features a stylized blue and white graphic that resembles a bar chart or a set of stairs, with three vertical bars of increasing height from left to right.

Professional Engineer Seal for State of California, No. 94270, Exp. 12-31-24, signed by Kevin H. Bateman.

THE SIGNATURE AND SEAL OF A
PROFESSIONAL ENGINEER IS THE LEGAL
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WERE PREPARED UNDER THE
RESPONSIBLE CHARGE (THE DIRECT
CONTROL AND PERSONAL SUPERVISION)
OF THE PROFESSIONAL ENGINEER AND
CERTIFIES THAT THE WORK WAS
PERFORMED COMPETENTLY, MEETS THE
PROFESSIONAL STANDARD OF CARE, AND
ACCEPTABLE STANDARDS OF PRACTICE.

JURISDICTION HAVING AUTHORITY
COUNTY OF RIVERSIDE
FM08140012075

1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
STRUCTURAL
DETAILS

SHEET NUMBER

AS-3.0

A. SECTION INCLUDES

1. COORDINATION OF ROOF MEMBRANE PENETRATIONS WITH AFFECTED TRADES.

2. ESTABLISHMENT OF CRITERIA FOR PENETRATING ROOF MEMBRANES EITHER BEFORE OR AFTER INSTALLATION OF MEMBRANES WHEN PENETRATIONS ARE REQUIRED BY THE WORK OF OTHER SECTIONS.

B. QUALITY ASSURANCE

1. QUALIFICATIONS: USE ONLY SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS.

2. PRE-INSTALLATION CONFERENCE: CONVENE PRE-INSTALLATION CONFERENCE UNDER PROVISIONS OF DIVISION 01, GENERAL REQUIREMENTS.

C. WARRANTY

1. FOR EXISTING WORK, CONTRACTOR SHALL VERIFY IF ANY WARRANTY IS IN EFFECT AND MAINTAIN THAT WARRANTY FOR ALL NEW PENETRATIONS. WRITTEN CERTIFICATION FROM THE ROOFING MANUFACTURER OF THE EXISTING ROOFING INDICATING THAT THE MEMBRANE PENETRATIONS AS INSTALLED AND SEALED MEET THE OR EXCEED THE REQUIREMENTS TO MAINTAIN THE EXISTING ROOFING WARRANTY.

D. MATERIALS

1. MATERIALS SHALL MATCH EXISTING ROOFING SYSTEM PREVIOUSLY INSTALLED.

E. EXAMINATION

1. EXAMINE THE SUBSTRATES AND CONDITIONS UNDER WHICH WORK OF THIS SECTION WILL BE PERFORMED. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS DETRIMENTAL TO TIMELY AND PROPER COMPLETION OF THE WORK HAVE BEEN CORRECTED.

F. PREPARATION

1. PROTECT MEMBRANES, FLASHING AND ADJOINING SURFACES FROM DAMAGE.

G. INSTALLATION

1. GROUP OR CLUSTER PIPE AND CONDUIT IN COMMON PENETRATIONS WHEREVER POSSIBLE TO MINIMIZE THE NUMBER OF PENETRATIONS THROUGH MEMBRANE.

2. PERMITTED CLEARANCES, EXCEPT AS SPECIFICALLY DETAILED:

A. BETWEEN PENETRATIONS FOR SINGLE PIPES: 20 INCHES CLEAR.

B. BETWEEN PENETRATION FOR SINGLE PIPE AND TOE OF CANT STRIP AT CURB OR PARAPET: 18 INCHES CLEAR.

C. BETWEEN TOES OF CANT STRIPS AT CURBS OR PARAPETS: 18 INCHES CLEAR.

3. MAKE PENETRATIONS IN A MANNER CONSISTENT WITH MEMBRANE AND FLASHING INSTALLATIONS AS FOLLOWS:

A. AS DETAILED AND SPECIFIED IS SECTION 07 62 00.

B. WHERE NOT DETAILED OR SPECIFIED MEET RECOMMENDATIONS OF REFERENCED STANDARDS AS FOLLOWS.

1) SMACNA FIGURE 4-13 THRU 4-16.

2) SINGLE PLY TP-11, 12, 16, 17, 18, 20, 20B, 20C, 22.

3) MEET REQUIREMENTS OF SECTION 07 92 00 FOR SEALANTS AND PRIMING.

C. WHERE NOT ADDRESSED BY DETAILS, SPECIFICATIONS OR REFERENCED STANDARDS, REQUEST DIRECTION OF ARCHITECT.

A. SECTION INCLUDES

1. REPAIR OF EXISTING SINGLE PLY TPO ROOFING MEMBRANE INCLUDING FLASHINGS AND ALL OTHER INCIDENTAL AND ACCESSORY ITEMS TO COMPRISE A ROOFING SYSTEM MATCHING EXISTING.

B. SUBMITTALS

1. SHOP DRAWINGS: INDICATE SETTING PLAN FOR TAPERED AND FLAT RIGID INSULATION, JOINT OR TERMINATION DETAIL CONDITIONS, CONDITIONS OF INTERFACE WITH OTHER MATERIALS.

2. PRODUCT DATA: PROVIDE CHARACTERISTICS ON MEMBRANE MATERIALS, FLASHING MATERIALS, INSULATION.

3. SAMPLES THREE INCH IN SIZE ILLUSTRATING INSULATION AND COLOR COATING FOR MEMBRANE.

4. INDICATE SPECIAL PRECAUTIONS REQUIRED FOR SEAMING THE MEMBRANE.

5. CERTIFICATION THAT INSTALLER IS APPROVED AND AUTHORIZED BY MANUFACTURER.

6. FASTENING PATTERN FOR INSULATION.

C. QUALITY ASSURANCE

1. PRE-INSTALLATION CONFERENCE

A. CONVENE TWO WEEKS PRIOR TO COMMENCING WORK OF THIS SECTION.

B. REVIEW INSTALLATION PROCEDURES AND COORDINATION REQUIRED WITH RELATED WORK. REQUIRED ATTENDANCE:

1) OWNER'S REPRESENTATIVE

2) PROJECT INSPECTOR

3) CONTRACTOR

4) ROOFING SUBCONTRACTOR

5) ARCHITECT

D. DELIVERY, STORAGE AND HANDLING

1. DELIVER PRODUCTS IN MANUFACTURERS ORIGINAL CONTAINERS, DRY, UNDAMAGED, SEALS AND LABELS INTACT, WITH CONTROL NUMBER VISIBLE.

2. STORE PRODUCTS IN WEATHER PROTECTED ENVIRONMENT, CLEAR OF GROUND AND MOISTURE. DO NOT EXCEED LOAD BEARING CAPACITY OF STRUCTURE. STORE ROLLED GOODS HORIZONTALLY. STORE LIQUID PRODUCTS AWAY FROM SPARKS, OPEN FLAMES OR EXCESSIVE HEAT OR COLD.

E. PROJECT SITE CONDITIONS

1. DO NOT APPLY ROOFING MEMBRANE DURING INCLEMENT WEATHER, AMBIENT TEMPERATURES BELOW 45 DEGREES F OR ABOVE 95 DEGREES F.

2. DO NOT APPLY ROOFING MEMBRANE TO DAMP OR FROZEN DECK SURFACE.

3. DO NOT EXPOSE MATERIALS VULNERABLE TO WATER OR SUN DAMAGE IN QUANTITIES GREATER THAN CAN BE WEATHERPROOFED DURING SAME DAY.

F. COORDINATION

1. COORDINATE WORK WITH OTHER SECTIONS.

2. COORDINATE WORK WITH INSTALLATION OF ASSOCIATED METAL FLASHINGS, AS WORK OF THIS SECTION PROCEEDS.

G. WARRANTY

1. PROVIDE UNDER PROVISIONS OF DIVISION 01.

2. PROVIDE TWO-YEAR GUARANTEE TO MAINTAIN ROOFING, FLASHINGS AND COUNTERFLASHINGS IN WATERTIGHT CONDITION FROM DATE OF CERTIFIED COMPLETION.

3. CONTRACTOR WARRANTS THAT HE HAS REVIEWED ENTIRE SET OF CONSTRUCTION DOCUMENTS AND ALL DETAILS PERTAINING TO ROOFING AND ARE ACCEPTABLE TO CONTRACTOR AND INSTALLER OF ROOFING PRODUCTS TO PROVIDE CONTINUE GUARANTEES. CONTRACTOR AGREES TO CHANGE OR ADD TO REQUIREMENTS OF CONTRACT DOCUMENTS AS NECESSARY TO COMPLY WITH REQUIREMENTS OF ROOF MANUFACTURER OF ROOFING PRODUCTS AT NO ADDITIONAL COST TO OWNER.

H. MANUFACTURERS

1. PRODUCTS OF FOLLOWING MANUFACTURERS FORM BASIS FOR DESIGN AND QUALITY INTENDED:

A. JOHNS MANVILLE, COMMERCIAL/INDUSTRIAL ROOFING SYSTEMS, DENVER, CO.

2. OR EQUAL AS APPROVED IN ACCORDANCE WITH DIVISION 01, GENERAL REQUIREMENTS FOR SUBSTITUTIONS.

I. ROOFING MEMBRANE -BASIS OF DESIGN

1. JOHNS MANVILLE TPO, THERMOPLASTIC POLYOLEFIN, MEMBRANES REINFORCED WITH A POLYESTER FABRIC. MINIMUM

2. MEMBRANE SHALL EQUAL OR EXCEED MINIMUM PHYSICAL PROPERTIES OF EXISTING ROOFING SYSTEM.

J. ACCESSORIES

1. SOLVENT: PVC SOLVENT WELDING SOLUTION SHALL BE FURNISHED WITH LABEL ATTACHED.

2. SEALING MASTIC: JM SINGLE PLY SEALING MASTIC, ONE-PART, GUN GRADE BUTYL SEALANT, AS APPROVED BY MANUFACTURER.

3. CAULK: JM SINGLE PLY CAULK, ONE-PART ELASTOMERIC SEALANT, AS APPROVED BY MANUFACTURER.

4. ADHESIVE: JM TPO MEMBRANE ADHESIVE, LOW VOC, AS APPROVED BY MANUFACTURER.

5. TPO MEMBRANE CLEANER: JM SINGLE PLY MEMBRANE CLEANER, LOW VOC, AS APPROVED BY MANUFACTURER.

6. FLASHING MEMBRANE: SAME AS MEMBRANE THICKNESS AND AS RECOMMENDED BY MANUFACTURER.

7. EDGE SEALANT: JM TPO EDGE SEALANT, ONE PART SEALING AGENT AS APPROVED BY MANUFACTURER.

8. TERMINATION BAR: EXTRUDED ALUMINUM BAR 3/32 INCH THICK USED TO TERMINATE ADHERED, REINFORCED MEMBRANE BASE FLASHINGS IN CERTAIN CONSTRUCTIONS.

9. FASTENERS: MANUFACTURER'S RECOMMENDED FASTENERS FOR SPECIFIED SYSTEM.

10. WALKWAY: JM TPO WALKPAD 5/32" THICK.

11. PIPE BOOTS: JM TPO PIPE BOOTS, SIZES AS INDICATED ON DRAWINGS.

12. JOINT PATCHES: JM TPO T-JOINT PATCHES, AS APPROVED BY MANUFACTURER.

13. CORNERS: JM TPO UNIVERSAL CORNERS, 6" DIAMETER, FOR USE ON BOTH INSIDE AND OUTSIDE CORNERS.

14. PLATES: JM TPO RHINOPLATE, 3" ROUND GALVALUME PLATE WITH RECESSED CENTER AND RAISED FLAT BONDING SURFACE.

15. COATED METAL: JM TPO-COATED METAL, NONREINFORCED 20 MIL MEMBRANE LAMINATED TO 24 GAUGE GALVANIZED STEEL.

16. RECOVER BOARD: JM INORGANIC POLYISO ROOF RECOVER BOARD, SEPARATOR CGF, CONFORMING TO ASTM C1289, TYPE II, CLASS 2, GRADE 3. SIZE: 4' X 8' X 1/2". MECHANICALLY FASTENED.

17. WOOD NAILERS

A. NAILERS SHALL BE #2 OR BETTER LUMBER. NAILERS SHALL BE PRESSURE TREATED FOR ROT RESISTANCE (WOLMANIZED OR OSMOSE TREATED). CREOSOTE AND ASPHALTIC PRESERVATIVES ARE NOT ACCEPTABLE.

B. WOOD NAILERS SHALL CONFORM TO THE FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-49 RECOMMENDATIONS. [*****FOR ROOFS OVER HIGH-HUMIDITY AREAS: INSTALL VAPOR RETARDER, CK ***VERIFY WHERE VAPOR RETARDER IS REQUIRED*****]

K. EXAMINATION

1. VERIFY EXISTING CONDITIONS.

2. VERIFY CONDITION OF DECK AND IS SUPPORTED AND SECURE.

3. VERIFY ROOFING IS CLEAN AND SMOOTH, FREE OF DEPRESSIONS, WAVES, OR PROJECTIONS, PROPERLY SLOPED TO DRAINS, VALLEYS OR EAVES.

4. CONFIRM DRY DECK BY MOISTURE METER WITH PERCENT MOISTURE MAXIMUM AS ACCEPTABLE TO THE MATERIAL MANUFACTURER.

5. VERIFY CONDITION OF ROOF OPENINGS, CURBS, PIPES, SLEEVES, DUCTS AND VENTS THROUGH ROOF AND ARE SOLIDLY SET.

L. PATCHING AND REPAIRS

1. WHERE WORK EXPOSES DAMAGED SURFACES, REPAIR AND FINISH TO MATCH EXISTING, REMOVE DAMAGED MATERIALS, AND PROVIDE NEW, ACCEPTABLE, MATCHING MATERIALS, TO MAKE CONTINUOUS AREAS AND SURFACES UNIFORM. CONFORM TO MANUFACTURE'S INSTALLATION DETAILS TO CONTINUE WARRANTY PERIOD.

2. NOTWITHSTANDING PROVISIONS OF THIS SECTION, EXISTING ROOFING UNDER GUARANTEE SHALL BE REPAIRED WITH A ROOFING SYSTEM COMPATIBLE WITH SYSTEM UNDER GUARANTEE, AND ACCEPTABLE TO GUARANTOR.

M. INSTALLATION OF INSULATION

1. INSTALL ACCORDING TO INSULATION MANUFACTURER'S RECOMMENDED PROCEDURES.

2. NEATLY CUT TO FIT AROUND PENETRATIONS AND PROJECTIONS.

3. DO NOT INSTALL MORE INSULATION BOARD THAN CAN BE COVERED WITH ROOF MEMBRANE BY THE END OF THE DAY OR THE ONSET OF INCLEMENT WEATHER.

4. MINIMUM 2 LAYERS OF INSULATION OR IN THICKNESS TO MATCH EXISTING, INSTALLED STAGGERED WITH APPROVED FASTENERS AND IN PATTERNS APPROVED BY THE MANUFACTURER TO PROVIDE WARRANTY REQUIRED AND ACHIEVE A R VALUE OF R30.

5. **MECHANICAL ATTACHMENT:**

A. INSULATION BOARD SHALL BE MECHANICALLY FASTENED TO THE DECK WITH APPROVED FASTENERS AND PLATES AT RATE ACCORDING TO THE INSULATION MANUFACTURER'S, FM'S AND MANUFACTURERS RECOMMENDATIONS FOR FASTENING RATES AND PATTERNS. THE QUANTITY AND LOCATIONS OF THE FASTENERS AND PLATES SHALL ALSO CAUSE THE BOARDS TO REST EVENLY ON THE ROOF DECK SO THAT THERE ARE NO SIGNIFICANT AND AVOIDABLE AIR SPACES BETWEEN THE BOARDS AND THE SUBSTRATE. EACH INSULATION BOARD SHALL BE INSTALLED TIGHTLY AGAINST THE ADJACENT BOARDS ON ALL SIDES.

B. FASTENERS ARE TO HAVE MINIMUM PENETRATION INTO STRUCTURAL DECK RECOMMENDED BY THE FASTENER MANUFACTURER AND ROOFING MANUFACTURER.

C. USE FASTENER TOOLS WITH A DEPTH LOCATOR AND TORQUE-LIMITING ATTACHMENT AS RECOMMENDED OR SUPPLIED BY FASTENER MANUFACTURER TO ENSURE PROPER INSTALLATION.

N. MEMBRANE APPLICATION

1. MECHANICALLY APPLY MEMBRANE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND REQUIREMENTS OF THE NRCA -ROOFING AND WATER PROOFING MANUAL -5TH EDITION, THERMOPLASTIC ROOF SPECIFICATIONS.

2. ROLL OUT MEMBRANE, FREE FROM AIR POCKETS, WRINKLES, OR TEARS. FIRMLY PRESS SHEET INTO PLACE WITHOUT STRETCHING.

3. OVERLAP EDGES AND ENDS AND SEAL BY SOLVENT, MINIMUM 6 INCHES. SEAL PERMANENTLY WATERPROOF.

4. SHINGLE JOINTS ON SLOPED SUBSTRATE IN DIRECTION OF DRAINAGE.

5. EXTEND MEMBRANE UP AND ONTO VERTICAL SURFACES AS DETAILED ON DRAWINGS.

6. SEAL MEMBRANE AROUND ROOF PENETRATIONS.

O. FLASHINGS AND ACCESSORIES

1. APPLY FLEXIBLE FLASHINGS TO SEAL MEMBRANE TO ALL VERTICAL AND EDGE ELEMENTS. UTILIZE NCRA ROOFING AND WATERPROOFING MANUAL -FIFTH EDITION, DETAILS TP-1 THROUGH TP-23S AS APPLICABLE FOR VARIOUS FLASHING CONDITIONS ENCOUNTERED, UNLESS DETAILED OTHERWISE ON DRAWINGS.

2. INSTALL PREFABRICATED ROOFING CONTROL AND EXPANSION JOINTS TO ISOLATE ROOF INTO AREAS.

3. COORDINATE INSTALLATION OF ROOF DRAINS AND RELATED FLASHINGS.

4. SEAL FLASHINGS AND FLANGES OF ITEMS PENETRATING MEMBRANE.

5. INSTALL HEAVY DUTY WALKWAY PADS DIRECTLY TO MEMBRANE, CONTINUOUSLY HEAT WELD PERIMETER, 1-1/2 INCHES WIDTH WELDS AND AS RECOMMENDED BY THE MANUFACTURER.

P. FIELD QUALITY CONTROL

1. FIELD INSPECTION AND TESTING WILL BE PERFORMED UNDER PROVISIONS OF DIVISION 01.

2. CORRECT IDENTIFIED DEFECTS OR IRREGULARITIES.

3. REQUIRE SITE ATTENDANCE OF ROOFING AND INSULATION MATERIALS' MANUFACTURERS REPRESENTATIVE DURING INSTALLATION OF WORK.

Q. CLEANING

1. IN AREAS WHERE FINISHED SURFACES ARE SOILED BY WORK OF THIS SECTION, CONSULT MANUFACTURER OF SURFACES FOR CLEANING ADVICE AND CONFORM TO THEIR DOCUMENTED INSTRUCTIONS.

2. REPAIR OR REPLACE DEFACED OR DISFIGURED FINISHES CAUSED BY WORK OF THIS SECTION.

R. PROTECTION

1. PROTECT BUILDING SURFACES AGAINST DAMAGE FROM ROOFING WORK.

2. WHERE TRAFFIC MUST CONTINUE OVER FINISHED ROOF MEMBRANE, PROTECT SURFACES.

SHEET NUMBER

AS-4.0

VIEW KEY

NAME

10'-0"

LEVEL NAME

HEIGHT ABOVE PROJECT 0'-0"

INDICATES NOTE USED TO DESCRIBE ADDITIONAL INFORMATION ABOUT WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL

1

INDICATES DIRECTION OF TRUE NORTH

PLAN OR DETAIL NUMBER

PLAN OR DETAIL NAME

VIEW NAME

1

1/8" = 1'-0"

PLAN OR DETAIL SCALE

INDICATES SIMILAR DETAIL REFERENCED IN MULTIPLE LOCATIONS

DETAIL REFERRED TO BY SECTION CUT

SHEET DETAIL IS LOCATED ON

SIM

1

M101

SIM

4

T101

LINE TYPE AND TAG KEY:

NEW WORK BY THIS CONTRACTOR (WIDE LINE)

NEW

EXISTING TO BE REMOVED (SHORT DASHED PATTERN)

EXISTING TO REMAIN OR WORK BY OTHERS (NARROW LINE)

EXISTING

HALFTONING DOES NOT MODIFY SCOPE.

'TAG'-E TAGS WITH DASH 'E' INDICATES THE REFERENCED OBJECT IS EXISTING

TAG-1 UNDERLINED TEXT INDICATES ADDITIONAL INFORMATION CAN BE FOUND ELSEWHERE IN A SCHEDULE, MATERIAL LIST, OR SYMBOL LIST

INDICATES AN EXISTING SYSTEM'S POINT OF CONNECTION/REMOVAL

APPLICABLE CODES

CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES AND LOCAL AMENDMENTS.

2023

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

2023

CALIFORNIA BUILDING CODE (CBC) PART 2, TITLE 24, CCR

2023

CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24, CCR

2023

CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24, CCR

2023

CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24, CCR

2023

CALIFORNIA ENERGY CODE (CEC) PART 6, TITLE 24, CCR

2023

CALIFORNIA FIRE CODE (CFC) PART 9, TITLE 24, CCR

2023

CALIFORNIA EXISTING BUILDING (CEBC) PART 10, TITLE 24, CCR

2019

CALIFORNIA GREEN BUILDING STANDARD CODE(CALGREEN) PART 11, TITLE 24, CCR

2019

CALIFORNIA REFERENCED STANDARD CODE PART 12, TITLE 24, CCR

2018

NFPA 13 STANDARD FOR INSTALLATION OF SPRINKLER SYSTEM

MECHANICAL ABBREVIATION KEY

ABBR:

DESCRIPTION:

AD

ACCESS DOOR

AFF

ABOVE FINISHED FLOOR

C

COMMON

CO

CLEANOUT

CU

CONDENSING UNIT

CFSD

CONTROL/FIRE/SMOKE DAMPER

DPG (0-2")

DIFFERENTIAL PRESSURE GAUGE (RANGE)

DPS

DIFFERENTIAL PRESSURE SWITCH

EA

EXHAUST/RELIEF AIR

ECFSD

EXISTING CONTROL FIRE SMOKE DAMPER

efd

EXISTING FIRE DAMPER

EFSD

EXISTING FIRE SMOKE DAMPER

EP

ELECTRICAL TO PNEUMATIC VALVE

ESD

EXISTING SMOKE DAMPER

FC

FAN COIL

FD

FIRE DAMPER

FOB

FLAT ON BOTTOM

FOT

FLAT ON TOP

FSD

FIRE/SMOKE DAMPER

MA

MIXED AIR

MV

MIXING VALVE

N.C.

NORMALLY CLOSED

NIC

NOT IN CONTRACT

N.O.

NORMALLY OPEN

OA

OUTSIDE AIR

PS

PRESSURE SWITCH

RA

RETURN AIR

SA

SUPPLY AIR

SCCR

SHORT CIRCUIT CURRENT RATING

SD

SMOKE DAMPER

TAB

TERMINAL AIR BOX

TD

TRANSFER DUCT

TYP

TYPICAL

UC-1

DOOR UNDERCUT BY OTHERS (1" TYPICAL)

UON

UNLESS OTHERWISE NOTES

MECHANICAL SYMBOL LIST

NOT ALL SYMBOLS MAY APPLY.

SYMBOL:

DESCRIPTION:

BD

BOILER BLOW DOWN

BF

BOILER FEED WATER

CA

COMPRESSED AIR

CBR

CHILLED BEAM RETURN

CBS

CHILLED BEAM SUPPLY

CR

CONDENSER WATER RETURN

CS

CONDENSER WATER SUPPLY

CS15

CLEAN STEAM -NUMBER INDICATES PRESSURE IN PSIG.

CWR

CHILLED WATER RETURN

CWS

CHILLED WATER SUPPLY

DPP

DRAIN

G

NATURAL GAS

GV

GAS REGULATOR VENT

GWR

GLYCOL WATER RETURN

GWS

GLYCOL WATER SUPPLY

HCR

HEATING/CHILLED WATER RETURN

HCS

HEATING/CHILLED WATER SUPPLY

HG

REFRIGERANT HOT GAS

HPC

HIGH PRESSURE CONDENSATE

HPS

HIGH PRESSURE STEAM

HWL

HEATING WATER RETURN

HWS

HEATING WATER SUPPLY

LCS

LOW PRESSURE CLEAN STEAM

LIQ

REFRIGERANT LIQUID

LPC

LOW PRESSURE CONDENSATE

LPS

LOW PRESSURE STEAM

LWR

LOOP WATER RETURN

LWS

LOOP WATER SUPPLY

MV

MEDICAL VACUUM

OR

OIL RETURN

OS

OIL SUPPLY

PC

PUMPED CONDENSATE

PD

PUMPED DISCHARGE

RGR

RADIANT COOLING RETURN

RCS

RADIANT COOLING SUPPLY

RWR

REHEAT WATER RETURN

RWS

REHEAT WATER SUPPLY

SUC

REFRIGERANT SUCTION

SV

SAFETY RELIEF VENT

VAC

LAB VACUUM

PIPE CAP

PIPE DOWN

PIPE UP OR UP/DOWN

PITCH PIPE IN DIRECTION

DIRECTION OF FLOW IN PIPE

DIELECTRIC CONNECTION

UNION/FLANGE

SHUTOFF VALVE NORMALLY OPEN

SHUTOFF VALVE NORMALLY CLOSED

THROTTLING VALVE

BALANCING VALVE (NUMBER INDICATES GPM)

AUTOMATIC BALANCING VALVE

MIXING VALVE

CONTROL VALVE (THREE-WAY)

CONTROL VALVE (TWO-WAY)

SOLENOID VALVE

CHECK VALVE

BACKFLOW PREVENTER

SAFETY/RELIEF VALVE

PRESSURE REDUCING VALVE (LIQUID/GAS)

PRESSURE REDUCING VALVE (STEAM)

TRIPLE DUTY VALVE (ANGLE TYPE)

TRIPLE DUTY VALVE (IN-LINE TYPE)

PUMP

VACUUM BREAKER

"WYE" -STRAINER

"WYE" -STRAINER W/SHUTOFF VALVE AND HOSE CONNECTION WITH CAP

BASKET STRAINER

FLEXIBLE CONNECTION

PRESSURE/TEMPERATURE TEST PLUG

REDUCER -REFERENCE SPECIFICATION FOR CONCENTRIC/ECCENTRIC AND FOT/FOB

SUCTION DIFFUSER WITH SUPPORT FOOT

AUTOMATIC AIR VENT

MANUAL AIR VENT

DRAIN VALVE WITH HOSE CONNECTION AND CAP

PRESSURE SENSOR (FURNISHED WITH BALL VALVE)

PRESSURE GAUGE (FURNISHED WITH BALL VALVE)

DIFFERENTIAL PRESSURE SENSOR

MECHANICAL SYMBOL LIST

NOT ALL SYMBOLS MAY APPLY.

SYMBOL:

DESCRIPTION:

T

INVERTED BUCKET STEAM TRAP (REFER TO SCHEDULE)

ALIGNMENT GUIDE

X

PIPE ANCHOR

E-J-H

(#,#)

EXPANSION JOINT
#,# IS THE EXPANSION TRAVEL INCHES

M

METER

DIRECTION OF AIR FLOW

FLEXIBLE DUCT

MANUAL VOLUME DAMPER

R

RISE IN DIRECTION OF AIR FLOW

D

DROP IN DIRECTION OF AIR FLOW

DUCT CAP

DUCT DOWN

DUCT UP

X

SUPPLY/OUTSIDE AIR DUCT SECTION

X

RETURN AIR DUCT SECTION

X

EXHAUST/RELIEF AIR DUCT SECTION

X

4-WAY DIFFUSER WITH BLANKOFF IN ONE DIRECTION

SD-1

6/115

AIR TERMINAL PROPERTYSSYMBOL
NECK SIZE/CFM

###

TERMINAL AIR BOX (REFER TO SCHEDULE)

###

TERMINAL AIR BOX w/REHEAT COIL (REFER TO SCHEDULE)

FAN POWERED TERMINAL AIR BOX w/REHEAT COIL (REFER TO SCHEDULE)

H

V

V

V

HUMIDIFIER

X

X

OPPOSED BLADE DAMPER (REFER TO SCHEDULE)

X

X

PARALLEL BLADE DAMPER (REFER TO SCHEDULE)

DIFFERENTIAL PRESSURE SENSOR

H

HUMIDISTAT SENSOR

H

HUMIDISTAT / SENSOR

C

CARBON MONOXIDE SENSOR

C

CARBON DIOXIDE SENSOR

O

OCCUPANCY SENSOR

P

PRESSURE SENSOR/MONITOR

P

PRESSURE SENSOR (DUCT MOUNTED)

T

THERMOSTAT/SENSOR

T

TEMPERATURE SENSOR

T

THERMOSTAT/SENSOR WITH HEAVY DUTY ENCLOSURE

T

TEMPERATURE SENSOR WITH WELL

T

THERMOMETER WITH WELL (DIAL TYPE)

T

THERMOMETER WITH WELL (FILLED TYPE)

XX-Y

AIRFLOW MEASUREMENT SYMBOL
XX-AHU SYMBOL
Y-SEQUENTIAL NUMBER

FIRE / SMOKE BARRIER DESIGNATIONS

THE LINE TYPES SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY RATINGS WITH THE LATEST SET OF ARCHITECTURAL PLANS AND FURNISH ALL MATERIALS REQUIRED TO COMPLY WITH THOSE RATINGS WHETHER SHOWN OR NOT.

FIRE PARTITION

1 HOUR FIRE BARRIER

2 HOUR FIRE BARRIER OR WALL

ADA STANDARDS FOR ACCESSIBLE DESIGN

20" MAX.

48" MAX.

INSTALL ABOVE COUNTER DEVICE AT 44" ABOVE FINISHED FLOOR.

20"-25" MAX.

44" MAX.

INSTALL ABOVE COUNTER DEVICE AT 40" ABOVE FINISHED FLOOR.

15" MIN.

48" MAX.

INSTALL DEVICE AT 18" ABOVE FINISHED FLOOR.

10" MAX.

48" MAX.

INSTALL DEVICE AT 44" ABOVE FINISHED FLOOR.

10"-24" MAX.

46" MAX.

INSTALL DEVICE AT 42" ABOVE FINISHED FLOOR.

ADA GUIDELINES -FRONT ACCESS

ADA GUIDELINES -SIDE ACCESS

SPLIT SYSTEM UNIT SCHEDULE

TAG NAME

AREA SERVED

CFM

VOLTAGE

PHASE

COOLING MBH

MAX. DIMENSIONS

DEPTH

WIDTH

HEIGHT

WEIGHT

MODEL

MANUFACTURER

FC-1

ROOM 118
TTC SERVER ROOM

843

208

1

36

10.83"

44.88"

14.57"

43.65 LBS

40MAHBQ36XA3

CARRIER

OUTDOOR UNIT

TAG NAME

SEER

MCA

MOC

VOLTAGE

PHASES

OUTSIDE UNIT MAX. DIMENSIONS

HEIGHT

DEPTH

WIDTH

WEIGHT

MODEL

MANUFACTURER

CU-1

20.8

28

35

208

1

34.84"

16.14"

37.24"

150.13 LBS

38MARBQ36AA3
COOLING ONLY UNIT.

CARRIER

NOTES:

1. CONTRACTOR TO DISABLE HEATING MODE.

2. UNIT OT BE FACTORY FURNISHED WITH CONDENSATE PUMP & PRE-WIRED OVERFLOW SWITCH

TAB POST-CONSTRUCTION NOTES:

1. AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE, TESTING, ADJUSTING (TAB) AND BALANCING CONTRACTOR SHALL REBALANCE FAN COIL UNIT AS REQUIRED TO ACHIEVE THE NEW AIRFLOW VALUES SHOWN ON THE CONSTRUCTION DRAWINGS.

2. THE FINAL POST CONSTRUCTION REPORT SHALL INCLUDE ALL ITEMS REQUIRED IN THESPECIFICATIONS.

PIPING GENERAL NOTES:

1. PIPE DRAIN LINES FROM EQUIPMENT TO NEAREST FLOOR DRAIN.

2. INSTALL ALL REFRIGERANT LIQUID AND SUCTION PIPING SIZED PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, MEDICAL GAS, VENTILATION, PIPING AND TEMPERATURE CONTROL.

1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.

2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.

3. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT ORDERS.

4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS.

5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.

6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.

7. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AND OTHER MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.

8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH.

9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE GC FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE GC OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.

10. SEAL ALLWALL, AND ROOFPENETRATIONS AIRTIGHT WHERE CONDUITS, PIPING, AND DUCTS PENETRATE.

11. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN ROOMS.

12. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.

13. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES.

14. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS.

15. PROVIDE LEVELING EQUIPMENT PAD FOR ALL ROOF MOUNTED EQUIPMENT. PAD SHALL EXTEND MINIMUM 6" BEYOND ALL SIDES OF EQUIPMENT.

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PROJECT NAME

LOCATION

OWNER

CAC BASEMENT SERVER ROOM UPGRADE

4080 LEMON ST., RIVERSIDE, CA 92501

TREASURY AND TAX COLLECTION

OWNER

COUNTY OF RIVERSIDE

UTILITIES

MANAGEMENT

ENGINEER OF RECORD

REVIEWED BY SEAL / STAMP

REGISTERED PROFESSIONAL ENGINEER

WACD / SAL EX

No. M39074

Exp. 09-30-24

MECHANICAL

STATE OF CALIFORNIA

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COUNTY OF RIVERSIDE

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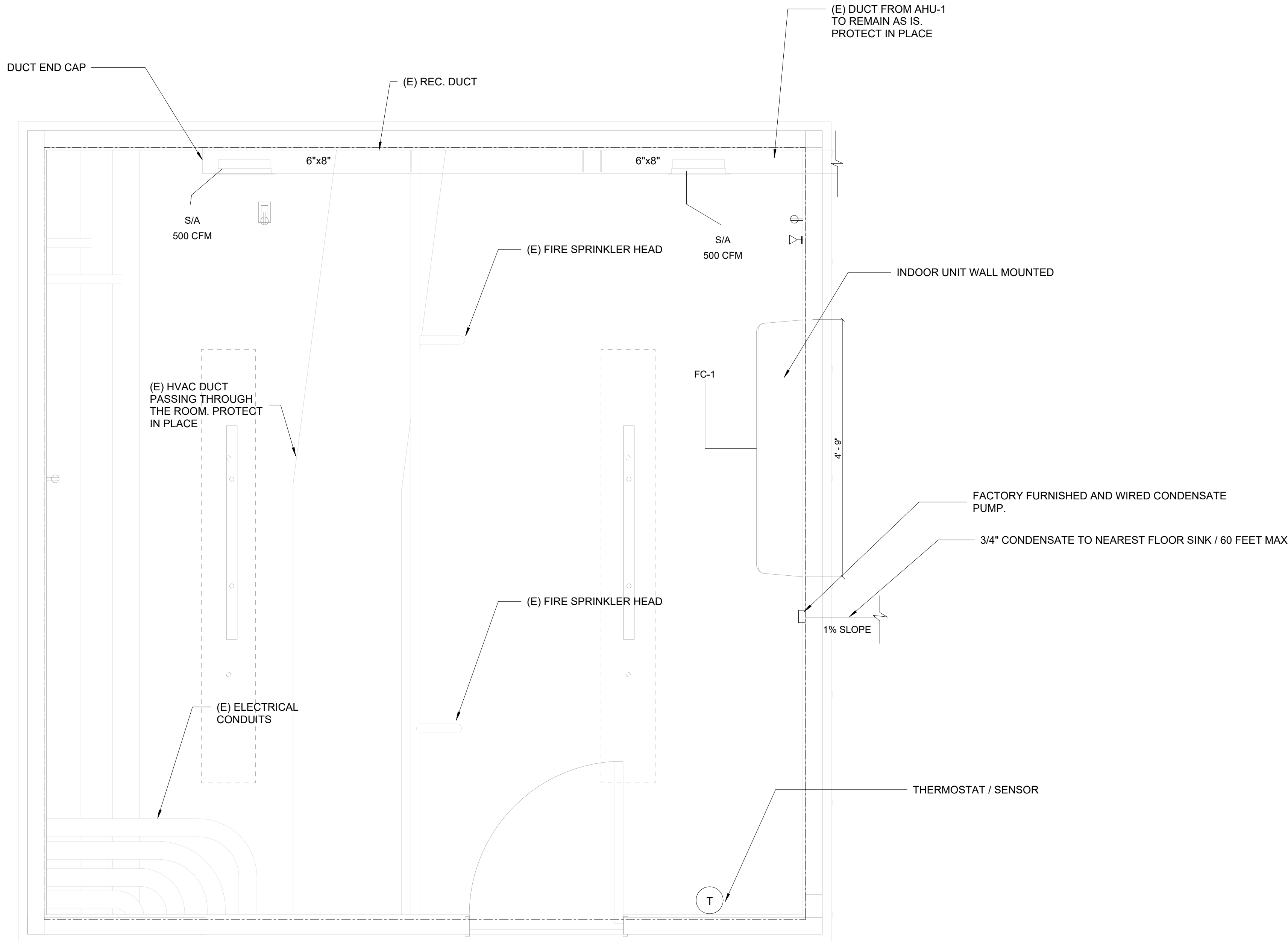
REVISION#02

SHEET NAME

MECHANICAL NOTES & EQUIPMENT SCHEDULES

SHEET NUMBER

M000



1 MECHANICAL FLOOR PLAN
3/4" = 1'-0"

FLOOR PLAN GENERAL NOTES:

- 1.DO NOT EXCEED MANUFACTURER'S LISTED MAXIMUM PIPING LENGTH REQUIREMENTS. COORDINATE SELECTION WITH ACTUAL LENGTHS FROM SHOP DRAWINGS.
- 2.PROVIDE W/ FACTORY PROVIDED FIELD INSTALLED CONDENSATE PUMP.
- 3.INDOOR UNIT POWERED FROM THE OUTDOOR UNIT. REFER TO ELECTRICAL.
- 4.PROVIDE INTEGRAL OVERFLOW ALARM TO SHUT OFF THE EVAPORATOR IN CASE OF BLOCKAGE OR FAILURE.

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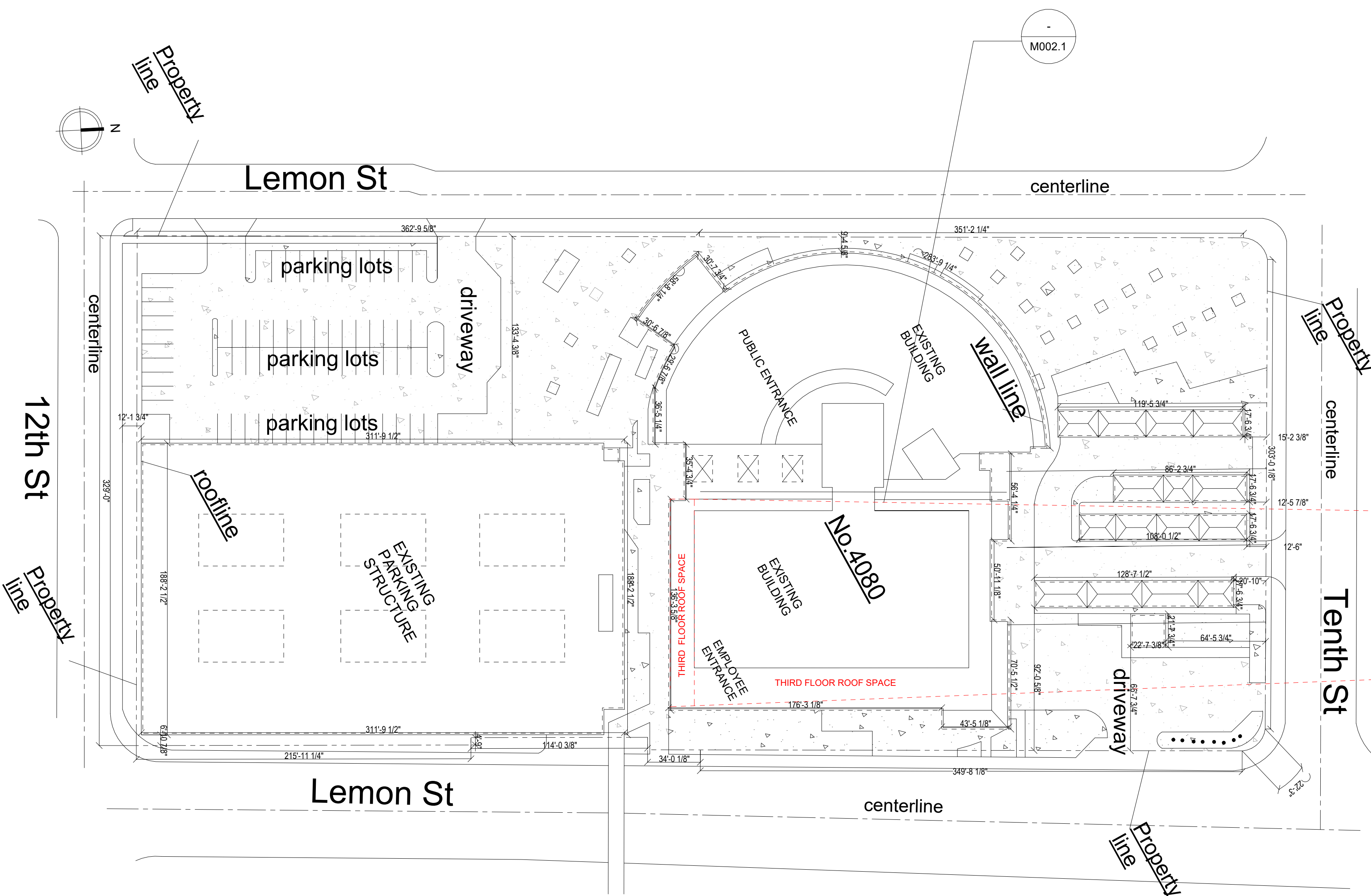
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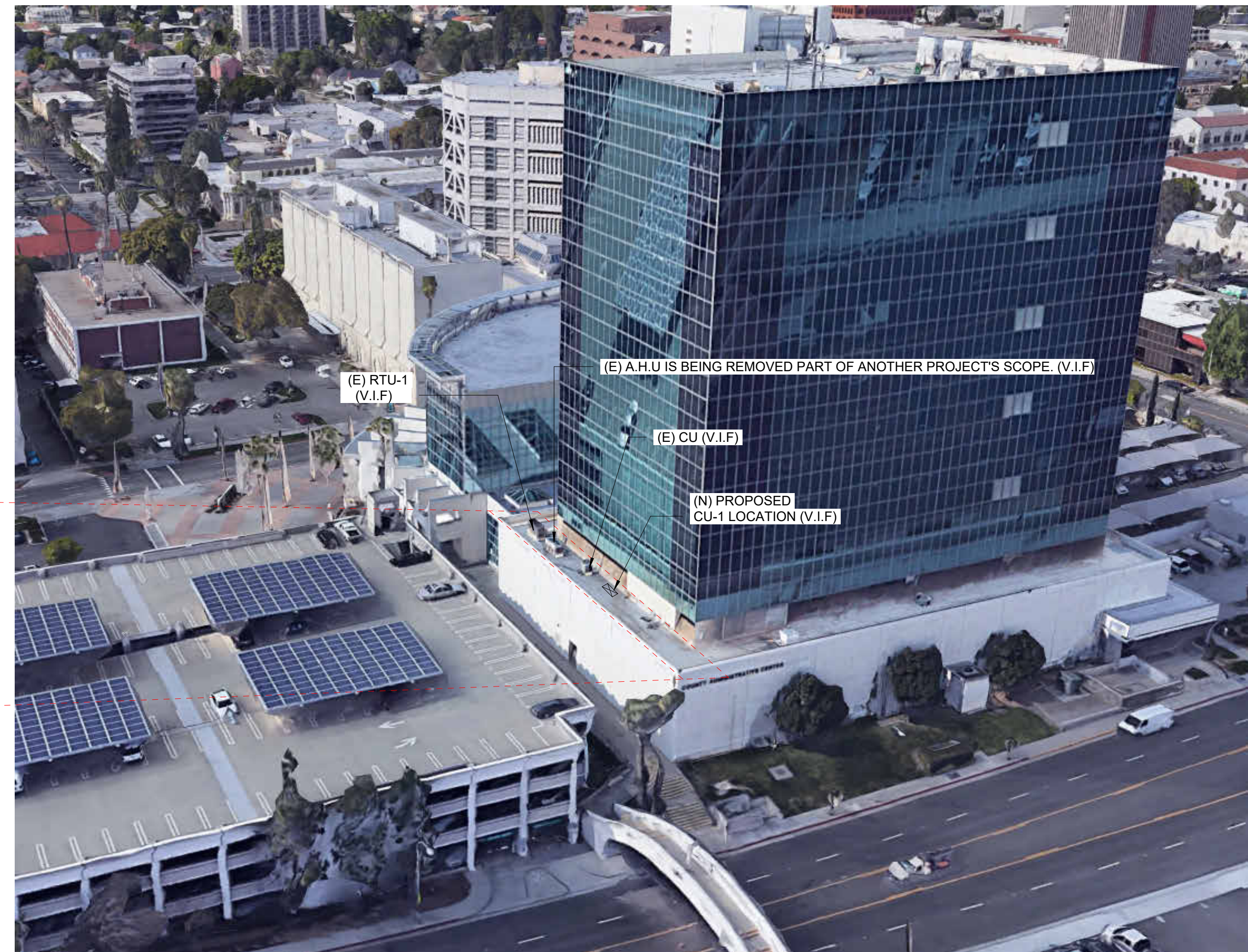
MECHANICAL FLOOR
PLAN

SHEET NUMBER

M001



1 SITE PLAN LAYOUT SHOWING 3RD FLOOR ROOF SPACE
N.T.S



2 SATELLITE 3D IMAGE SHOWING ROOF SPACE
N.T.S

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OWNER

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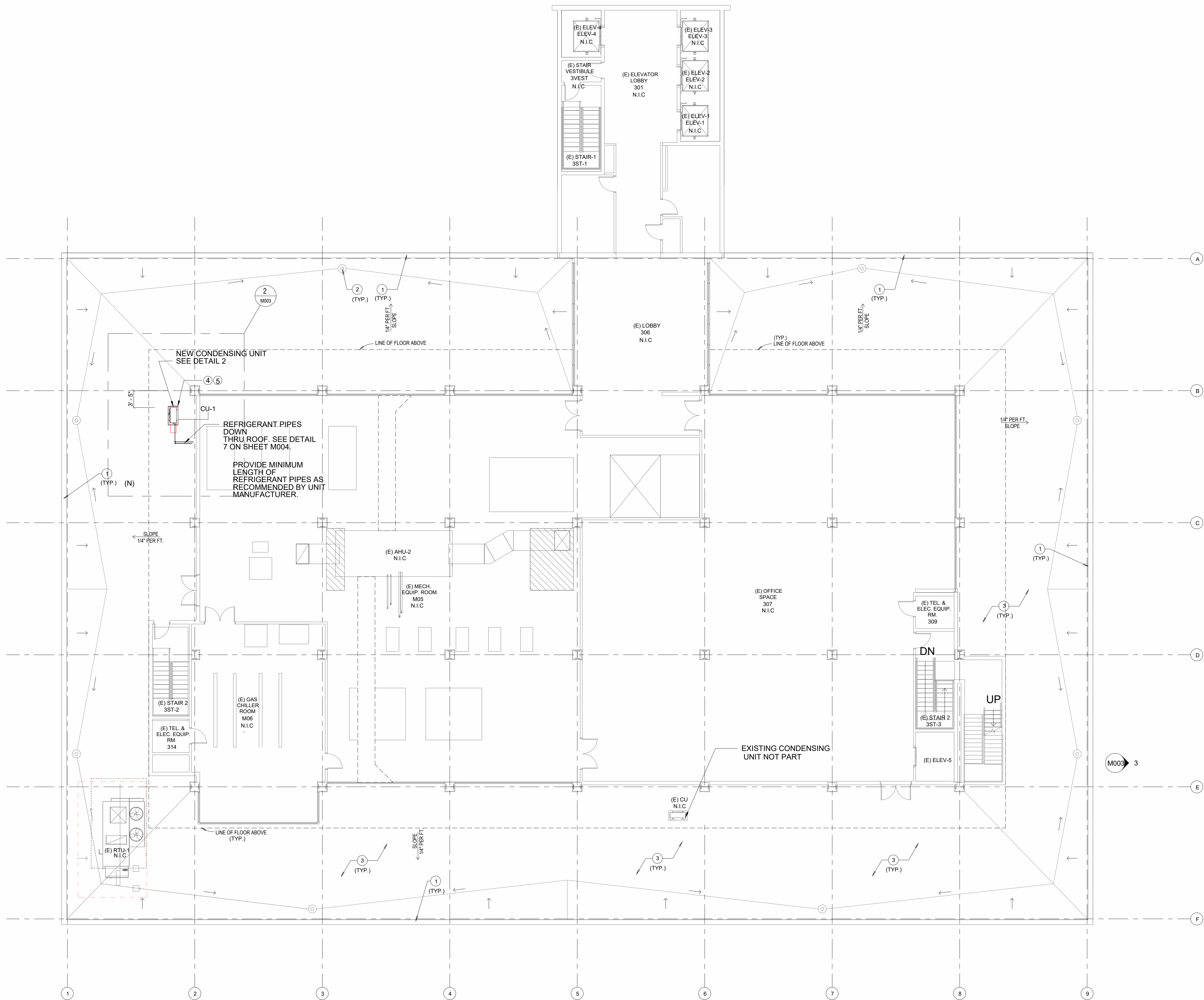
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SHEET NAME
MECHANICAL SITE PLAN

SHEET NUMBER
M002



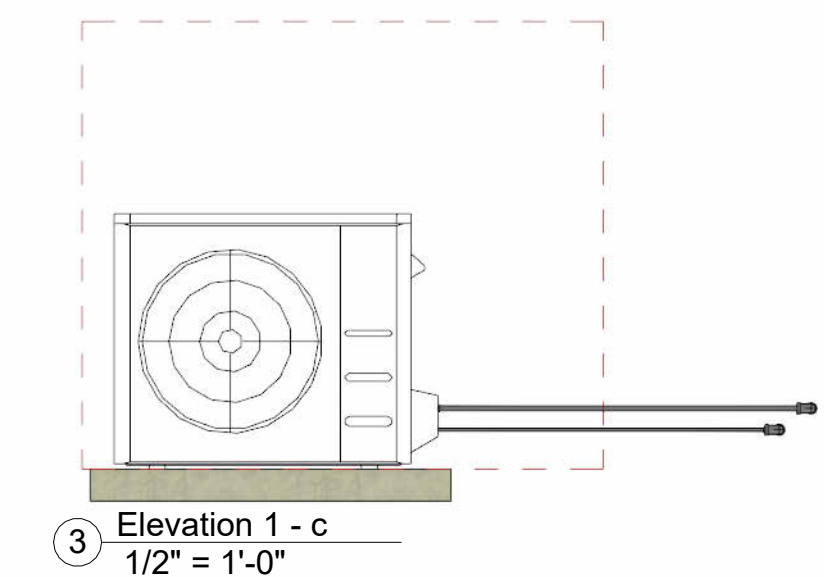
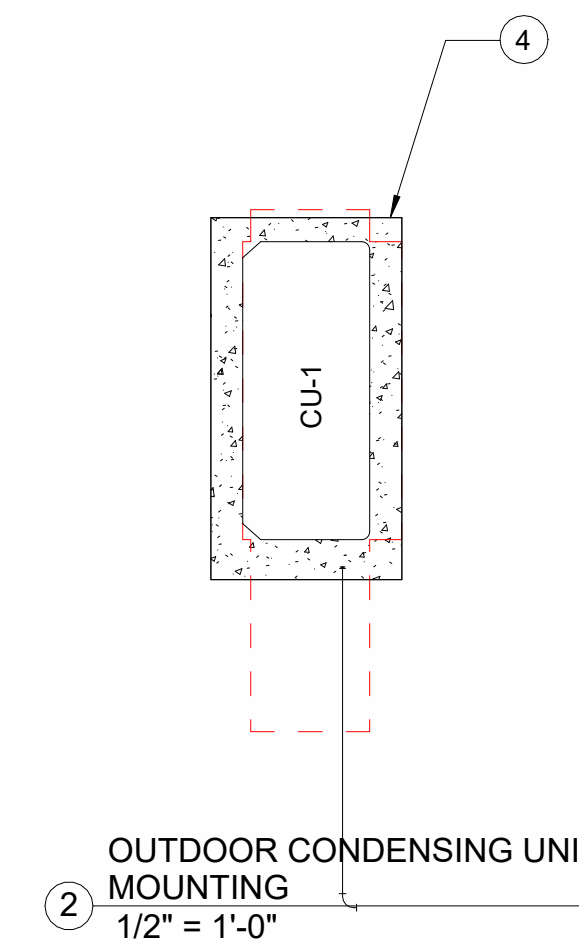
1 3RD FLOOR - ROOF LEVEL
1" = 10'-0"

ROOF PLAN GENERAL NOTES

- PATCH AND REPAIR EXISTING LIGHT WEIGHT CONCRETE FILL AND ROOFING AS REQUIRED PER INSTALLATION OF NEW MECHANICAL EQUIPMENT. PROTECT IN PLACE ALL EXISTING CONSTRUCTION TO REMAIN. SEE MECHANICAL DRAWINGS.
- TAPERED INSULATION SHALL PROVIDE A MINIMUM OF 1/4-INCH PER FOOT OF SLOPE TO ROOF DRAINS, UNLESS NOTED OTHERWISE.
- ALL ROOF CURBS TO BE A MINIMUM OF 8 INCHES ABOVE ROOFING LEVELS. PROVIDE TAPERED INSULATION ROOF SADDLES AT ROOF CURBS TO PROVIDE DRAINAGE AROUND CURB.
- SEE STRUCTURAL DRAWINGS FOR FRAMING AROUND ROOF / DECK PENETRATIONS.
- COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR PENETRATIONS NOT SHOWN ON THIS DRAWING.
- FLASH DRAINS, CURBS, VENTS AND STACKS PER MANUFACTURER'S RECOMMENDATIONS IF DETAIL NOT SHOWN ON DRAWINGS.

SHEET NOTES

- | | |
|---|---|
| 1 | (E) 42" HIGH CONCRETE PARAPET WALL |
| 2 | (E) ROOF DRAIN, TYP. |
| 3 | (E) ROOFING TO REMAIN. PATCH AND REPAIR AS REQUIRED. SEE ROOF PLAN GENERAL NOTE A. MAINTAIN OWNER'S EXISTING WARRANTY |
| 4 | (N) CONCRETE PAD FOR (N) CU-1, REFER TO MECH. & STRUCT. DWGS. FOR ADDITIONAL INFORMATION |
| 5 | PATCH AND REPAIR ROOF/WATERPROOFING MEMBRANE TO MATCH EXISTING. MAINTAIN OWNER'S EXISTING WARRANTY |



* SEE SHEET MECHANICAL AND STRUCTURAL SHEETS FOR MOUNTING DETAILS

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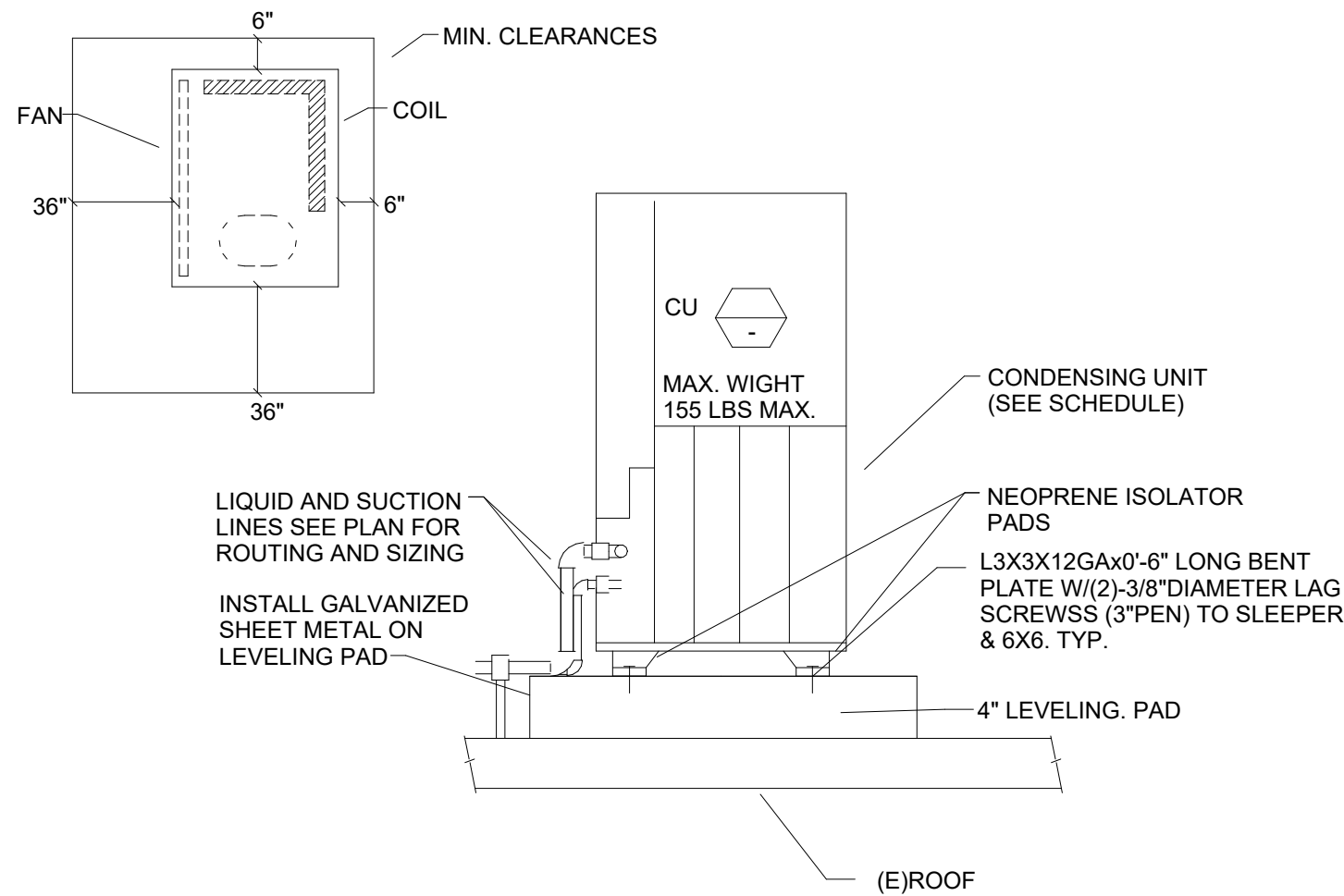
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SHEET NAME

MECHANICAL ROOF
PLAN

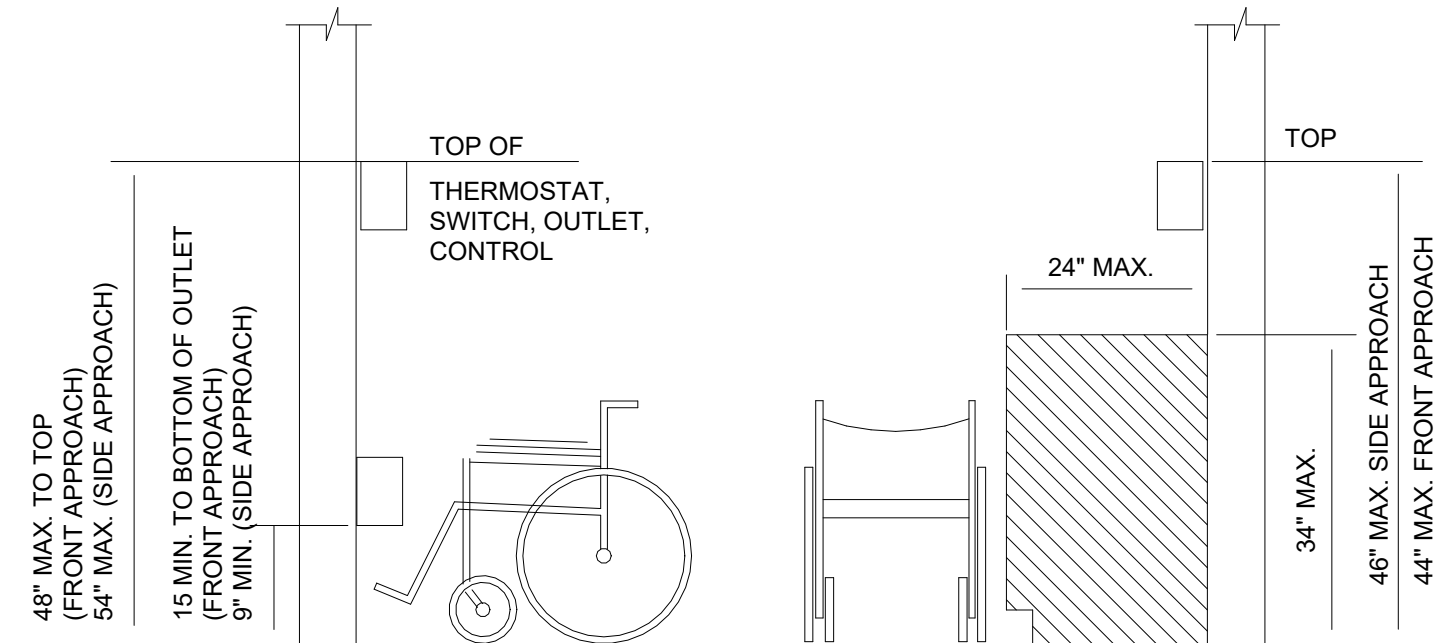
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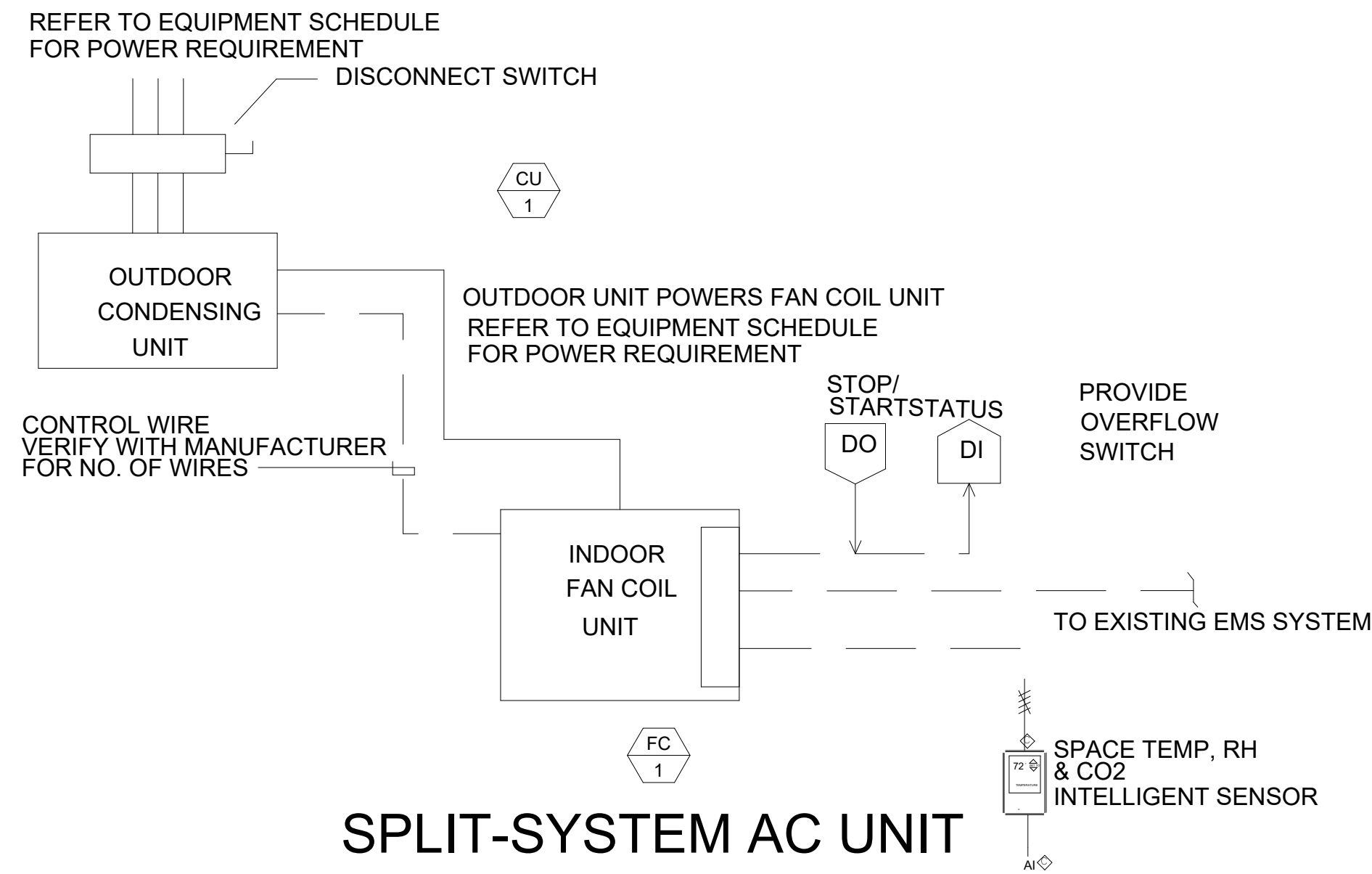
1 CONDENSING UNIT MOUNTING DETAIL

NO SCALE



2 CONTROL DEVICE MOUNTING DETAIL

NO SCALE



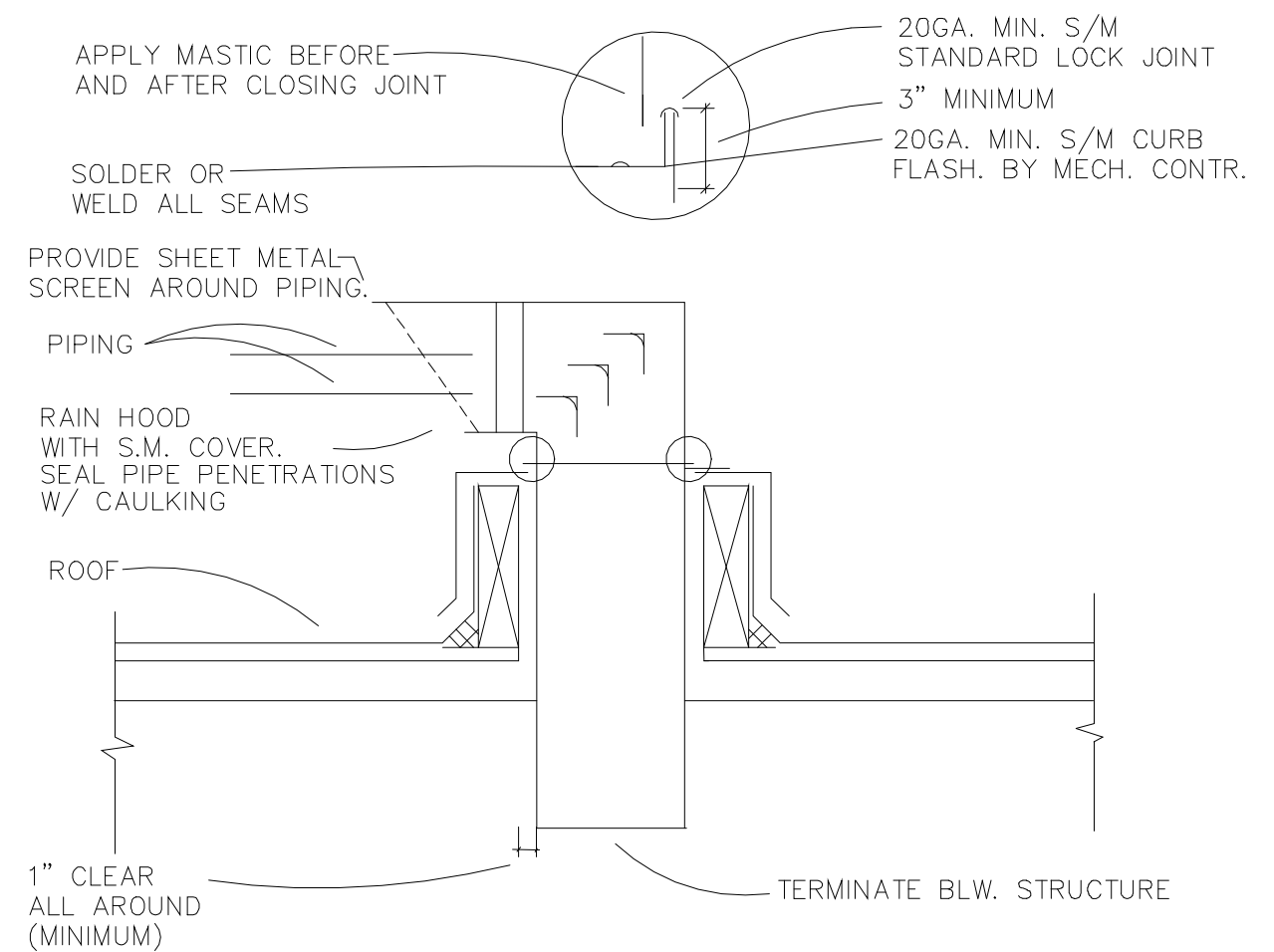
CONDENSATE PUMP SHALL BE CONNECTED TO 120 VOLT POWER. COORDINATE WITH ELECTRICAL CONTRACTOR.

SPLIT SYSTEM AC UNITS

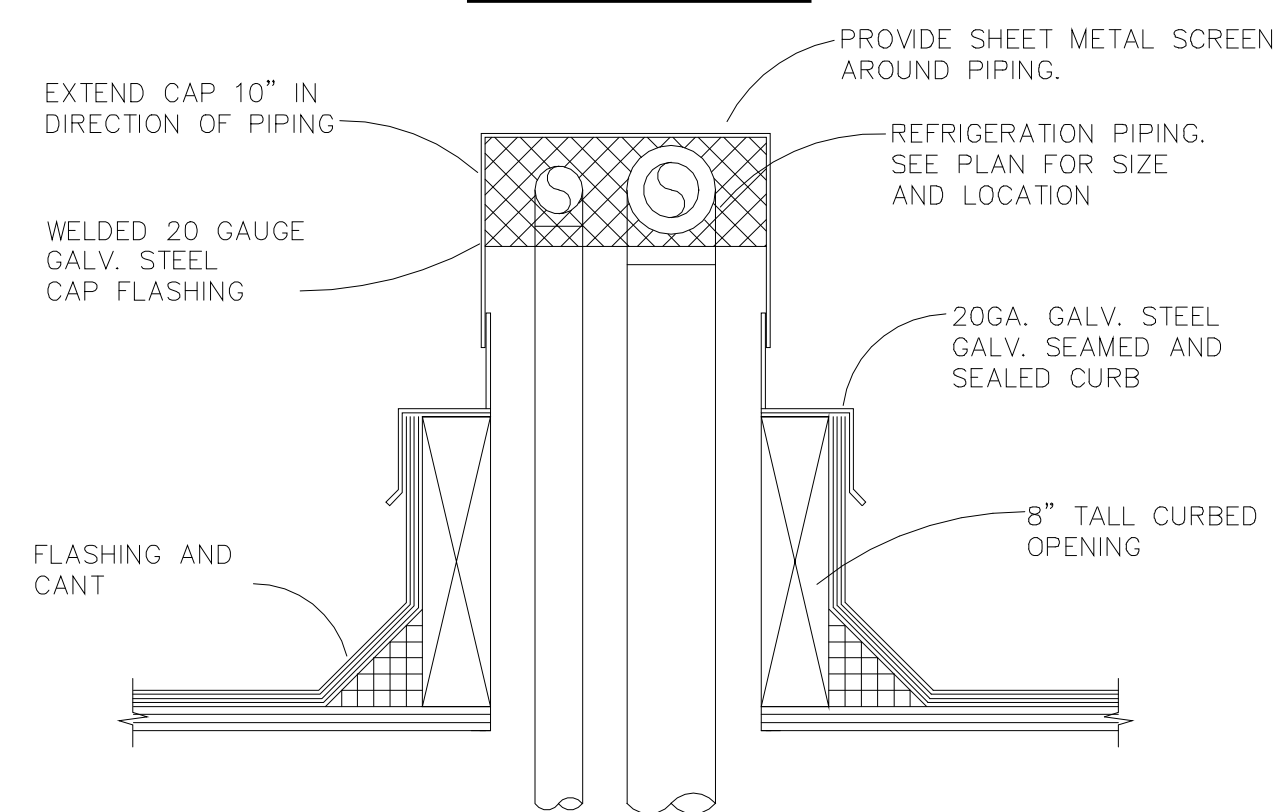
SPLIT SYSTEM AC UNIT WILL BE STARTED BY A LOCAL WALL MOUNTED THERMOSTAT SET AT 72 DEGREES (ADJUSTABLE LOCALLY).

HIGH TEMPERATURE ALARM

1. ALARM CONDITION: ROOM TEMPERATURE > 75.0°F (ADJUSTABLE) FOR MORE THAN 5 MINUTES.
2. RETURN-TO-NORMAL CONDITION: ROOM TEMPERATURE < 72.0°F (ADJUSTABLE).

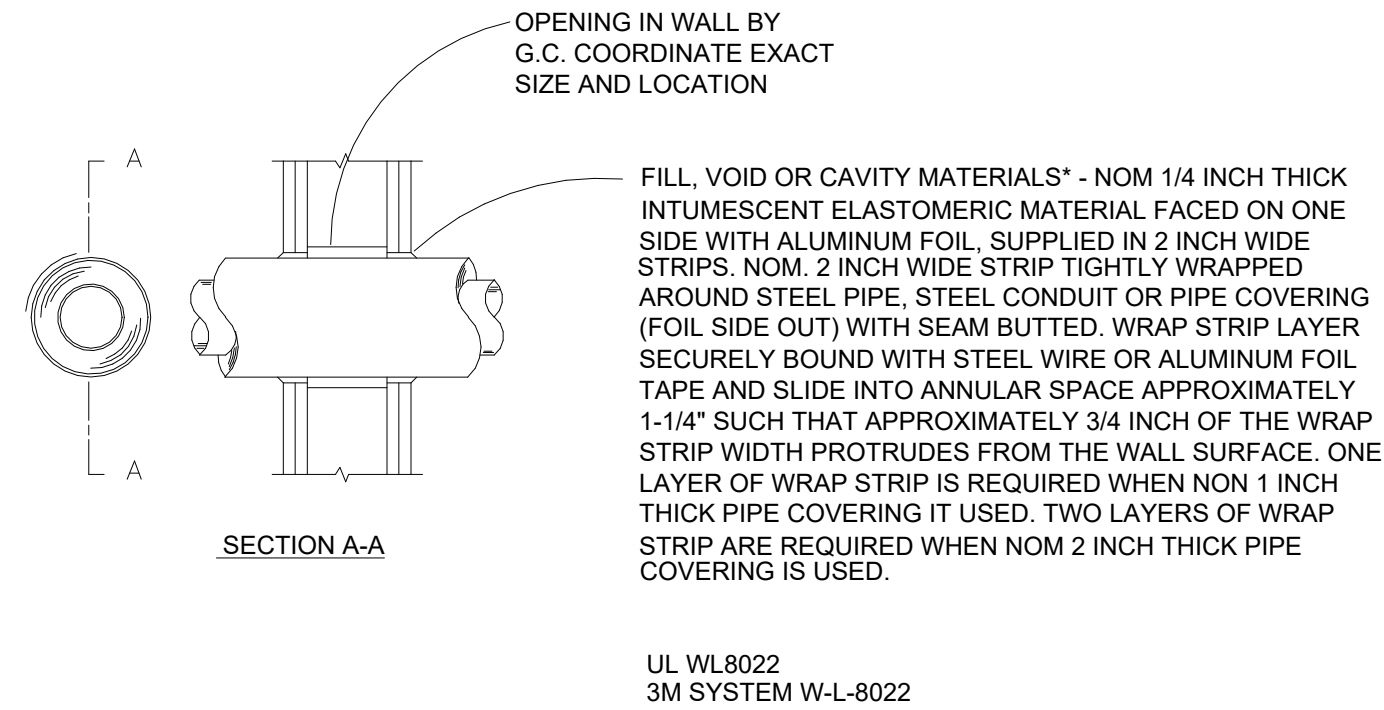


SIDE VIEW



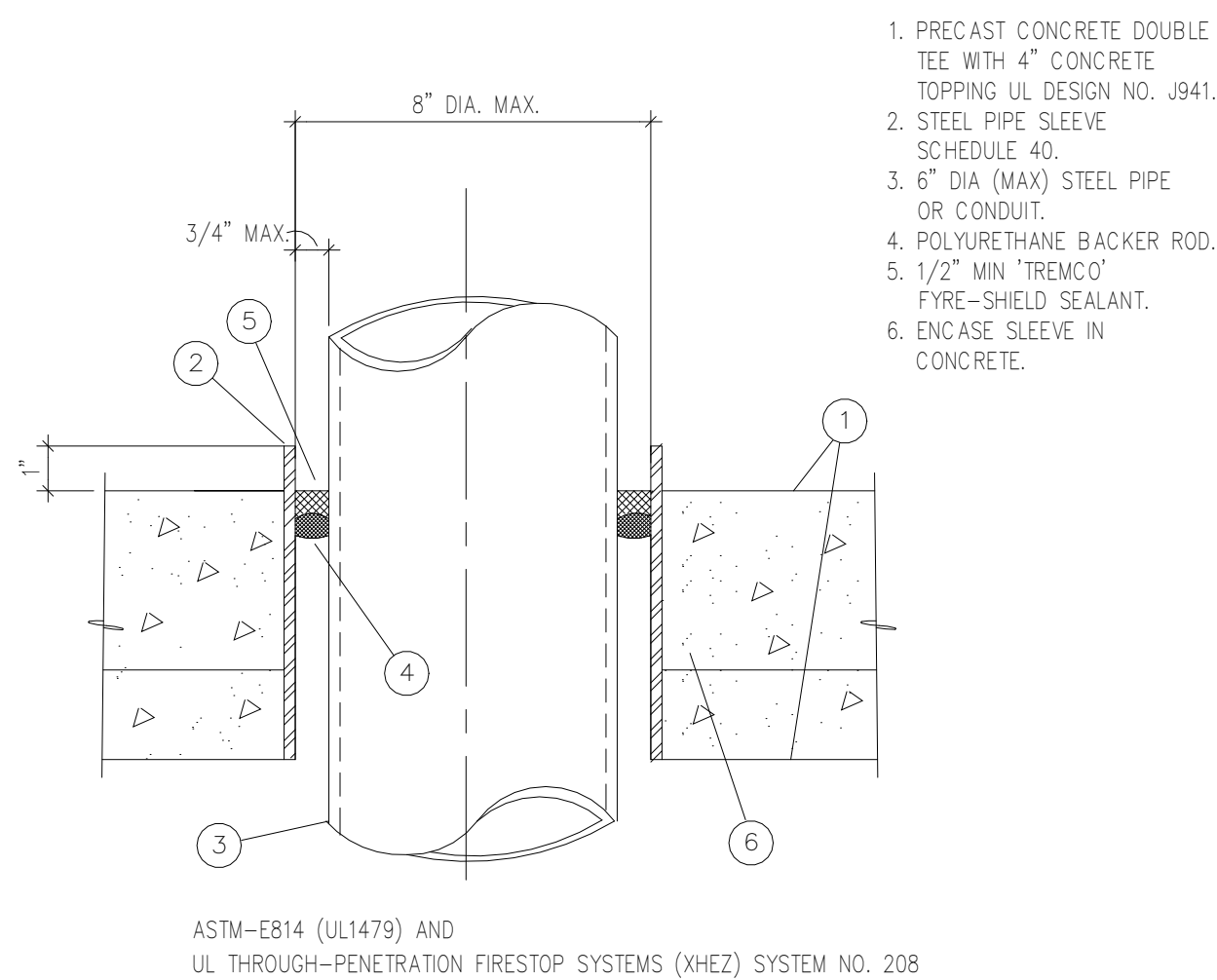
7 REFRIGERANT PIPING THRU ROOF

NO SCALE



5 PIPE THRU FIRE RATED PARTITION

NO SCALE

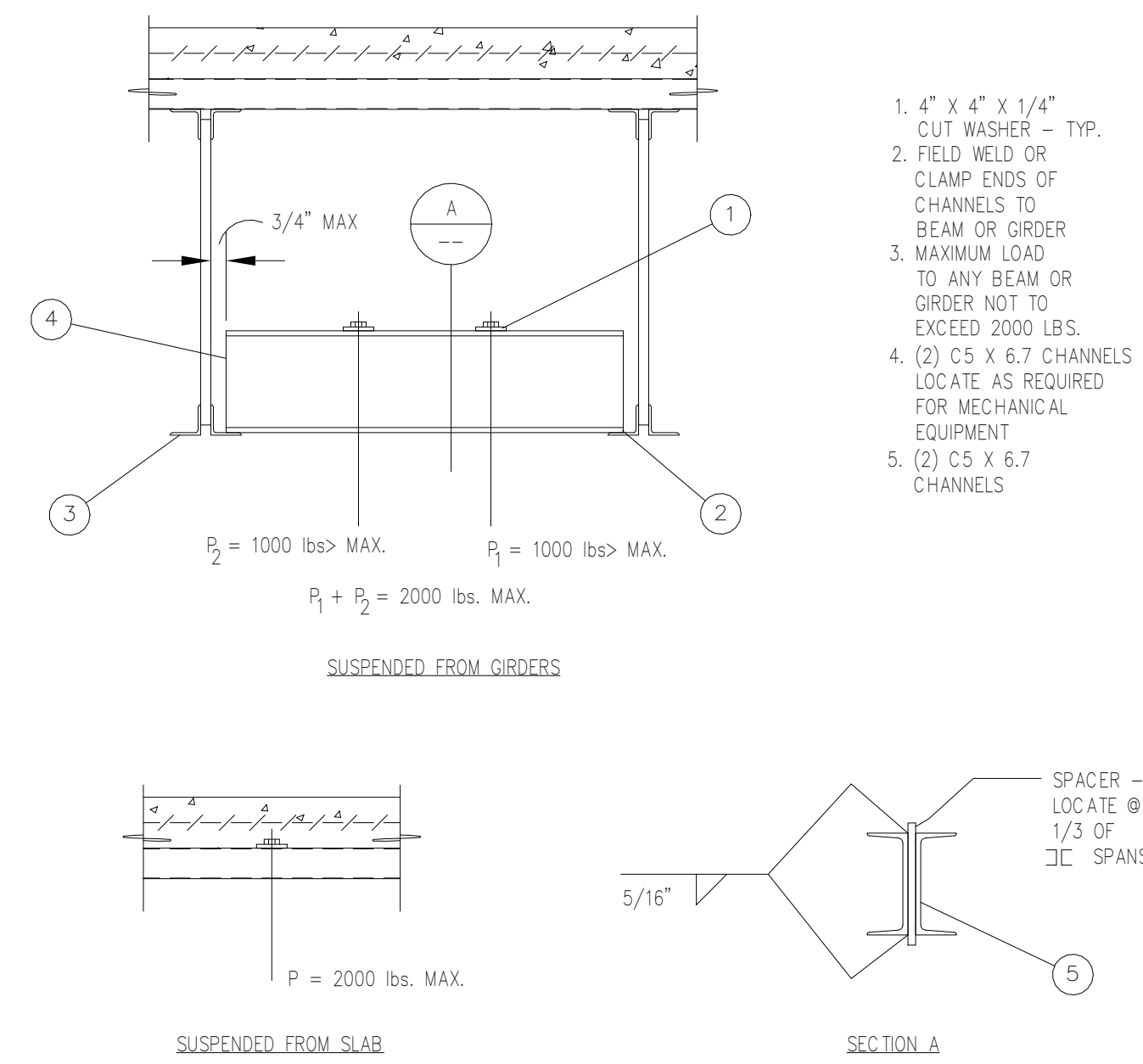


8 2 HOUR RATED CONCRETE PENETRATION

NO SCALE

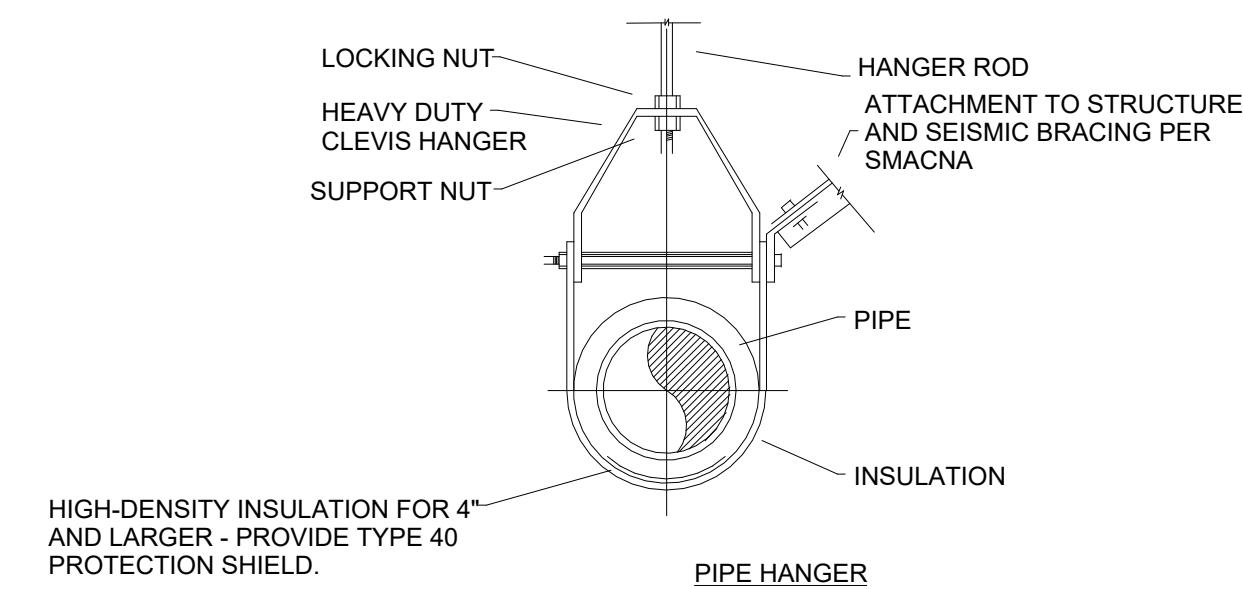
3 SPLIT SYSTEM AC UNIT CONTROL DIAGRAM

NO SCALE



3 MECHANICAL HANGER DETAIL

NO SCALE



4 PIPE HANGING DETAIL

NO SCALE

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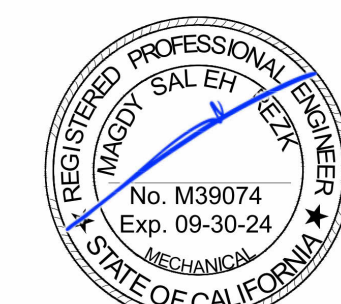
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TREASURY AND TAX COLLECTION

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ENGINEER OF RECORD
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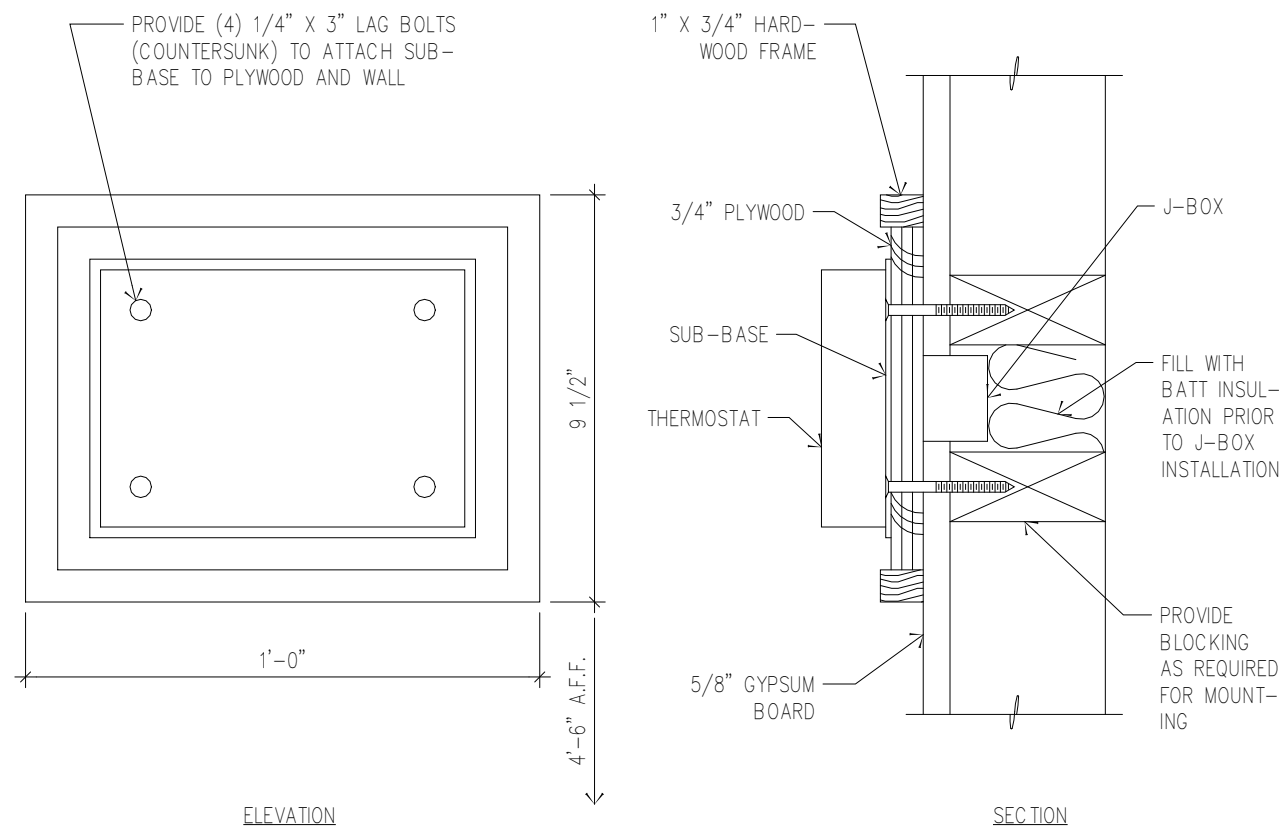
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REVISION#02

SHEET NAME
MECHANICAL DETAILS

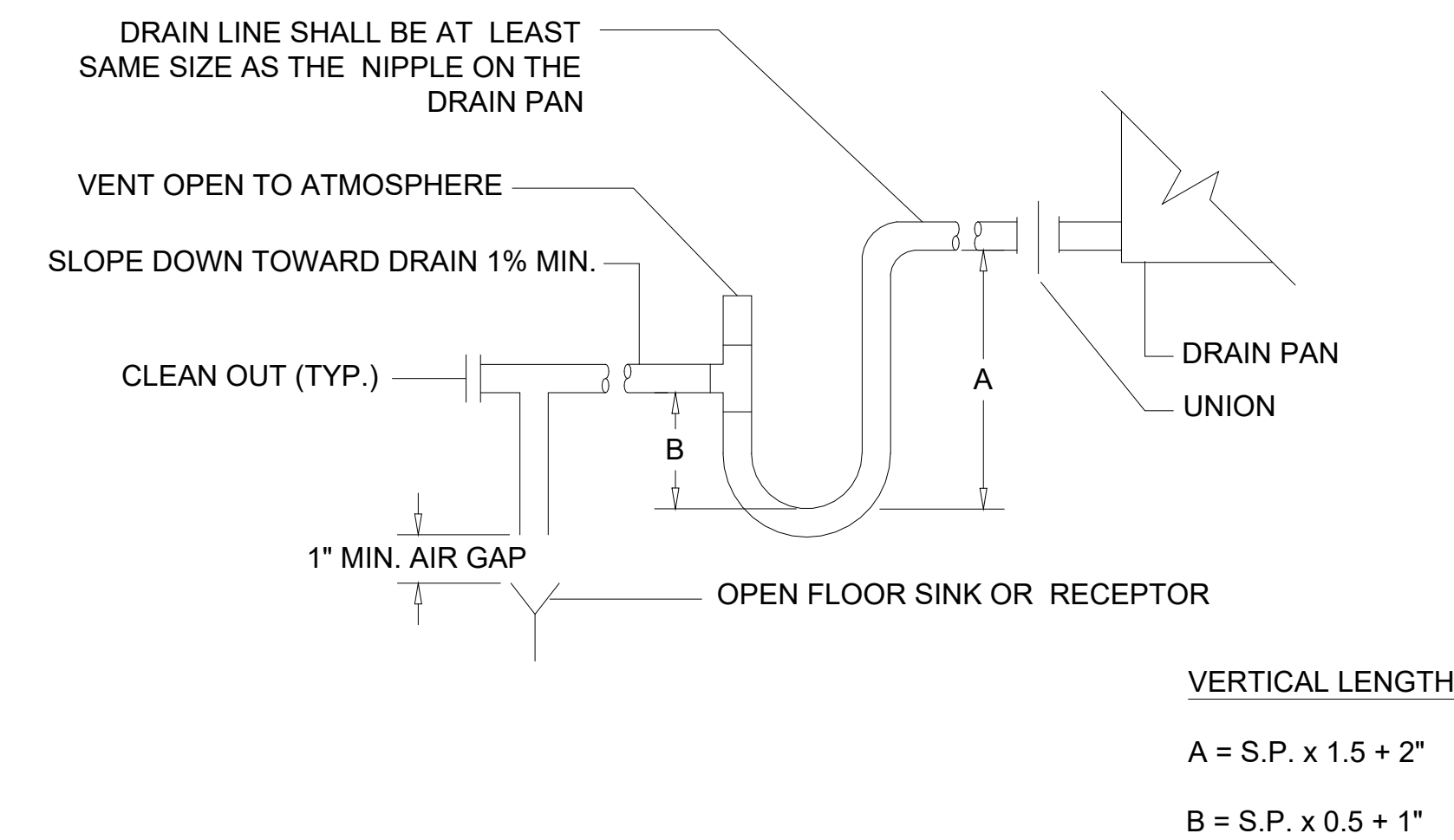
SHEET NUMBER

M004

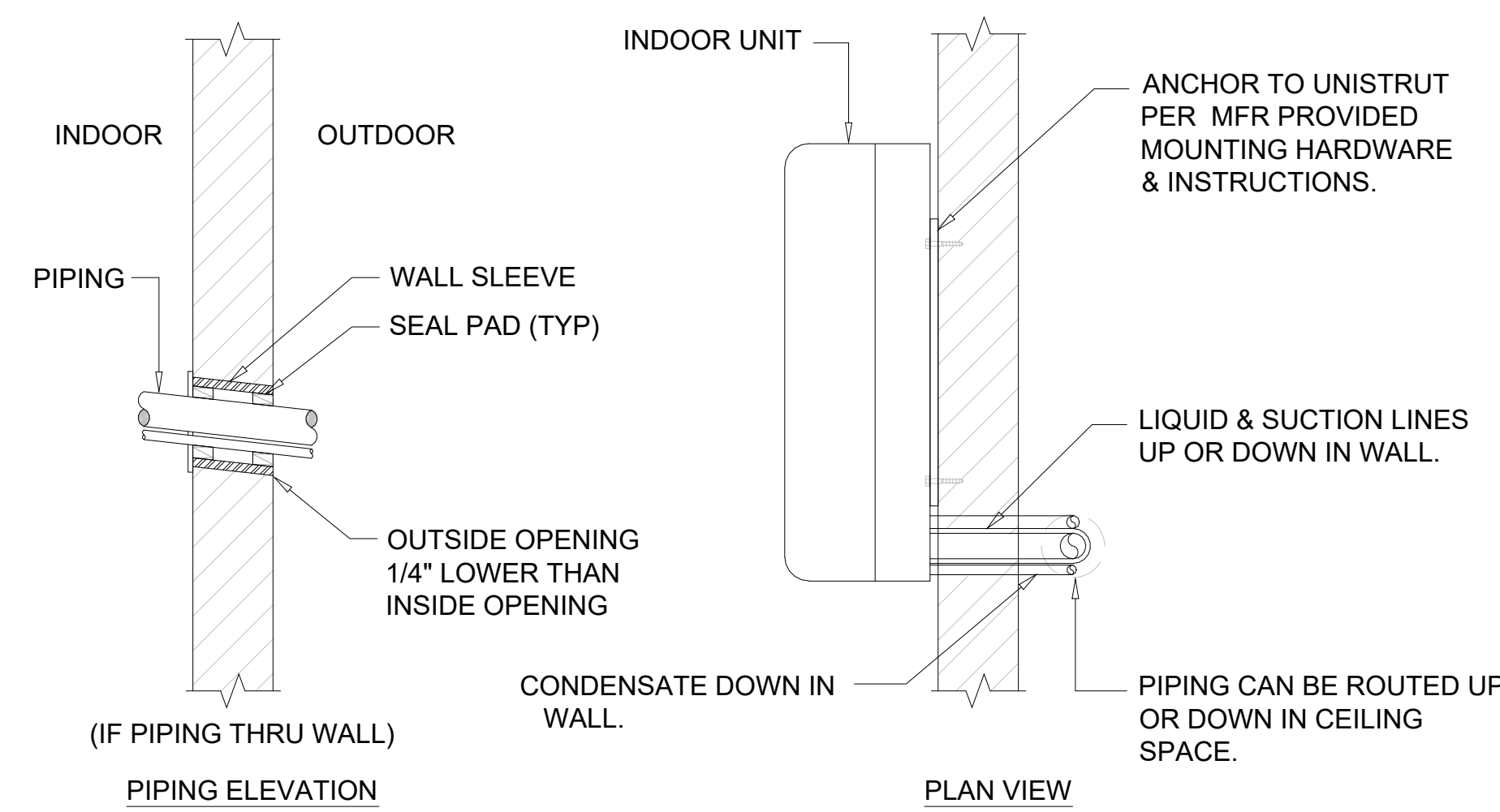


1.PROVIDE FACTORY WIRED WALL-MOUNTED THERMOSTAT.

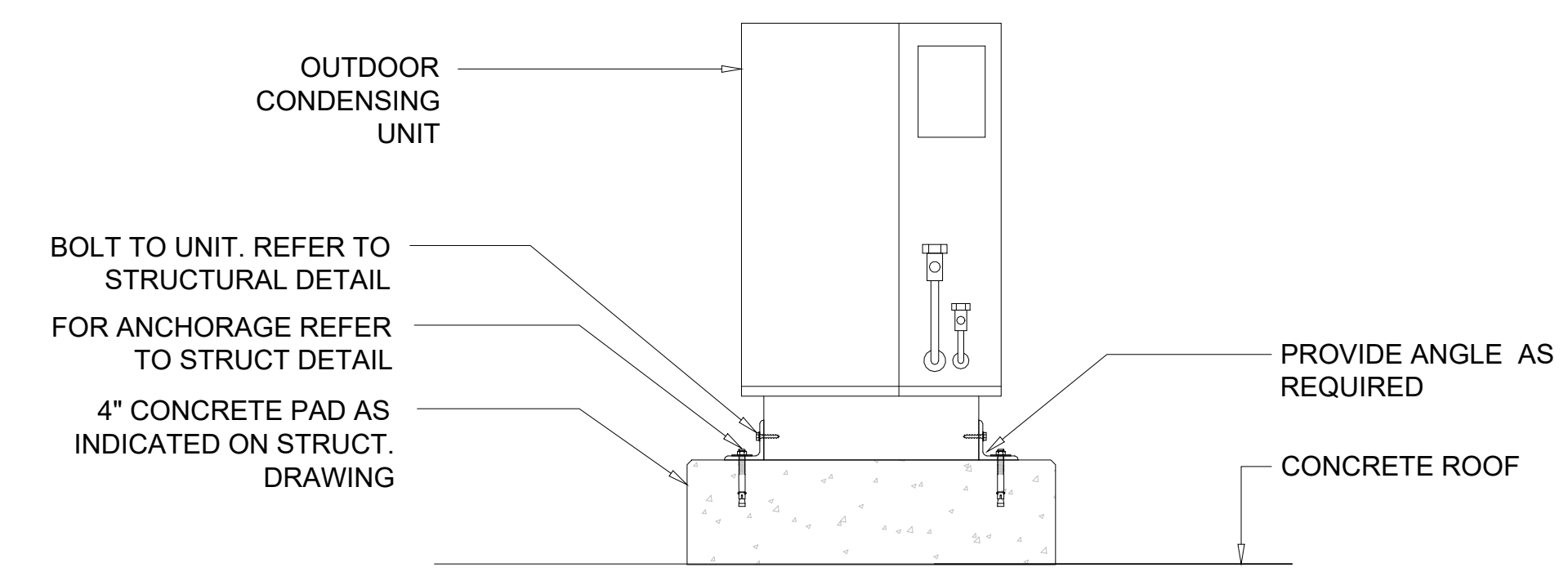
8 INSULATED THERMOSTAT BASE
NO SCALE



1 CONDENSATE TRAP DETAIL
NO SCALE



2 INDOOR UNIT MOUNTING DETAIL
SCALE: NONE



- NOTES:
1. REFER TO MANUFACTURER'S SHOP DRAWINGS FOR EXACT MOUNTING LOCATION.
 2. REFER TO MANUFACTURER'S SHOP DRAWINGS IF MOUNTING ANGLES ARE PROVIDED OR INTEGRATED WITH UNIT.

4 CONDENSING UNIT MOUNTING DETAIL
SCALE: NONE

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CAC BASEMENT SERVER ROOM UPGRADE	4080 LEMON ST, RIVERSIDE, CA 92501	TREASURY AND TAX COLLECTION

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COUNTY OF RIVERSIDE
PMB0142012075

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REVISION#01
REVISION#02

SHEET NAME
MECHANICAL DETAILS

SHEET NUMBER
M005

DIVISION 16 - ELECTRICAL
SECTION 16000
BASIC ELECTRICAL REQUIREMENTS

A. NOTE

1. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND ALL OTHER SPECIFICATION SECTIONS, APPLY TO THIS AND THE OTHER SECTIONS OF DIVISION 16.

2. THE CONTRACTOR FOR THIS DIVISION OF WORK IS REQUIRED TO READ THE SPECIFICATIONS AND REVIEW DRAWINGS FOR ALL DIVISIONS OF WORK AND IS RESPONSIBLE FOR THE COORDINATION OF THIS WORK AND THE WORK OF HIS SUBCONTRACTORS WITH ALL DIVISIONS OF WORK. IT IS THIS CONTRACTORS RESPONSIBILITY TO PROVIDE HIS SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.

3. THIS ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE COMPLETION AND INSPECTION OF THIS WORK TO COMPLY WITH TENANT/ARCHITECT'S SCHEDULE AND THE PROJECT COMPLETION DATE.

4. THIS CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF HIS WORK.

5. REFER TO RESPONSIBILITY SCHEDULE FOR INFORMATION IN REGARD TO RESPONSIBILITY OF WORK OR ITEMS WHICH MAY AFFECT THE BID.

B. GENERAL REQUIREMENTS

1. THIS CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, TOOLS, TRANSPORTATION, INCIDENTALS AND DETAILS NECESSARY TO PROVIDE A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS, CALLED FOR IN THE SPECIFICATIONS, AND AS REQUIRED BY JOB CONDITIONS. ALL WORK NOT SPECIFICALLY NOTED AS BEING BY THE LANDLORD OR ARCHITECTS SHALL BE PROVIDED BY THIS CONTRACTOR. CLOSELY COORDINATE THE ENTIRE INSTALLATION WITH THE LANDLORD AND ARCHITECTS, AS REQUIRED.

2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIAL OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED AND INSTALLED EVEN THOUGH NOT SPECIFICALLY MENTIONED IN BOTH ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK, AND WHICH IS USUALLY INCLUDED IN WORK OF SIMILAR CHARACTER, SHALL BE FURNISHED AND INSTALLED AS PART OF THE CONTRACT.

3. WHERE THE DRAWINGS OR SPECIFICATIONS CALL FOR ITEMS WHICH EXCEED CODES OR THE LANDLORD'S TENANT CRITERIA, THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING THE SYSTEM WITH THE MORE STRINGENT REQUIREMENTS AS DESIGNED AND DESCRIBED ON THESE DRAWINGS, UNLESS SPECIFICALLY NOTED OTHERWISE.

4. ALL WORK IN THIS SECTION SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING, AND REPAIRING. THIS CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUFFICIENT SERVICE ACCESS TO ALL EQUIPMENT.

5. ALL WORK SHALL BE PERFORMED IN A NEAT PROFESSIONAL MANNER USING GOOD CONSTRUCTION PRACTICES.

6. UNLESS SPECIFICALLY NOTED OTHERWISE, MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW, UNDERWRITERS LABORATORIES LISTED AND LABELED AND SIZED IN CONFORMITY WITH REQUIREMENTS OF STATE AND LOCAL CODES, WHICHEVER IS MORE STRINGENT.

7. THIS CONTRACTOR SHALL DO ALL CUTTING, CHASING AND CHANNELING REQUIRED FOR ANY WORK UNDER THIS DIVISION. CUTTING SHALL HAVE PRIOR APPROVAL BY THE ARCHITECTS AND THE LANDLORD. ALL PATCHING SHALL BE BY G.C. AND SHALL MATCH THE SURROUNDING SURFACES.

8. THE ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.

C. TEMPORARY LIGHT AND POWER

1. THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY WIRING AND RELATED GROUND FAULT INTERRUPTION DEVICES FOR LIGHT AND POWER FOR ALL CONTRACTORS AND SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY WIRING.

2. THE GENERAL CONTRACTOR SETS UP ALL ELECTRICAL UTILITIES IN THE NAME OF THE TENANT. TENANT PAYS FOR ALL UTILITIES THROUGHOUT CONSTRUCTION.

D. CODES

1. ALL WORK SHALL CONFORM TO THE LANDLORD'S CRITERIA, THE STATE'S, COUNTY'S, CITY'S AND LOCAL CODES AND ORDINANCES, SAFETY AND HEALTH CODES, NFPA CODES, ENERGY CODES AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. THIS CONTRACTOR SHALL INQUIRE INTO AND COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS. THIS CONTRACTOR SHALL INCLUDE ANY CHANGES REQUIRED BY CODES IN THE BID AND IF THESE CHANGES ARE NOT INCLUDED IN THE BID, THEY MUST BE QUALIFIED AS A SEPARATE LINE ITEM IN THE BID. AFTER CONTRACT IS AWARDED, CHANGE ORDERS FOR INCREASED COSTS DUE TO CODE ISSUES WILL NOT BE ACCEPTED BY OWNER, UNLESS ALLOWANCES HAVE PREVIOUSLY BEEN AGREED UPON.

E. LICENSES, PERMITS, INSPECTIONS & FEES

1. THIS OWNER SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS, INSPECTIONS, AND FEES REQUIRED OR RELATED TO HIS WORK.

2. FURNISH TO ARCHITECTS ALL CERTIFICATES OF INSPECTION AND FINAL INSPECTION APPROVAL AT COMPLETION OF PROJECT.

F. TRADE NAMES, MANUFACTURERS AND SHOP DRAWINGS

1. WHERE TRADE NAMES AND MANUFACTURERS ARE USED ON THE DRAWINGS OR IN THE SPECIFICATIONS, THE EXACT EQUIPMENT SHALL BE USED AS A MINIMUM FOR THE BASE BID. MANUFACTURERS CONSIDERED AS AN EQUAL OR BETTER IN ALL ASPECTS TO THAT SPECIFIED WILL BE SUBJECT TO APPROVAL IN WRITING BY ARCHITECTS/ENGINEERS THROUGH SHOP DRAWING SUBMITTAL PROCESS FOR ACCEPTANCE PRIOR TO INSTALLATION. THE USE OF ANY UNAUTHORIZED EQUIPMENT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

2. GENERAL CONTRACTOR SHALL SUBMIT ONLY SUBSTITUTION REQUESTS TO ARCHITECTS/ENGINEERS FOR APPROVAL. SUBMISSIONS SHALL BE MADE EARLY ENOUGH IN PROJECT TO ALLOW FOUR (4) WORKING DAYS FOR ARCHITECTS/ENGINEERS REVIEW WITHOUT CAUSING DELAYS OR CONFLICTS TO THE JOB'S PROGRESS. SUBMITTALS SHALL BEAR THE STAMP AND/OR THE SIGNATURE OF THE GENERAL CONTRACTOR AND THE SUB-CONTRACTOR SHOWING THAT HE HAS REVIEWED AND CONFIRMED THAT THE SUBMITTALS ARE IN CONFORMANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS OR INDICATE WHERE EXCEPTIONS HAVE BEEN TAKEN.

G. GUARANTEE

1. THE EQUIPMENT MANUFACTURER SHALL PROVIDE A 12 MONTH GUARANTEE TO TENANT FROM THE DATE OF ACCEPTANCE. THIS CONTRACTOR SHALL WARRANTY THE INSTALLATION OF THIS EQUIPMENT AND WILL BE RESPONSIBLE FOR ANY DAMAGE AND/OR MALFUNCTION CAUSED BY THE INSTALLATION. THIS CONTRACTOR SHALL NOT BEAR ADDITIONAL WARRANTIES BEYOND A COMPLETE WORKING SYSTEM.

H. RECORD DRAWINGS

1. THIS CONTRACTOR SHALL MAINTAIN ONE SET OF DRAWINGS ON THE JOB SITE UPDATED WEEKLY TO RECORD ALL DEVIATIONS FROM CONTRACT DRAWINGS, SUCH AS:

a. LOCATION OF CONCEALED CONDUIT AND EQUIPMENT.

b. REVISIONS, ADDENDUMS, AND CHANGE ORDERS.

c. SIGNIFICANT DEVIATIONS MADE NECESSARY BY FIELD CONDITIONS, APPROVED EQUIPMENT SUBSTITUTIONS, AND CONTRACTOR'S COORDINATION WITH OTHER TRADES.

2. AT COMPLETION OF THE PROJECT AND BEFORE FINAL APPROVAL, THIS CONTRACTOR SHALL MAKE ANY FINAL CORRECTIONS TO DRAWINGS AND CERTIFY THE ACCURACY OF EACH PRINT BY SIGNATURE THEREON. FAILURE TO KEEP THESE RECORDS WILL ALLOW TENANT/ARCHITECTS TO DIRECT THE GENERAL CONTRACTOR TO PROVIDE THESE RECORDS AT HIS EXPENSE PRIOR TO FINAL PAYMENT.

I. DISCREPANCIES IN DOCUMENTS

1. DRAWINGS (PLANS, SPECIFICATIONS, AND DETAILS) ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION AND INTENT OF THE ELECTRICAL SYSTEMS. WHERE DRAWINGS, EXISTING SITE CONDITIONS, SPECIFICATIONS OR OTHER TRADES CONFLICT OR ARE UNCLEAR, ADVISE THE GENERAL CONTRACTOR IN WRITING, PRIOR TO SUBMITTAL OF BID. THE GENERAL CONTRACTOR IS RESPONSIBLE TO ADVISE PROJECT MANAGER, IN WRITING, OF VARIATIONS TO CONTRACT DOCUMENTS PRIOR TO SUBMISSION OF BID. OTHERWISE, TENANT/ARCHITECTS' INTERPRETATION OF CONTRACT DOCUMENTS OR CONDITIONS SHALL BE FINAL WITH NO ADDITIONAL COMPENSATION PERMITTED.

J. PHASING REQUIREMENTS

1. THIS CONTRACTOR IS TO INCLUDE IN HIS BID ALL NECESSARY SERVICE REQUIRED TO KEEP THE OPERATING PHASE OF THE STORE'S ELECTRICAL SERVICE IN OPERATION. CONTRACTOR MUST SCHEDULE IN WRITING WITH TENANT/ARCHITECTS AND THE LANDLORD ONE WEEK PRIOR TO ANY SHUT DOWN OF THE ELECTRICAL SYSTEM.

K. DEMOLITION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE DEMOLITION OF EXISTING WORK AND THE DEMOLITION PROVIDED BY THE GENERAL CONTRACTOR. COORDINATE WITH THE GENERAL CONTRACTOR ANY EXISTING EQUIPMENT REQUIRED TO BE LEFT INTACT.

2. THE CONTRACTOR SHALL INCLUDE, AND WILL BE HELD RESPONSIBLE FOR, THE REMOVAL OF ALL EXISTING ELECTRICAL EQUIPMENT, CONDUITS, ETC. NOT TO BE REUSED ON THIS PROJECT, UNLESS SPECIFICALLY NOTED OTHERWISE. CONTRACTOR MUST VERIFY WITH THE LANDLORD ALL PRESUMED ABANDONED EQUIPMENT PRIOR TO REMOVAL. ALL EXTRANEOUS ITEMS IN THE SPACE OR ON THE ROOF NOT APPLICABLE TO THE NEW WORK MUST BE REMOVED AND ROOF/WALL/FLOOR PATCHED/REPAIRED TO MATCH EXISTING STRUCTURE. EXISTING ABANDONED CONDUIT OR EQUIPMENT IN THE FLOOR, EMBEDDED IN CONCRETE OR OTHERWISE INACCESSIBLE ARE TO BE CUT OFF AND SEALED BELOW OR WITHIN FLOOR OR WALL LEVEL WHEN THEY ARE NOT TO BE REUSED IN THIS PROJECT. IF REQUIRED BY LANDLORD OR CODES, ABANDONED CONDUIT MUST BE REMOVED TO POINT OF ORIGIN. CONFIRM THE EXTENT OF DEMOLITION PRIOR TO BID AND INCLUDE IN BID PROPOSAL.

L. SLEEVES

1. THE CONTRACTOR SHALL PROVIDE SLEEVES TO PROTECT EQUIPMENT OR FACILITIES IN THE INSTALLATION. EACH SLEEVE SHALL EXTEND THROUGH IT'S RESPECTIVE FLOOR, WALL OR PARTITION AND SHALL BE CUT FLUSH WITH EACH SURFACE EXCEPT SLEEVES THAT PENETRATE THE FLOOR, WHICH SHALL EXTEND 2" ABOVE THE FLOOR. CONTRACTOR MUST COORDINATE THROUGH THE LANDLORD ANY CORE DRILLING OR CUTTING OF OPENINGS IN MASONRY FLOORS OR WALLS.

2. ALL SLEEVES AND OPENINGS THROUGH FIRE RATED WALLS AND/OR FLOORS SHALL BE FIRE SEALED WITH CALCIUM SILICATE, SILICONE "RTV" FOAM, "3M" FIRE RATED SEALANTS OR EQUAL, SO AS TO RETAIN THEIR FIRE RATING.

3. SLEEVES IN BEARING AND MASONRY WALLS, FLOORS, AND PARTITIONS SHALL BE STANDARD WEIGHT STEEL PIPE FINISHED WITH SMOOTH EDGES. FOR OTHER THAN MASONRY PARTITIONS, THROUGH SUSPENDED CEILINGS, OR FOR CONCEALED VERTICAL PIPING, SLEEVES SHALL BE NO. 22 U.S.G. GALVANIZED STEEL MINIMUM.

M. HANGERS

1. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL SUCH AS ANGLE IRON, BANDS, C-CLAMPS WITH RETAINING CLIPS, CHANNELS, HANGER RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK.

2. HANGERS SHALL BE FASTENED TO BUILDING STEEL, CONCRETE, OR MASONRY, BUT NOT TO PIPING. HANGING FROM METAL DECK IS NOT PERMITTED. HANGERS MUST BE ATTACHED TO UPPER CHORD OF BAR JOIST, WHERE INTERFERENCES OCCUR, AND IN ORDER TO SUPPORT DUCTWORK OR PIPING, THE CONTRACTOR MUST INSTALL TRAPEZE TYPE HANGERS OR SUPPORTS WHICH SHALL BE LOCATED WHERE THEY DO NOT INTERFERE WITH ACCESS TO FIRE DAMPERS, VALVES, AND OTHER EQUIPMENT. HANGER TYPES AND INSTALLATION METHODS ARE ALSO SUBJECT TO LANDLORD CRITERIA.

3. HANGERS AND PIPING OF DISSIMILAR METALS SHALL BE DIELECTRICALLY SEPARATED.

N. FINAL ELECTRICAL INSPECTIONS

1. ASIDE FROM NORMAL INTERIM INSPECTIONS OF WORK IN PLACE, TENANT/ARCHITECTS MAY HAVE AN INDEPENDENT ELECTRICAL CONTRACTOR INSPECT THE FINISHED ELECTRICAL INSTALLATION UPON COMPLETION FOR COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODES. THE INSTALLING CONTRACTOR WILL BE RESPONSIBLE TO BRING ALL ITEM REQUIRING INSPECTION BY THE INDEPENDENT ELECTRICAL CONTRACTOR UP TO PLANS AND SPECIFICATION REQUIREMENTS.

A. CONTRACTOR NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, TOOLS, TRANSPORTATION, AND FACILITIES NECESSARY FOR, REASONABLY IMPLIED AND INCIDENTAL TO, THE FURNISHING, INSTALLATION, COMPLETION AND TESTING OF ALL THE WORK FOR THE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS, CALLED FOR IN THE SPECIFICATIONS, AND AS REQUIRED BY JOB CONDITIONS, TO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

a. A COMPLETE ELECTRICAL DISTRIBUTION SYSTEM INCLUDING THE INSTALLATION OF: SAFETY AND DISCONNECT SWITCHES, MOTOR STARTERS AND LIGHTING. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO INCLUDE IN HIS BID FOR PROVIDING SERVICE EQUIPMENT NECESSARY FOR TIE-IN TO LANDLORD'S DISTRIBUTION EQUIPMENT OR TO OBTAIN SERVICE FROM LOCAL UTILITY COMPANY. REFER TO ELECTRICAL RESPONSIBILITY SCHEDULE AND ELECTRICAL POWER RISER DIAGRAM FOR ADDITIONAL INFORMATION.

b. CONTRACTOR MUST ALSO INCLUDE IN BID ALL NECESSARY MATERIALS REQUIRED TO COMPLETE THE SYSTEM INCLUDING, BUT NOT LIMITED TO, FEEDERS, BRANCH CIRCUITS, JUNCTION BOXES, OUTLET BOXES, WIRING DEVICES, COVER PLATES, CONDUITS, ETC.

c. METERING AND CURRENT TRANSFORMERS AS REQUIRED BY DRAWINGS, UTILITY COMPANY, AND/OR LANDLORD.

d. THE WIRING OF MECHANICAL EQUIPMENT AS OUTLINED ON THE BID SET DRAWINGS AND IN THE SPECIFICATIONS. WORK SHALL INCLUDE WIRING OF ALL STARTERS, DISCONNECTS, AND POWER WIRING OF MECHANICAL EQUIPMENT EXCEPT AS SPECIFICALLY NOTED OTHERWISE. ALL LOW VOLTAGE (24 VOLT) EMS TEMPERATURE CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR UNLESS NOTED SPECIFICALLY ON DRAWING.

e. INSTALLATION OF LIGHT FIXTURES AND LAMPS AS SHOWN ON THE DRAWINGS INCLUDING ALL DEVICES, EQUIPMENT, ETC. REQUIRED FOR MOUNTING.

f. A COMPLETE CONDUIT SYSTEM FOR TELEPHONE/DATA INCLUDING BRANCH CONDUITS, OUTLET BOXES, PULL WIRES, GROUND CONDUCTORS, COVER PLATES, ETC. OR AS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.

g. A COMPLETE EMERGENCY AND EXIT LIGHTING SYSTEM AS SHOWN ON THE DRAWINGS.

h. TEMPORARY SERVICE AS INDICATED IN THE SPECIFICATIONS, INCLUDING ITS REMOVAL.

i. FINAL CONNECTIONS TO ALL SIGNS, CORNICE LIGHTING, CASE LIGHTING, ETC. AS SHOWN ON DRAWINGS.

j. IF INDICATED ON DRAWINGS, INSTALLATION AND WIRING OF SPEAKERS, AMPLIFIERS, CONDUIT AND FINAL CONNECTIONS FOR SOUND SYSTEM AS SHOWN.

k. SMOKE/FIRE ALARM WIRING, DEVICES AND CONDUIT, AS SHOWN OR DESCRIBED ON DRAWINGS OR AS NECESSARY TO MEET LANDLORD, STATE, LOCAL, INSURANCE AND FIRE DEPARTMENT REQUIREMENTS.

l. INSTALLATION OF CONDUITS STUBBED TO ABOVE CEILING FOR HVAC. ALSO, ANY ADDITIONAL CONDUIT FOR HVAC CONTROL EQUIPMENT WHERE PLENUM RATED CABLES ARE NOT PERMITTED.

m. BALANCING LOADS.

n. AS-BUILTS, PANEL DESCRIPTION AND CIRCUIT BREAKER SPECIFIC LABELING.

2. THE FOLLOWING ITEMS OF ELECTRICAL CONSTRUCTION ARE NOT INCLUDED IN THIS CONTRACT:

a. TELEPHONE INSTRUMENTS AND WIRING UNLESS NOTED OTHERWISE.

b. DATA CABLE WIRING UNLESS NOTED OTHERWISE.

3. BEFORE STARTING WORK, THIS CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL, STRUCTURAL, FIRE PROTECTION, MECHANICAL AND PLUMBING PLANS, SHOP DRAWINGS AND SPECIFICATIONS TO SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF THE ELECTRICAL SYSTEM, MATERIALS AND EQUIPMENT WITH OTHER CONTRACTORS TO AVOID INTERFERENCES AND CONFRONTATIONS.

B. CONDUIT

1. THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUITS SERVING ALL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, LIGHTING, RECEPTACLES, HEATING, AIR CONDITIONING, PLUMBING EQUIPMENT, TELEPHONE, DATA, SPEAKERS, SECURITY, PAGER, TRAFFIC COUNTING SYSTEM AND ELECTRICAL EQUIPMENT.

2. ALL CONDUITS SHALL BE GALVANIZED IMC OR EMT UNLESS OTHERWISE SPECIFIED IN SPECIFICATIONS OR ON DRAWINGS. ALL CONDUIT IS TO BE UL LABELED. EMT CONNECTORS SHALL BE STEEL COMPRESSION OR SET SCREW TYPE. CONDUIT UNDER SLAB ON GRADE SHALL BE RIGID STEEL, OR SCHEDULE 40 PVC WITH RIGID STEEL ELLS WHERE PERMITTED BY LANDLORD OR CODE.

3. MINIMUM SIZE OF CONDUIT SHALL BE:

a. MAIN FEEDER CONDUIT 2" OR LARGER FOR ALL APPLICATIONS.

b. 12" FOR INDIVIDUAL LIGHTING FIXTURE CONNECTIONS OR TO INDIVIDUAL LIGHT SWITCHES (IF ACCEPTABLE BY THE LANDLORD AND LOCAL CODE OFFICIALS) AND 3/4" FOR ALL OTHER LOCATIONS.

c. IF HVAC CONTROL WIRING IS REQUIRED TO BE RUN IN CONDUIT, IT SHALL BE A MINIMUM OF 3/4", UNLESS NOTED OTHERWISE ON DRAWINGS.

d. ALL IN/UNDER FLOOR CONDUIT SHALL BE OF MINIMUM 3/4" SIZE.

4. SUPPORT ALL CONDUIT, INCLUDING SEISMIC AND SWAY BRACING, IN ACCORDANCE WITH THE NEC AND LOCAL CODES.

5. GENERALLY, ALL CONDUIT SHALL BE CONCEALED EXCEPT FOR UNFINISHED AREAS, SUCH AS EQUIPMENT ROOMS. EXPOSED CONDUIT SHALL BE ALLOWED ONLY AS NOTED ON PLAN AND AS APPROVED BY PROJECT MANAGER. PAINTING OF CONDUITS, NOTED ON DRAWINGS OR SPECIFICATIONS WILL BE BY GENERAL CONTRACTOR.

6. FLEXIBLE METAL CONDUIT OR MC TYPE CABLE:

a. FLEXIBLE CONDUIT OR MC TYPE CABLE SHALL BE USED FOR THE FOLLOWING APPLICATIONS ONLY:

1. FINAL CONNECTIONS TO MOTORS.

2. FINAL CONNECTIONS INTO AND OUT OF THE TRANSFORMER.

3. FINAL CONNECTIONS TO VIBRATING EQUIPMENT.

4. INTER-CONNECTIONS BETWEEN ALL LIGHT FIXTURES AND HOMERUNS TO PANELS WHERE CODE ALLOWS.

5. FINAL CONNECTIONS WHERE RIGID CONDUIT IS NOT PRACTICAL.

6. IN WALLS (FOR LIGHT SWITCHES AND 120 VOLT POWER RECEPTACLES AND HVAC CONTROL EQUIPMENT).

b. FLEXIBLE METAL CONDUIT OR MC TYPE CABLE MUST BE THE SAME SIZE AS THE IMC OR EMT CONDUIT TO WHICH IT IS CONNECTED. BOTH THE FLEXIBLE METAL CONDUIT AND IT'S FITTINGS ARE TO BE LISTED FOR GROUNDING. A GREEN GROUNDING CONDUCTOR SHALL BE INSTALLED. ALL CONNECTORS ARE TO BE OF A NEMA APPROVED TYPE.

c. THE USE OF ROMEX, BX, ETC. IS PERMITTED ONLY IN RESIDENTIAL CONSTRUCTION NOT HIGHER THAN THREE STORES.

d. CONNECTION TO ANY OUTDOOR EQUIPMENT MUST BE WEATHERPROOF.

7. PROVIDE PULL-WIRE IN ALL EMPTY CONDUITS EXCEPT AS NOTED OTHERWISE ON DRAWINGS.

8. HOME RUNS AND MAIN CONDUIT RUNS ARE TO BE HELD TIGHT TO STRUCTURE ABOVE OR AS REQUIRED TO ALLOW PROPER SERVICE ACCESS AND OTHER TRADES WORK. CONDUIT MUST BE TRAPEZED TO ALLOW 3 FEET MINIMUM CLEARANCE ABOVE CEILING.

9. ALL CONDUITS MUST BE SIZED PER NEC AND LOCAL CODES.

10. ALL SENSORMATIC WIRING MUST BE PLACED IN CONDUIT (PVC PIPE NOT PERMITTED).

OUTLET BOXES

1. ALL OUTLET BOXES SHALL BE GALVANIZED PRESSED STEEL OF THE STANDARD KNOCKOUT TYPE. NO ROUND OUTLET BOXES SHALL BE PERMITTED UNLESS INDICATED AND FOR LIGHTING THAT REQUIRE SUCH CONFIGURATION. CONCEALED BOXES SHALL NOT BE LESS THAN 4" SQUARE AND 1 1/2" DEEP, WITH PLASTER RINGS.

2. ALL KNOCKOUT BOXES, UPON WHICH LIGHTING FIXTURES ARE TO BE INSTALLED, SHALL BE EQUIPPED WITH 3/8" FIXTURE STUDS.

3. EXTERIOR BOXES SHALL BE CAST RUST-RESISTING METAL WITH GASKETED COVERS.

4. INSTALL BOXES RIGIDLY FROM BUILDING STRUCTURE AND SUPPORT INDEPENDENTLY OF THE CONDUIT SYSTEM. ALSO PROVIDE SUITABLE BOX EXTENSIONS TO EXTEND BOXES TO FINISHED FACES OF FLOORS, CEILINGS, WALLS ETC. ALL OUTLET BOXES TO BE PROVIDED WITH CADDY "QUICK-MOUNT BOX SUPPORT" TO MINIMIZE THE DEFLECTION THAT OCCURS WHEN PLUGGING/UNPLUGGING INTO THESE DEVICES.

5. UNLESS OTHERWISE NOTED ON DRAWINGS OR OTHERWISE REQUIRED BY THE NATIONAL ELECTRICAL CODE, HANDICAP CODES OR LOCAL CODES, OUTLET HEIGHTS SHALL BE AS FOLLOWS:

a. SWITCH HEIGHT 48" FROM FINISHED FLOOR TO TOP OF OUTLET.

b. CONVENIENCE OUTLETS:

MOUNTED ON WALL NO MORE THAN 48-INCHES, MEASURED FROM TO TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING AND; NO LESS THAN 15-INCHES, MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING, TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM UNLESS OTHERWISE INDICATED OR HORIZONTALLY MOUNTED IN BASEBOARD BENEATH CABINETS, AS SHOWN ON DRAWINGS, OR AS REQUIRED BY LOCAL CODES, SEE DRAWINGS.

c. TELEPHONE OUTLETS SHALL BE LOCATED AS NOTED ON DRAWINGS.

JUNCTION AND PULL BOXES

1. THE PLANS INDICATE ONLY SCHEMATIC ROUTINGS FOR CONDUIT RUNS. THIS CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL BOXES WHERE REQUIRED BY FIELD CONDITIONS OR BY CODE.

2. BOXES AND COVERS SHALL BE GALVANIZED STEEL OF CODE GAUGE SIZE.

3. INSTALL BOXES RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE AND SUPPORTED INDEPENDENT OF THE CONDUIT SYSTEM.

4. ARRANGE CIRCUITS TO AVOID THE USE OF JUNCTION BOXES IN INACCESSIBLE LOCATIONS. THE USE OF JUNCTION BOXES ABOVE DRYWALL CEILINGS SHOULD BE LIMITED TO LOCATIONS NEAR ACCESS FRAMES USED FOR DIFFUSERS AND RETURN AIR GRILLES OR ACCESS PANELS AS LOCATED ON PLANS.

5. JUNCTION AND PULL BOXES MUST BE LABELED WITH CIRCUIT NUMBER IDENTIFICATION AND SYSTEM TYPE ON COVER.

WIRING

1. CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS SHALL BE COPPER AND THE AWG SIZE AND TYPE AS SHOWN ON DRAWINGS. MINIMUM WIRE SIZE #12. THE CONDUCTORS SHALL BE 600 VOLT INSULATION, TYPE THW, THWN OR THHN.

2. MINIMUM WIRE SIZE - 20 AMP BRANCH CIRCUIT SHALL BE AWG LISTED SIZE PER DISTANCE SHOWN BELOW. DISTANCE SHALL BE MEASURED FROM THE PANELBOARD CIRCUIT BREAKER TO THE FURTHEST OUTLET.

a. #12 LESS THAN 100 FEET

b. #10 BETWEEN 100-150 FEET

c. #8 BETWEEN 150 - 250 FEET

d. #6 OVER 250 FEET

3. ON ALL 20 AMP BRANCH CIRCUITS, CONDUCTORS LARGER THAN #10 AWG SHALL BE REDUCED TO #10 AWG WITHIN 10 FEET OF PANEL BOARD AND DEVICE IN JUNCTION BOXES ON RATED TERMINAL STRIPS.

4. CONDUCTORS MAY BE STRANDED FOR SIZES #10 AWG AND LARGER. CONDUCTORS SIZE #12 SHALL BE SOLID (NOT STRANDED).

5. ALUMINUM CONDUCTORS ARE NOT PERMITTED, EXCEPT AT SERVICE ENTRANCE, WHERE REQUIRED BY LANDLORD. CONDUCTOR CONNECTION MUST BE PER MANUFACTURER'S REQUIREMENTS. CONTRACTOR MUST OBTAIN WRITTEN PERMISSION FROM GENERAL CONTRACTOR AND PROJECT MANAGER WHEN USED.

6. ALL WIRING SHALL BE IN CONDUIT, UNLESS SPECIFICALLY NOTED OTHERWISE (IE. LOW VOLTAGE PLENUM RATED WIRE).

7. THE USE OF SHARED NEUTRALS IS REQUIRED FOR LIGHTING CIRCUITS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES. ALL OTHER EQUIPMENT REQUIRING A NEUTRAL CONDUCTOR SHALL HAVE A DEDICATED FULL SIZE NEUTRAL.

8. THE USE OF ROMEX, BX, ETC. IS PERMITTED ONLY IN RESIDENTIAL CONSTRUCTION NOT HIGHER THAN THREE STORES.

9. WIRE CONNECTORS SHALL BE EQUAL TO "SCOTCH LOCK" FOR #6 AWG WIRE AND SMALLER AND EQUAL TO T & B "LOCKTIGHT" FOR #6 AWG AND LARGER.

10. ALL WIRING TO BE COLOR-CODED AS FOLLOWS:

120/208 VOLT SYSTEM
NEUTRAL - WHITE
PHASE A OR L1 - BLACK
PHASE B OR L2 - RED
PHASE C OR L3 - BLUE
GROUND - GREEN

277/480 VOLT SYSTEM
NEUTRAL - GRAY
PHASE A OR L1 - YELLOW
PHASE B OR L2 - ORANGE
PHASE C OR L3 - BROWN
GROUND - GREEN WITH YELLOW TRACER

CLG.	WALL	FLR.	DESCRIPTION
			DUPLEX RECEPTACLE AT +15" FOR WALL MOUNTED U.O.N.
			DOUBLE DUPLEX RECEPTACLE AT + 15" FOR WALL MOUNTED U.O.N.
			GROUND FAULT INTERRUPTING DUPLEX RECEPTACLE
			DUPLEX RECEPTACLE WITH USB 2.0 PORT
			SPECIAL RECEPTACLE. SEE EQUIPMENT PLAN/INSTALLATION MANUAL FOR SPECS AND DETAILS.
			JUNCTION BOX
			COMBINATION TELEPHONE, DATA AND CABLE OUTLET AT +18" U.O.N. PROVIDE 1/2"C.O. STUBBED TO ACCESSIBLE CEILING SPACE
			TELEPHONE OUTLET; CAT5E CABLE. RJ11 TERMINATION MOUNTED AT +18" PROVIDE 1/2"C.O. STUBBED TO ACCESSIBLE CEILING SPACE
			CABLE OUTLET; CAT5E CABLE, RJ45 TERMINATION MOUNTED AT +18" U.O.N. PROVIDE 1/2"C.O. STUBBED TO ACCESSIBLE CEILING SPACE
			CABLE OUTLET; RG-6 COAXIAL CABLE, MOUNTED AT +18" U.O.N. PROVIDE 1/2"C.O. STUBBED TO ACCESSIBLE CEILING SPACE
			LIGHTING FIXTURE WITH 90 MIN. EMER. BATTERY PACK OR ON INVERTER SEE LIGHT FIXTURE SCHEDULE FOR DETAILS AND SPECS
			CONDUIT STUB OUT, 3/4" MINIMUM - SEE PLANS FOR NOTES
			CONDUIT CONCEALED ABOVE CEILING OR IN WALLS
			HOMERUN TO PANEL "A", CIRCUITS #1
			GROUND CONNECTOR
			ELECTRICAL PANEL. REFER TO PANEL SCHEDULE FOR DETAILS.
			MAIN SWITCHBOARD OR POWER DISTRIBUTION BOARD. VERIFY DIMENSION WITH VENDER/MANUFACTURER.
			DENOTES EQUIPMENT #1, SEE EQUIPMENT SCHEDULE FOR THE DETAILS AND EXACT SPECIFICATIONS.
			INDICATES PLAN NOTE NUMBER "1", SEE PLAN
			DENOTES MECHANICAL EQUIPMENT #1 SEE MECHANICAL DRAWINGS FOR THE DETAILS AND SPECIFICATIONS.
			SINGLE POLE SWITCH AT 48" U.O.N.
			THREE-WAY SWITCH AT +48" U.O.N.
			MANUAL MOTOR STARTER
			DIMMER SWITCH AT +48" U.O.N.
			THREE-WAY DIMMER SWITCH AT +48" U.O.N.
			OCCUPANCY AUTOMATIC WALL SWITCH SENSOR WITH SINGLE LEVEL SWITCHING AT +48" U.O.N./MANUFACTURER TO BE DETERMINED
			VACANCY AUTOMATIC WALL SWITCH SENSOR WITH SINGLE LEVEL SWITCHING AT +48" U.O.N./MANUFACTURER TO BE DETERMINED
			OCCUPANCY SENSOR SINGLE POLE SWITCH WITH DIMMER CONTROL FEATURE AT +48" U.O.N./MANUFACTURER TO BE DETERMINED
			CEILING MOUNTED OCCUPANCY SENSOR MANUFACTURER TO BE DETERMINED
			CEILING MOUNTED VACANCY SENSOR MANUFACTURER TO BE DETERMINED
			CEILING MOUNTED DAYLIGHT SENSOR MANUFACTURER TO BE DETERMINED
			HARD WIRED, WITH BATTERY BACKUP, SMOKE DETECTOR/CARBON MONOXIDE DETECTOR/MULTI-PURPOSE CARBON MONOXIDE & SMOKE DETECTOR.
			NON-FUSED/FUSED SWITCH, SIZE AS SHOWN IN THE PLAN
			MOTOR OUTLET - IDENTIFICATION
			TIME CLOCK WITH MANUAL BY-PASS SWITCH SEE LIGHTING CONTROL DIAGRAM FOR DETAILS
			GAS SOLENOID-SEE PLUMBING PLAN FOR EXACT LOCATION.
			CURRENT LIMITER FOR TRACK LIGHTING FIXTURE. 1A RATED U.O.N.
			ABBREVIATION FOR NEW / EXISTING. EXISTING TO REMAIN U.O.N.

SYMBOL NOTES:
SYMBOL LIST SHOWN IN FOR GENERAL REFERENCE ONLY. A PRESENCE OF A SYMBOL DOES NOT IMPLY ITS USE ON THIS PROJECT. REFER TO DRAWING FOR SPECIFIC SYMBOLS USED.

SCOPE OF WORK

- EXISTING COMMERCIAL MINOR TENANT IMPROVEMENT.
- REPLACE EXISTING LIGHT FIXTURES TO L.E.D / SAME CIRCUITS TO BE USED.
- RELOCATE EXISTING POWER-OUTLETS & SWITCHES/ SAME CIRCUIT TO BE USED.
- PROVIDE POWER TO NEW MECHANICAL CONDENSATE UNIT.

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PROJECT NAME LOCATION OWNER

CAC BASEMENT SERVER ROOM UPGRADE

4080 LEMON ST., RIVERSIDE, CA 92501

TREASURY AND TAX COLLECTION

OWNER

COUNTY OF RIVERSIDE
Facilities Management

ENGINEER OF RECORD
REVIEWED BY SEAL / STAMP

REGISTERED PROFESSIONAL ENGINEER
REED R. STOKES
ELECTRICAL
STATE OF CALIFORNIA
Exp. 6-30-23

THE SIGNATURE AND SEAL OF A PROFESSIONAL ENGINEER IS THE LEGAL REPRESENTATION THAT THE ENGINEERING DRAWINGS, PLANS, AND SPECIFICATIONS WERE PREPARED UNDER THE RESPONSIBLE CHARGE (THE DIRECT CONTROL AND PERSONAL SUPERVISION) OF THE PROFESSIONAL ENGINEER AND CERTIFIES THAT THE WORK WAS PERFORMED COMPETENTLY, MEETS THE PROFESSIONAL STANDARD OF CARE, AND ACCEPTABLE STANDARDS OF PRACTICE.

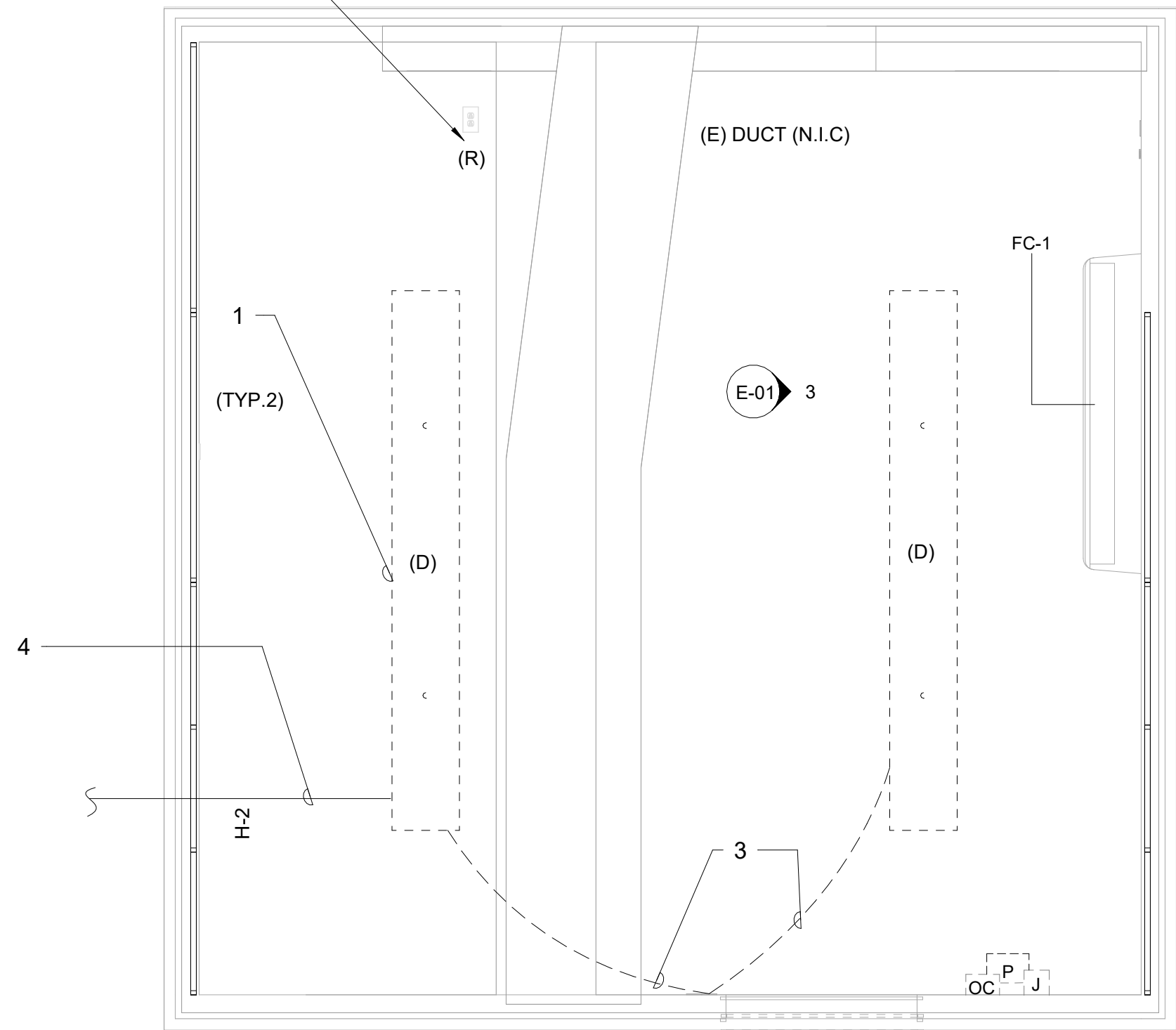
JURISDICTION HAVING AUTHORITY
COUNTY OF RIVERSIDE
PMB014001/02019

1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
ELECTRICAL
SPECIFICATION

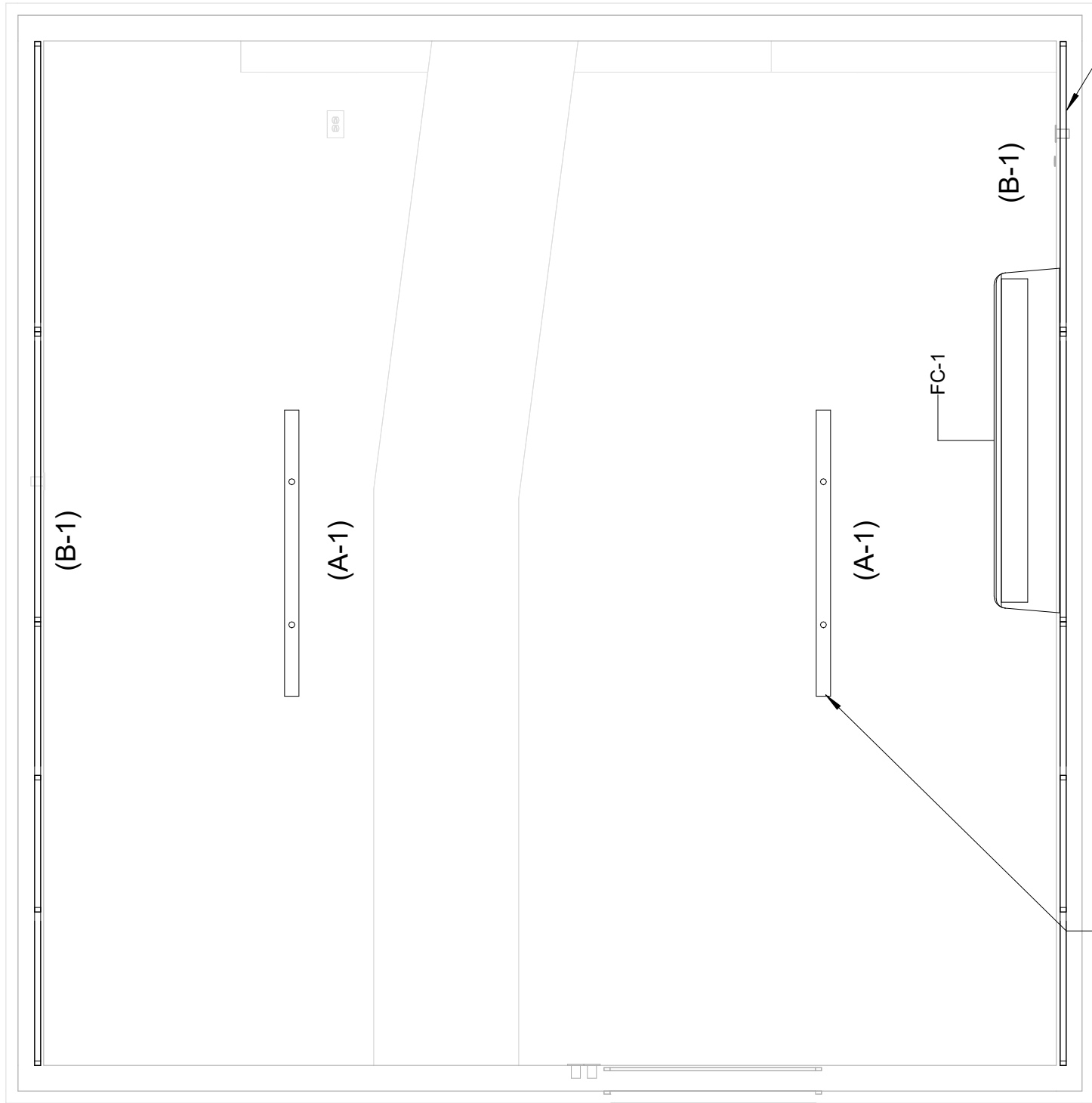
SHEET NUMBER

GROUND RECEPTACLE
TO BE REMOVED, REMOVE
WIRES TO THE NEAREST
J-BOX & RELOCATE TO THE
WALL



1 DEMOLITION PLAN - LIGHTING
1/2" = 1'-0"

UL LISTED 14 FT. LOW VOLTAGE LED SMART WHITE LIGHT STRIP
BOTH SIDES
CONNECT TO RELOCATED OUTLET IN THE SAME ROOM



2 REMODEL PLAN - LIGHTING
1/2" = 1'-0"

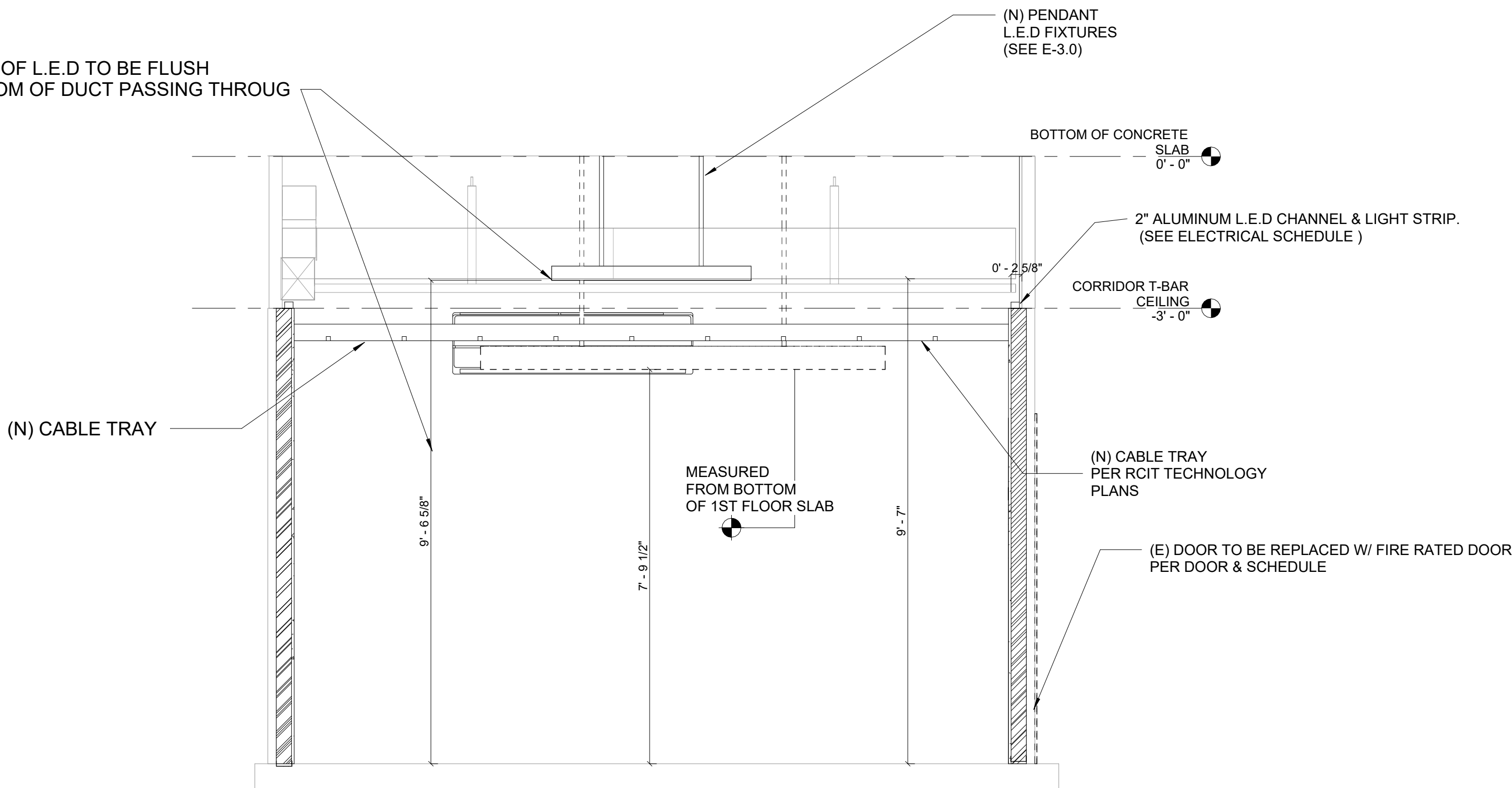
FLOOR PLAN GENERAL NOTES:

N/A

KEY NOTES

- 1 DISCONNECT AND REMOVE EXISTING PENDANT MOUNTED LIGHT FIXTURE
- 2 DISCONNECT EXISTING FEEDER TO ACCOMMODATE REMOVAL OF LIGHT FIXTURE.
- 3 INTERCEPT EXISTING FEEDER AND EXTEND TO NEW LIGHT FIXTURE.
- 4 TO EXISTING LIGHTING FIXTURES.

BOTTOM OF L.E.D TO BE FLUSH
W/ BOTTOM OF DUCT PASSING THROUG



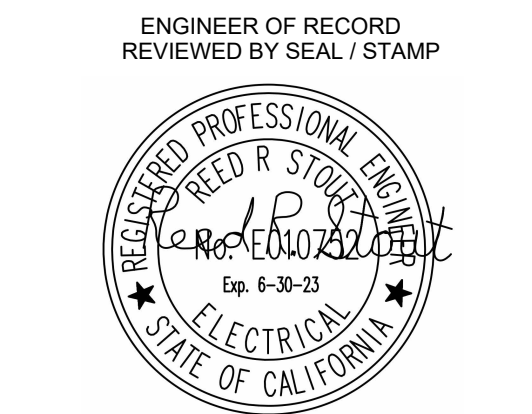
3 ELEVATION -1 LIGHT
1/2" = 1'-0"

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PROJECT NAME	LOCATION	OWNER
CAC BASEMENT SERVER ROOM UPGRADE	4080 LEMON ST, RIVERSIDE, CA 92501	TREASURY AND TAX COLLECTION



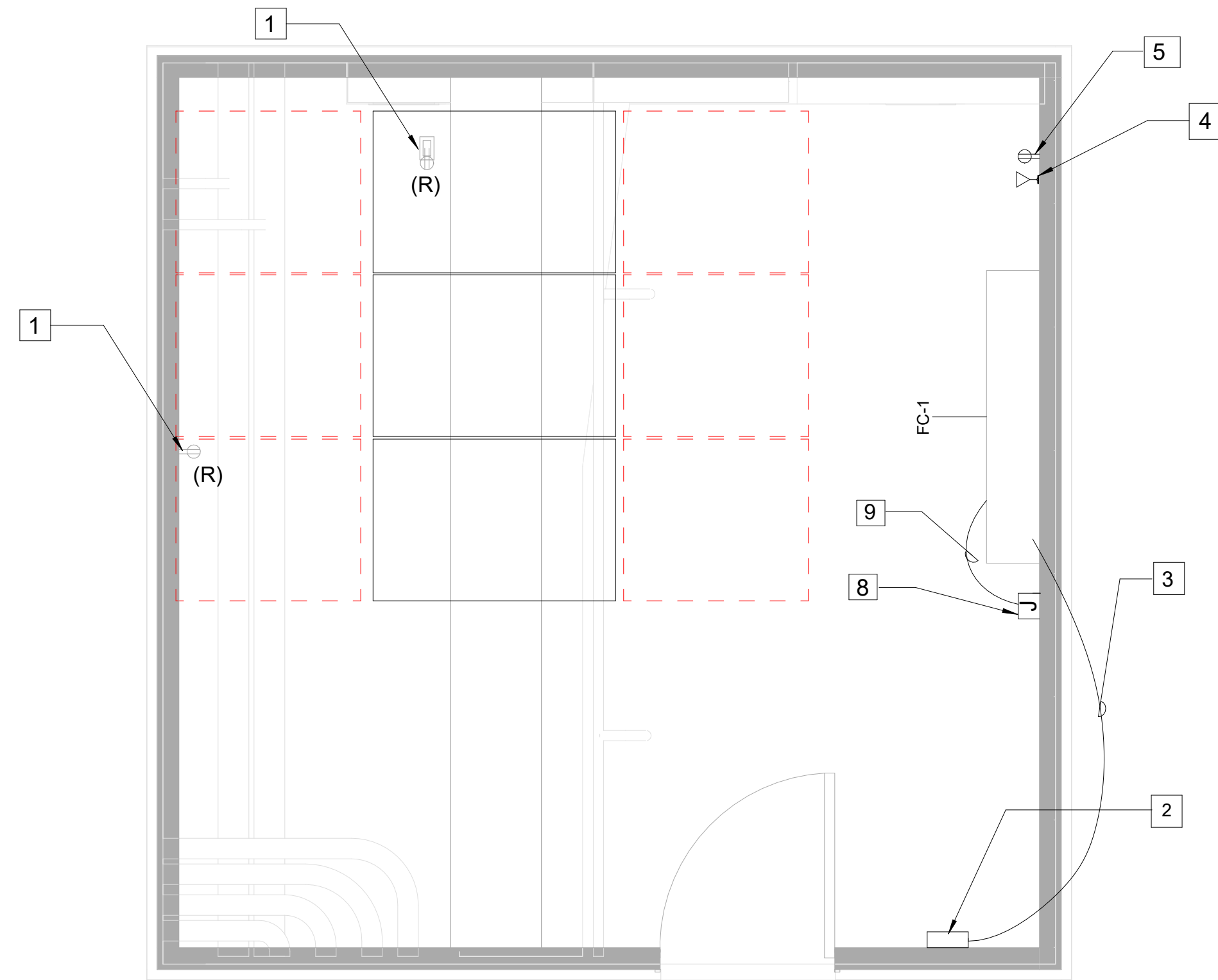
THE SIGNATURE AND SEAL OF A
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RESPONSIBLE CHARGE (THE DIRECT
CONTROL AND PERSONAL SUPERVISION)
OF THE PROFESSIONAL ENGINEER AND
CERTIFIES THAT THE WORK WAS
PERFORMED COMPETENTLY, MEETS THE
PROFESSIONAL STANDARD OF CARE, AND
ACCEPTABLE STANDARDS OF PRACTICE.

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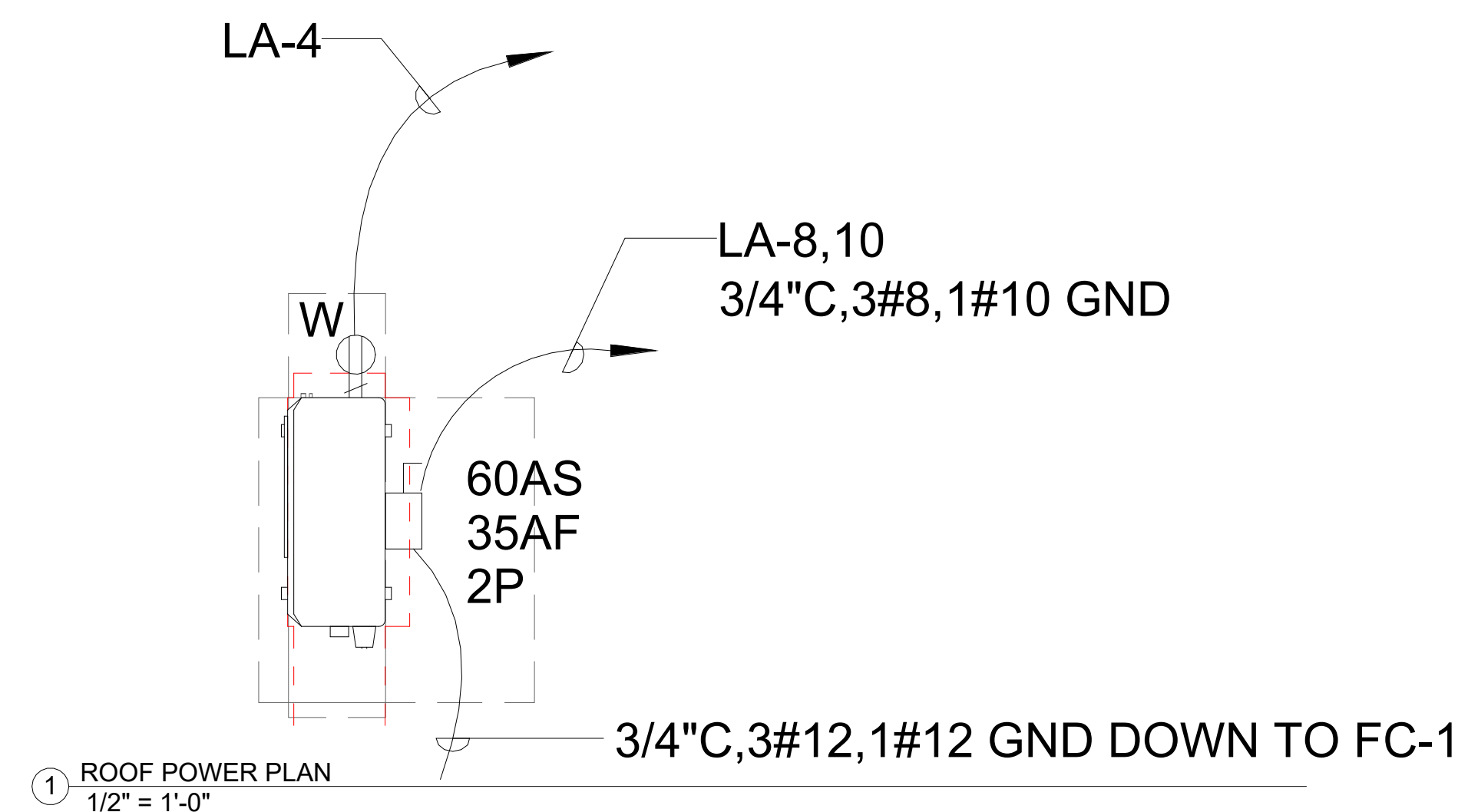
1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
ELECTRICAL PLAN -
LIGHTING

SHEET NUMBER
E-01



② REMODEL PLAN - POWER
1/2" = 1'-0"



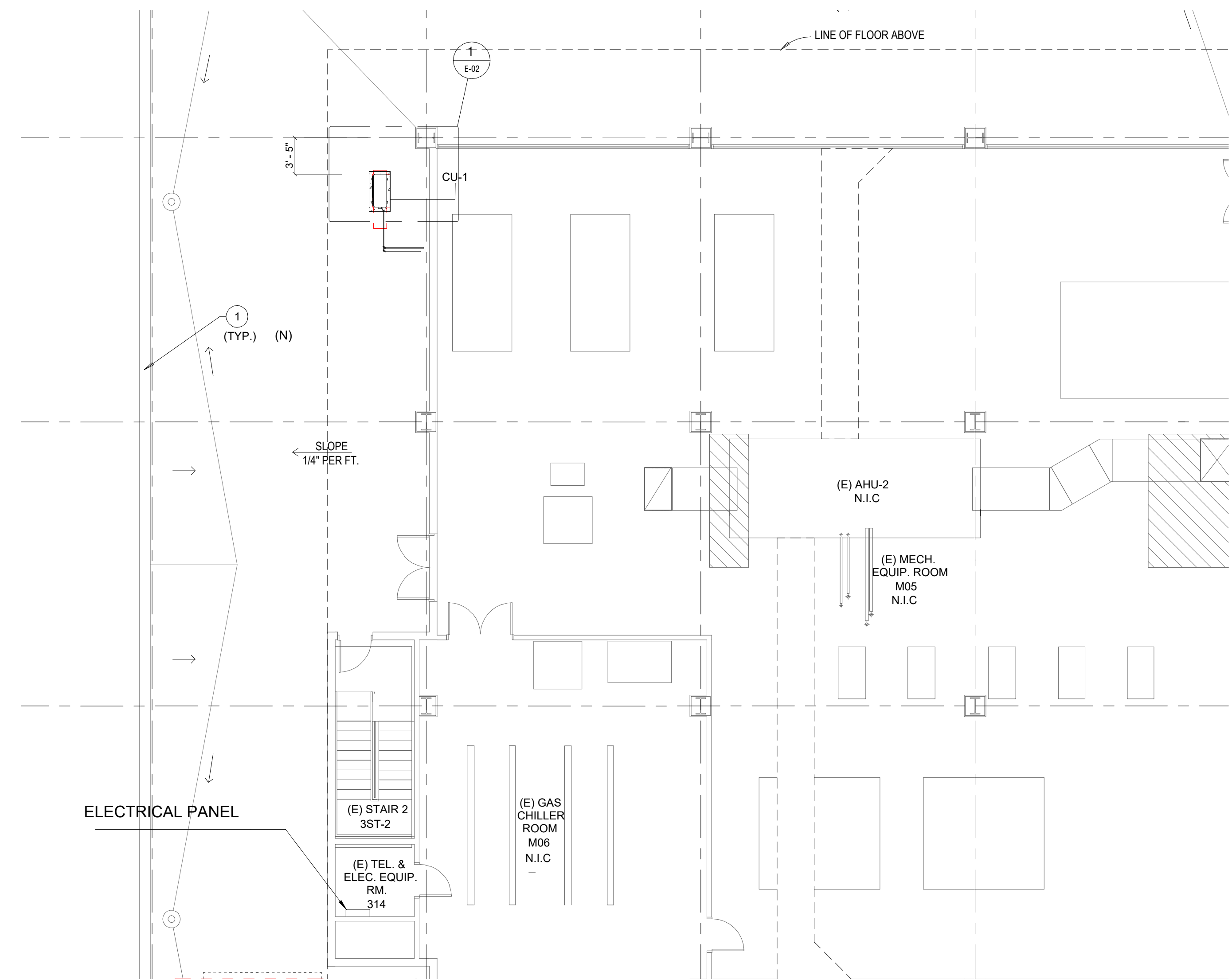
① ROOF POWER PLAN
1/2" = 1'-0"

GENERAL NOTES:

1. NO CONDUIT SHALL BE RUN EXPOSED ON ROOF. RUN ALL CONDUITS IN CEILING SPACE AND STUB THROUGH ROOF AT CONNECTION POINT. VERIFY ROUGH-IN LOCATIONS WITH MECHANICAL CONTRACTOR.
2. ALL EQUIPMENT ON ROOF SHALL BE WEATHERPROOF, NEMA 3R. ALL BOXES, CONDUIT AND RECEPTACLES SHALL BE WEATHERPROOF. SEAL OPENINGS

KEY NOTES

- 1 DISCONNECT INTERCEPT CIRCUIT AND RELOCATE EXISTING POWER OUTLET
- 2 20A, 2P, 208V 1PHASE.
- 3 3/4"C, 3#12, 1#12 GND UP TO "CU-1" ON ROOF. REFER TO MECHANICAL DRAWINGS. FC-1 IS INTERNALLY POWERED BY CU-1.
- 4 INSTALL (1) 1" EMT CONDUIT FROM IN ROOM LADDER TRAY TO 4S JUNCTION BOX WITH SINGLE GANGE FLUSH MUG RING FROM DATA, MOUNT AT 42 INCHES TO CENTER OF OUTLET; COUNTER HEIGHT.
- 5 RE-ROUTE INTERCEPTED CIRCUIT FROM DISCONNECTED POWER OUTLETS MARKED (R) AND (V.I.F) TO INSTALL (1) GENERAL PURPOSE/CONVENIENCE 120 VAC, 20 AMP ELECTRICAL QUAD OUTLET AT 42 INCHES TO CENTER OF OUTLET; COUNTER HEIGHT.
- 8 CONDENSATE PUMP, REFER TO MANUFACTURER SHOPDRAWINGS.
- 9 1/2"C, 2#12, 1#12 CU GND TO CONDENSATE PUMP.



③ PARTIAL 3RD FLOOR - ROOF LEVEL
1/8" = 1'-0"

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PROJECT NAME LOCATION OWNER

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TREASURY AND TAX COLLECTION

OWNER



ENGINEER OF RECORD
REVIEWED BY SEAL / STAMP



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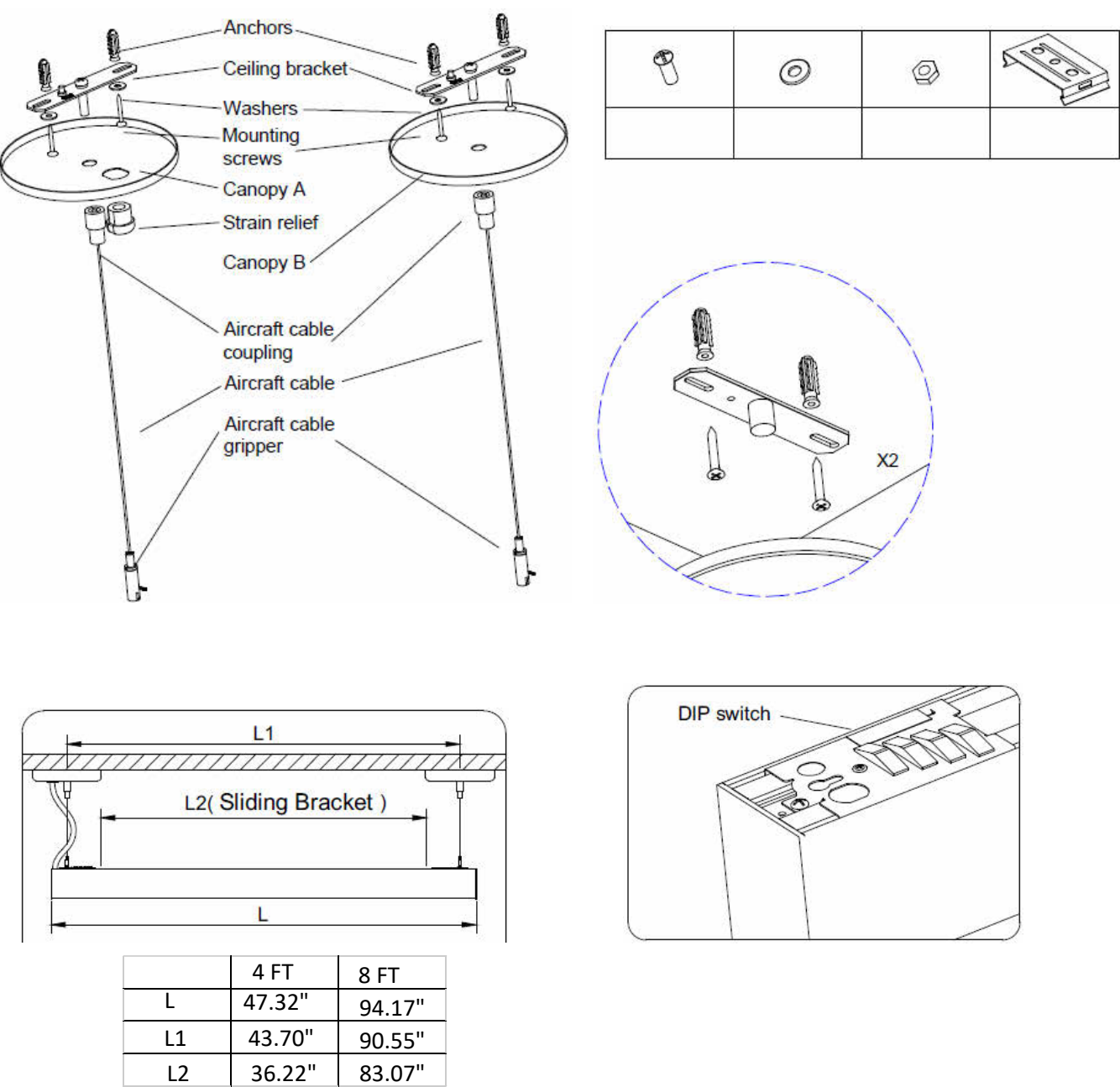
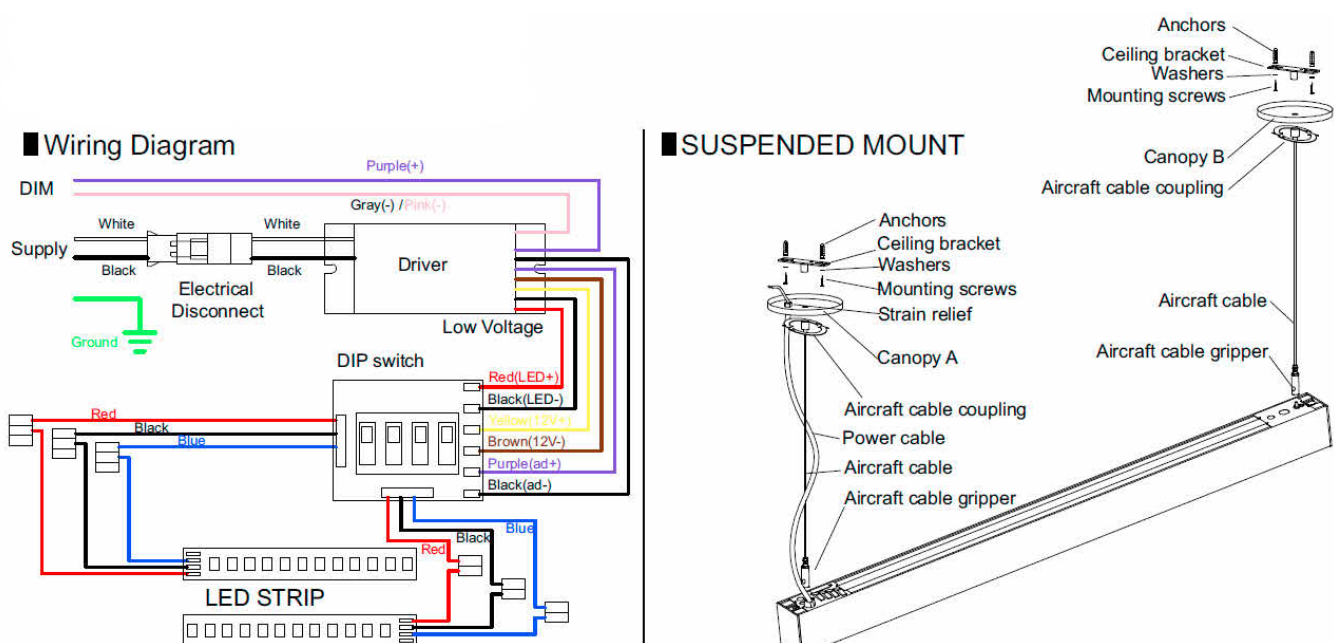
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SHEET NAME

ELECTRICAL PLAN - POWER

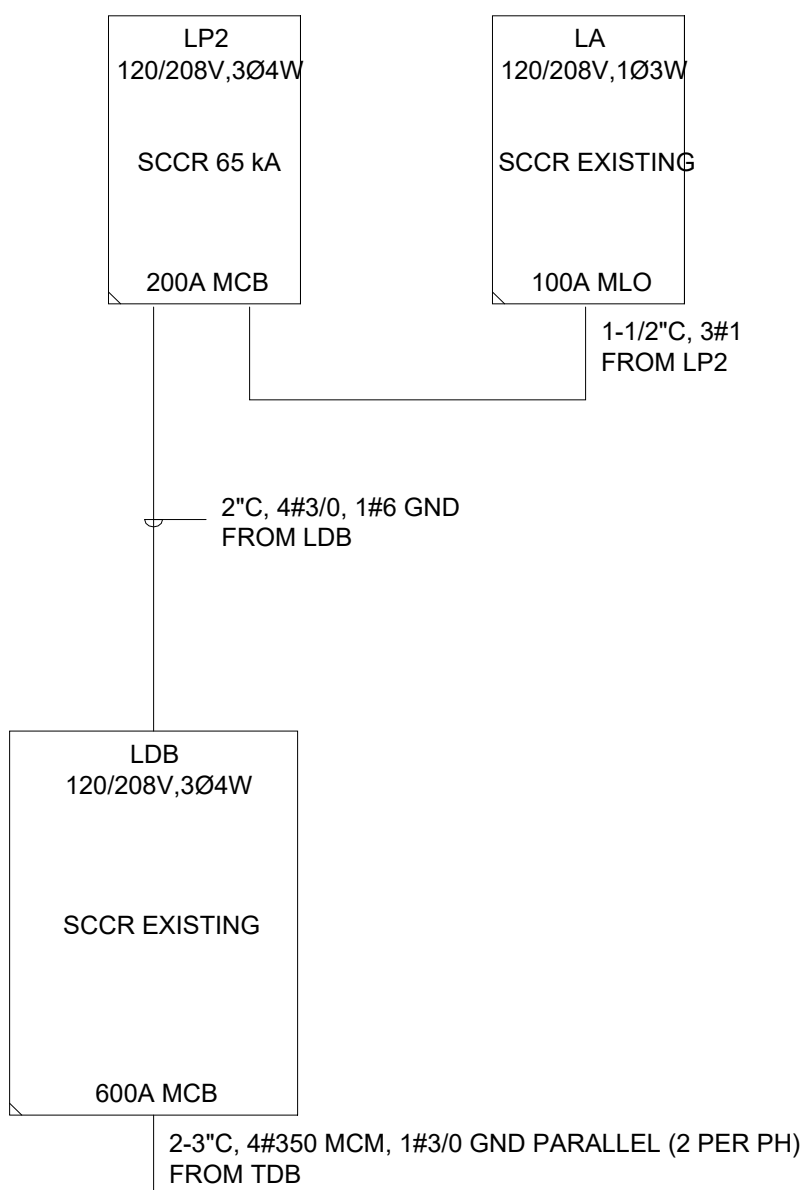
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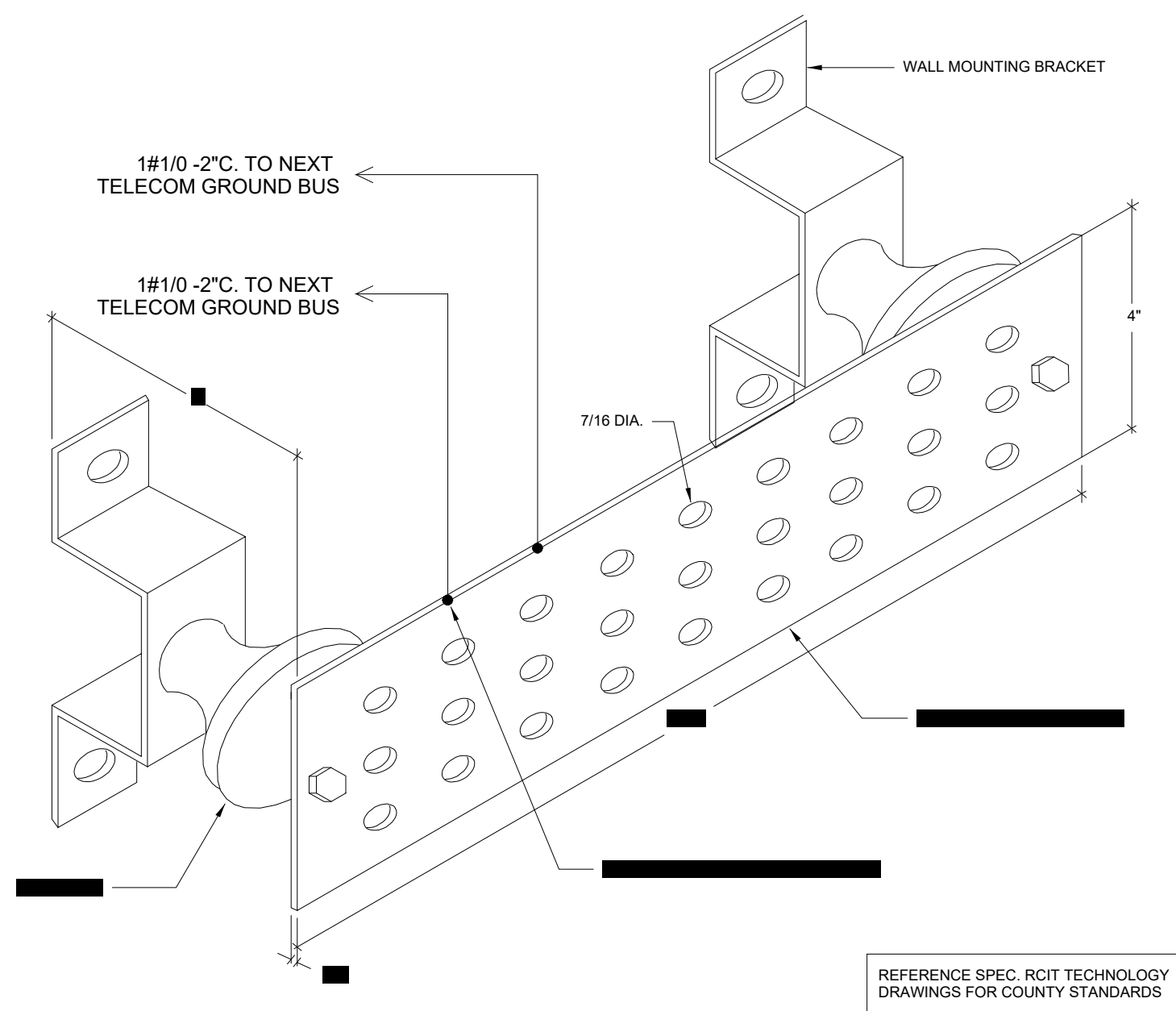
LED LUMINAIRE SCHEDULE

(L/L) LENS/LOUVER: ACRYLIC													
(MTG) MOUNTING: SUSPENDED PENDANT LIGHT				(WATT) PER: FIX - FIXTURE, FT - FOOT, LAMP (TYPE) LED LED - LIGHT EMITTING DIODE									
(TYPE) DRIVER: 0-10V - 0-10V DIMMING													
CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN.													
VERIFY AND COORDINATE ALL CEILING TYPES WITH LUMINAIRE MOUNTING AND TRIM REQUIREMENTS PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER. CONFIRM ALL COLORS AND FINISHES OF ALL LUMINAIRE COMPONENTS WITH ARCHITECT AND INTERIOR DESIGNER PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER. UNLESS INDICATED ON LIGHTING PLANS OR BELOW.													
ITEM	DESCRIPTION	MTG	DIMENSIONS			WATT		LED		DRIVER		APPROVED MANUFACTURER/OR APPROVED EQUAL	
			L	W	H	ANSI WATT S	PER	TYPE	QTY	DELIVERED LUMENS (MIN)	VOLTS		TYPE
A	4' X 2" LED FIXTURE	SUS	47.32"	2.76"	3.35"	40 W	FIX	LED	2	4800	120 - 277 V	0-10V	WareLight BEAMLED4-40W-4CT-DMV-WH-G2
B	16.4 FT. LOW VOLTAGE LED SMART LIGHT STRIP W MOUNTING-PACK)	RE	197"	1.76"	1"	18 W	PACK	LED	2	4800	120	PLUG IN	PHILIPS HUE LOW VOLTAGE



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PANEL A LOAD CALCULATION	
ADDED LOAD = 28 A	
NEW TOTAL CONNECTED LOAD	= 39.4 A



1 PARTIAL SINGLE LINE DIAGRAM-EXISTING

NO SCALE

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1ST SUBMITTAL:
REVISION#01
REVISION#02

SHEET NAME
SINGLE LINE
DIAGRAMS,
SCHEDULES, AND
DETAILS

SHEET NUMBER

E-03