

WEST REGIONAL LIBRARY RENOVATION

4000 LOUIS STEPHENS DR. CARY, NC 27519

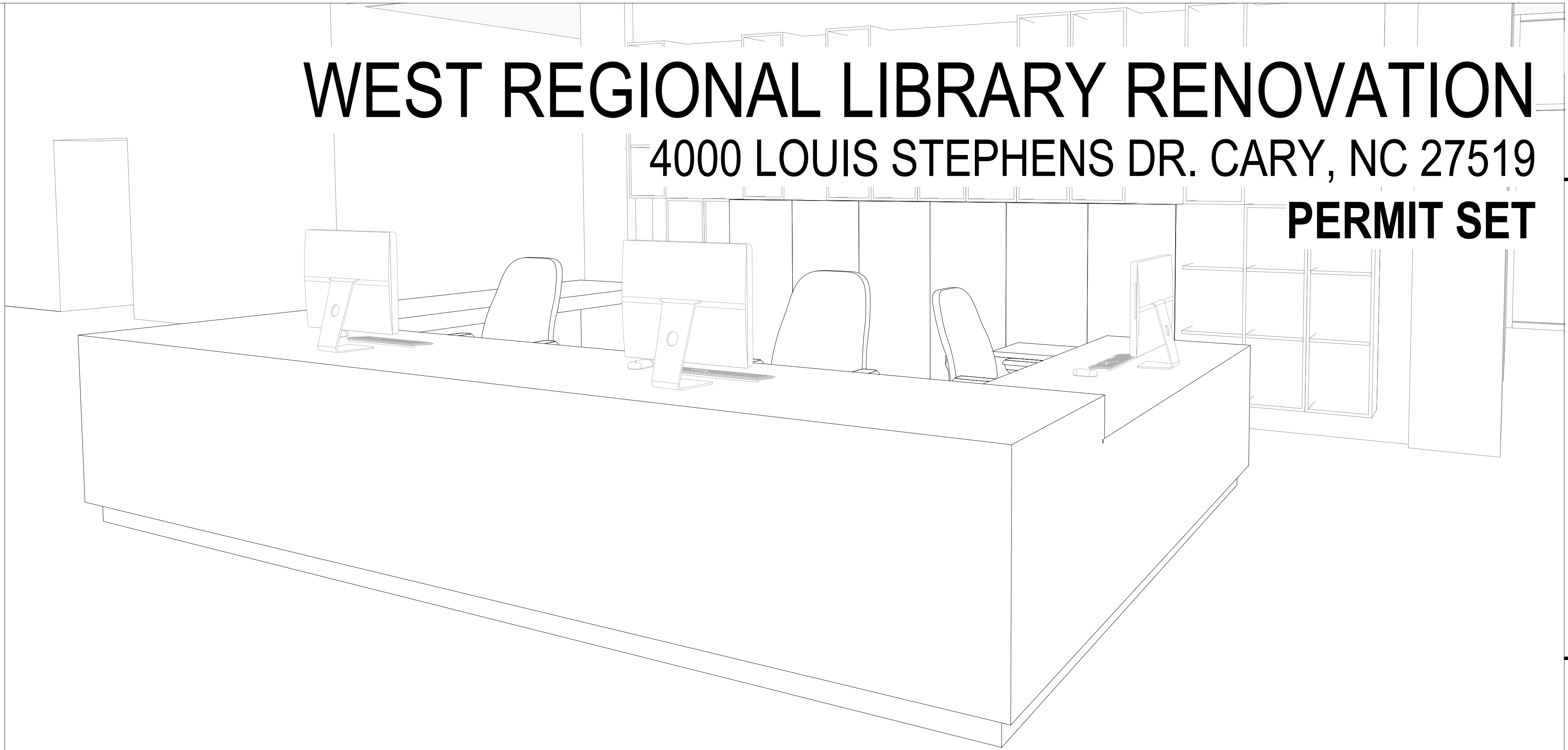
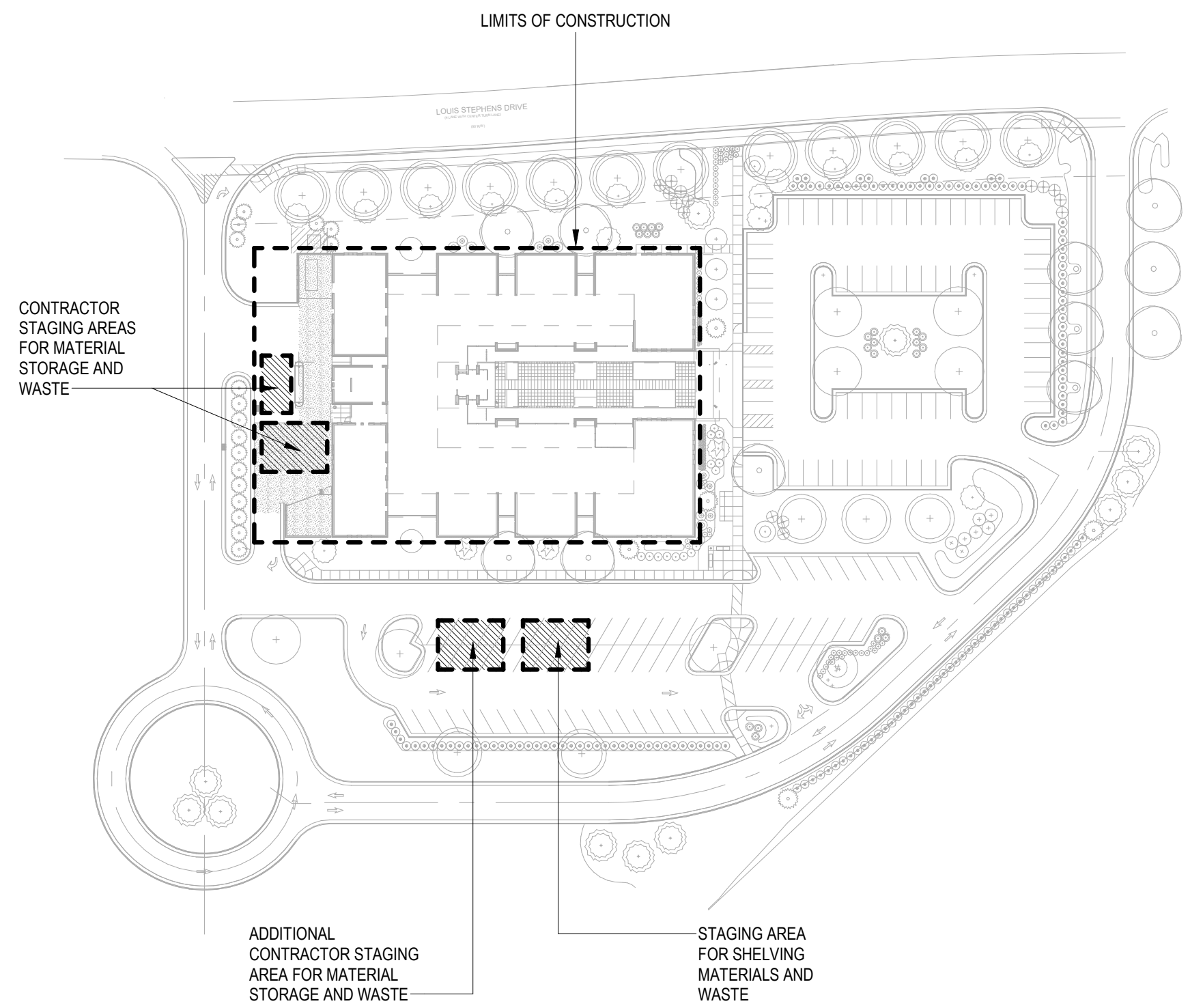
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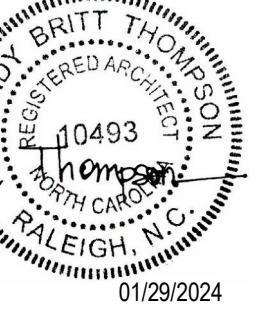
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SEALS



PERMIT SET
01.29.2024

PROJECT

WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

No.	Description	Date

PROJECT DATA

DATE: 01.29.2024
DRAWN: LP
CHECKED: EM
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

SHEET DATA

COVER

SHEET NO.

G000

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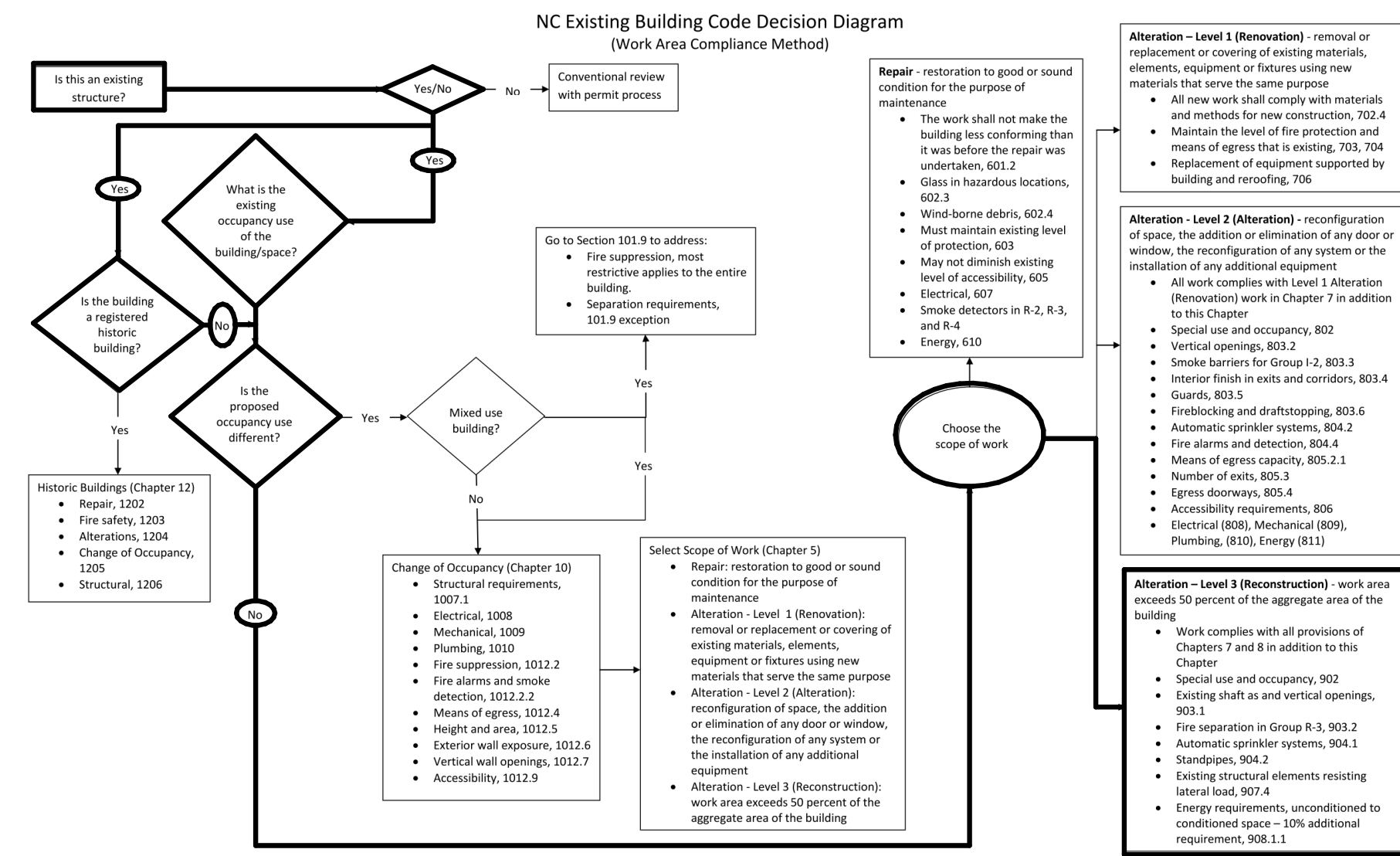
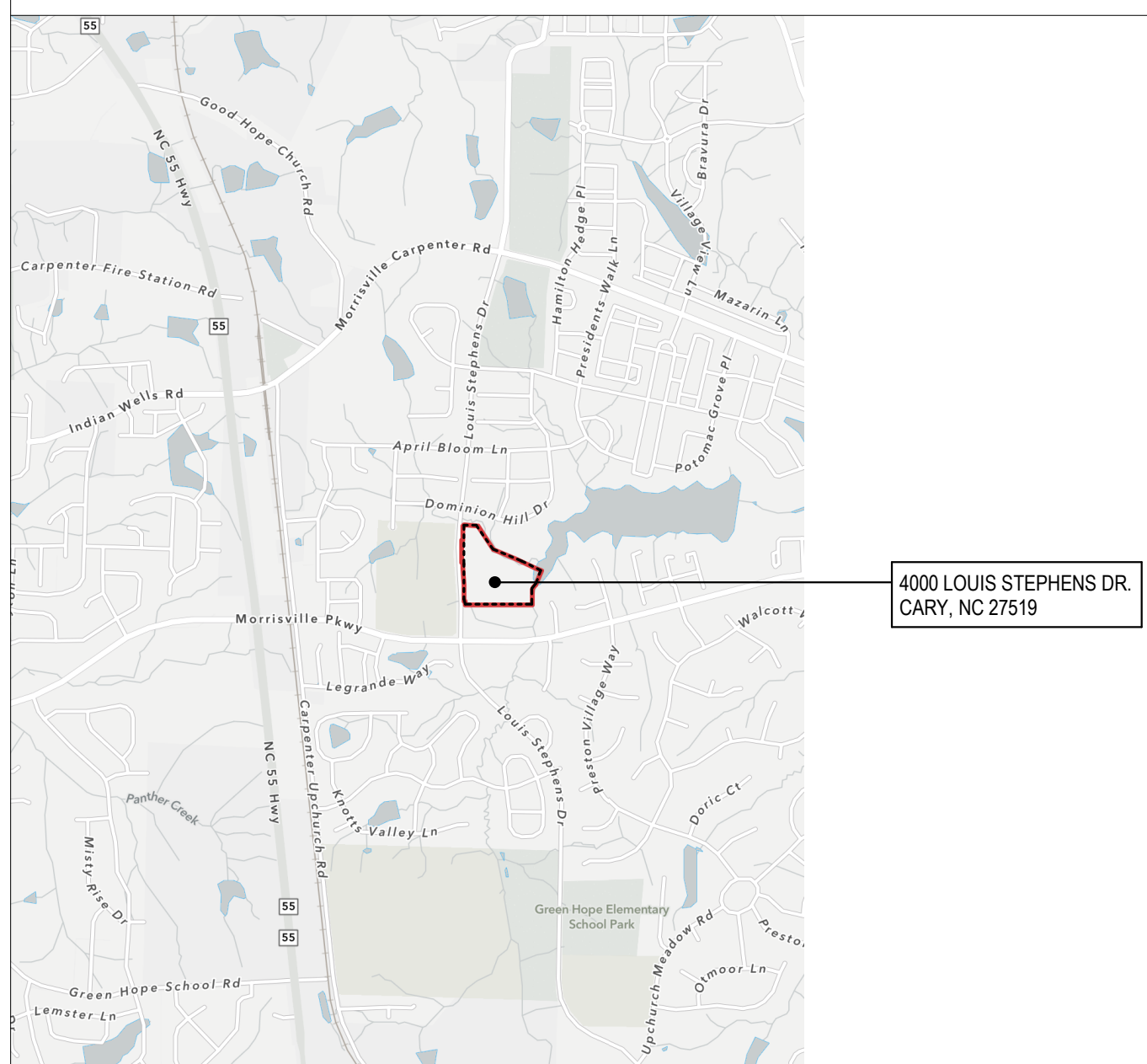
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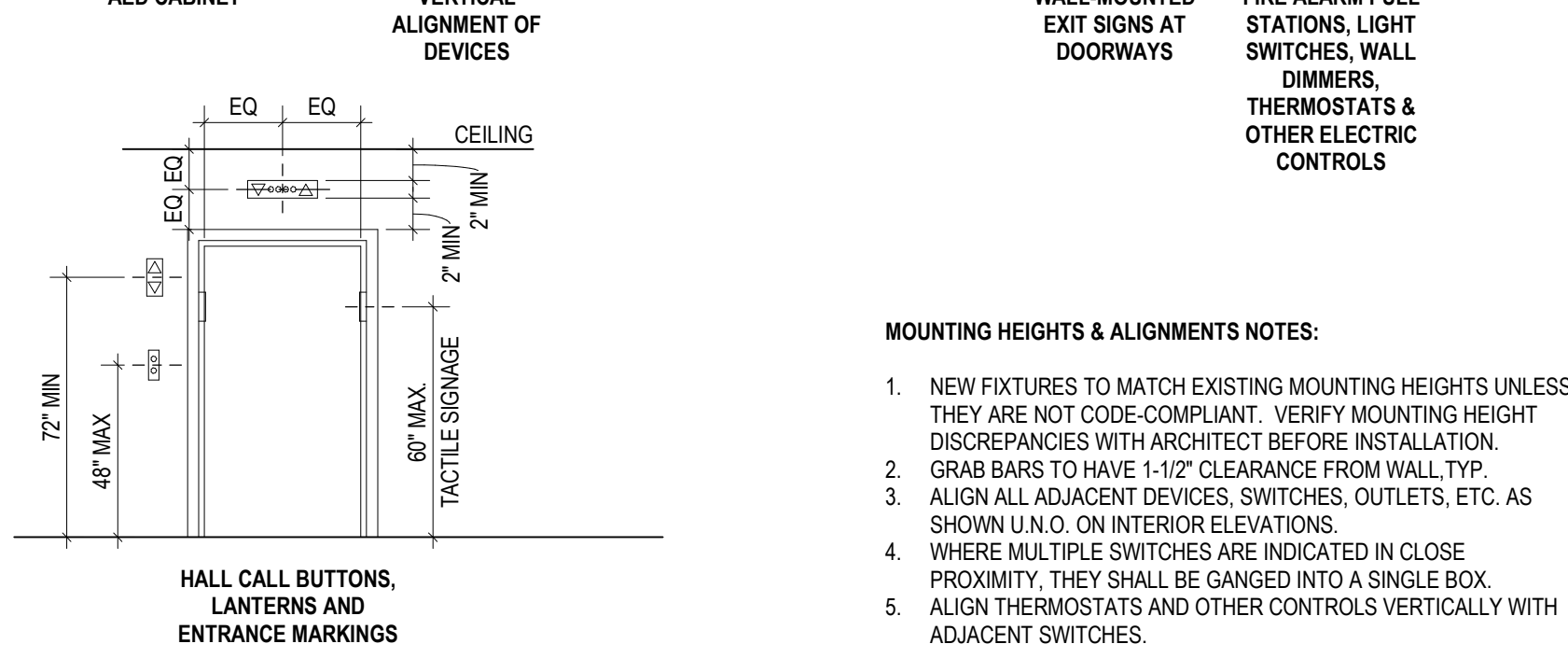
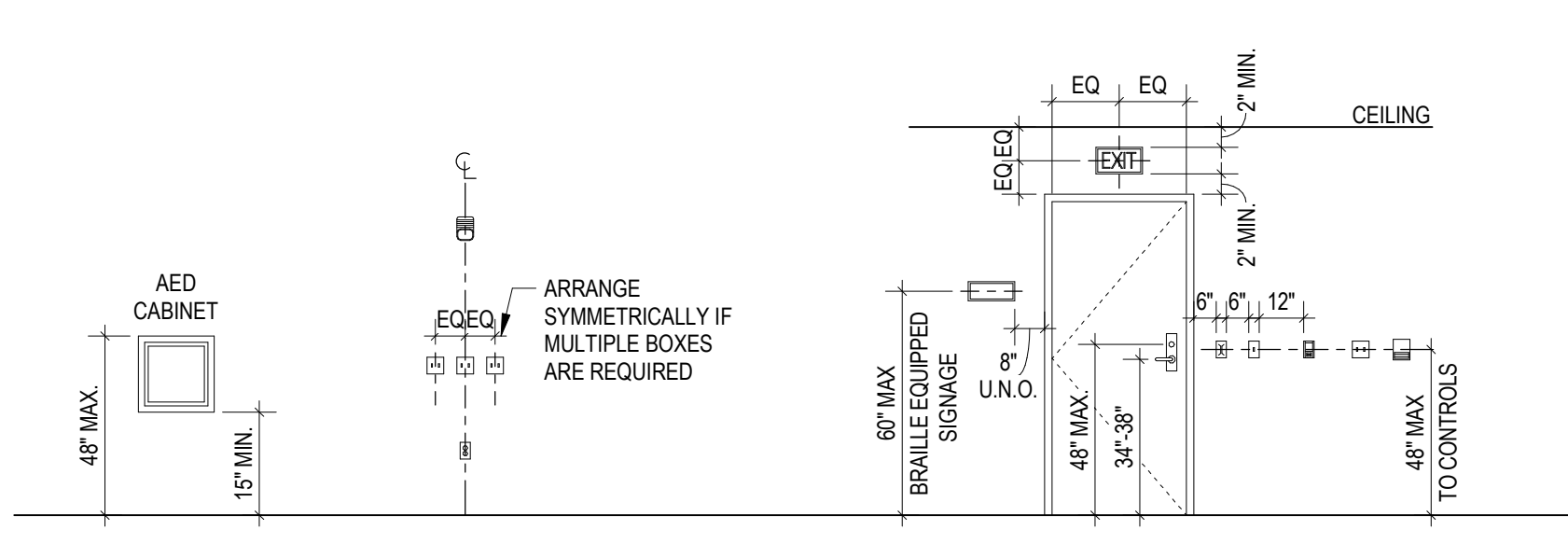
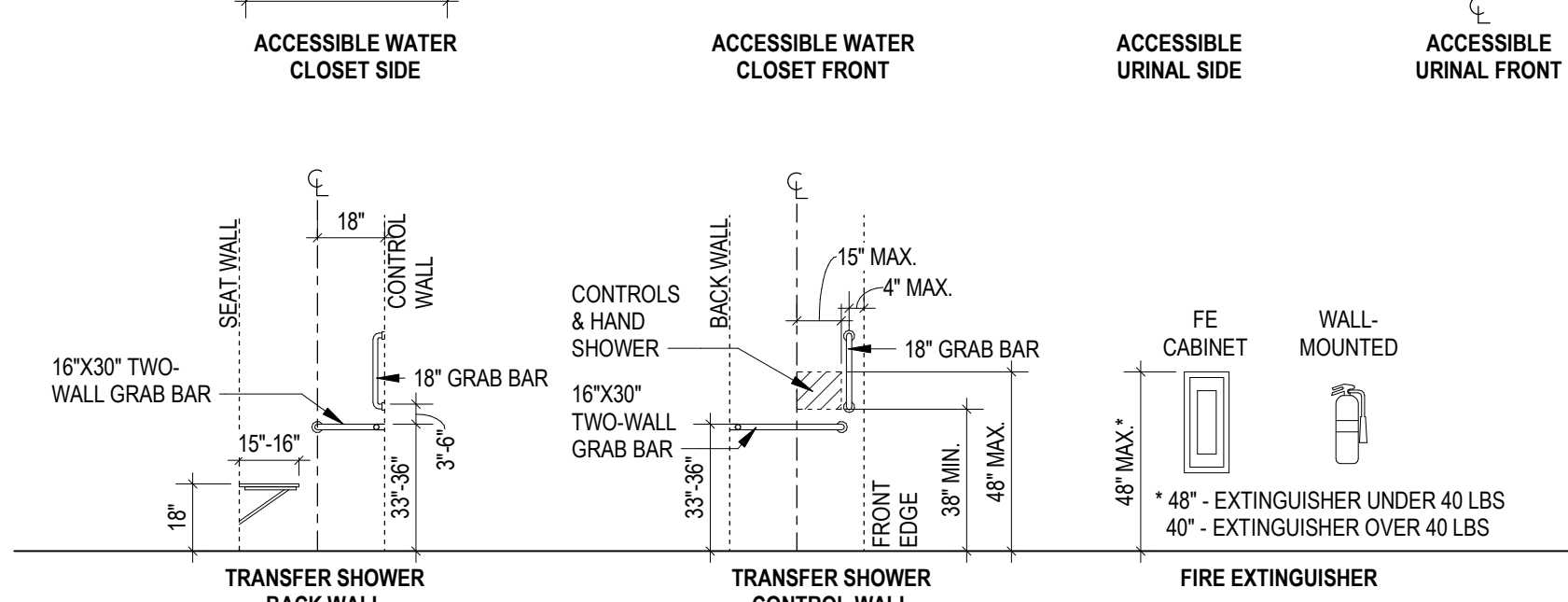
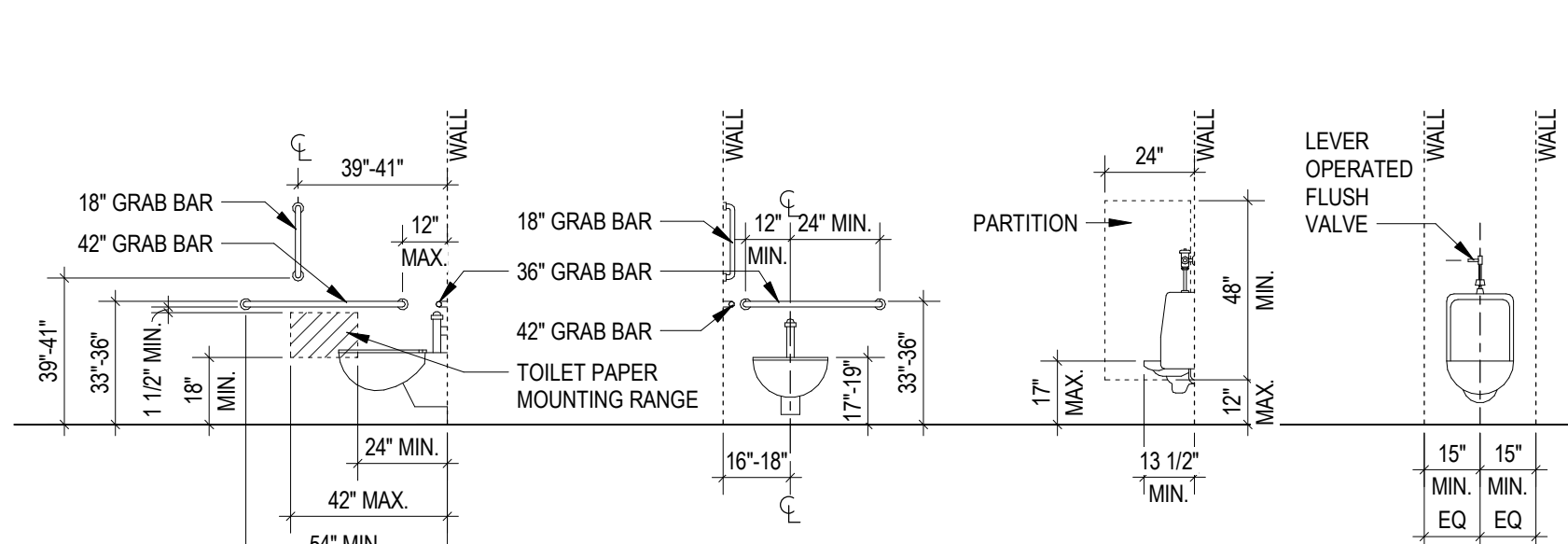
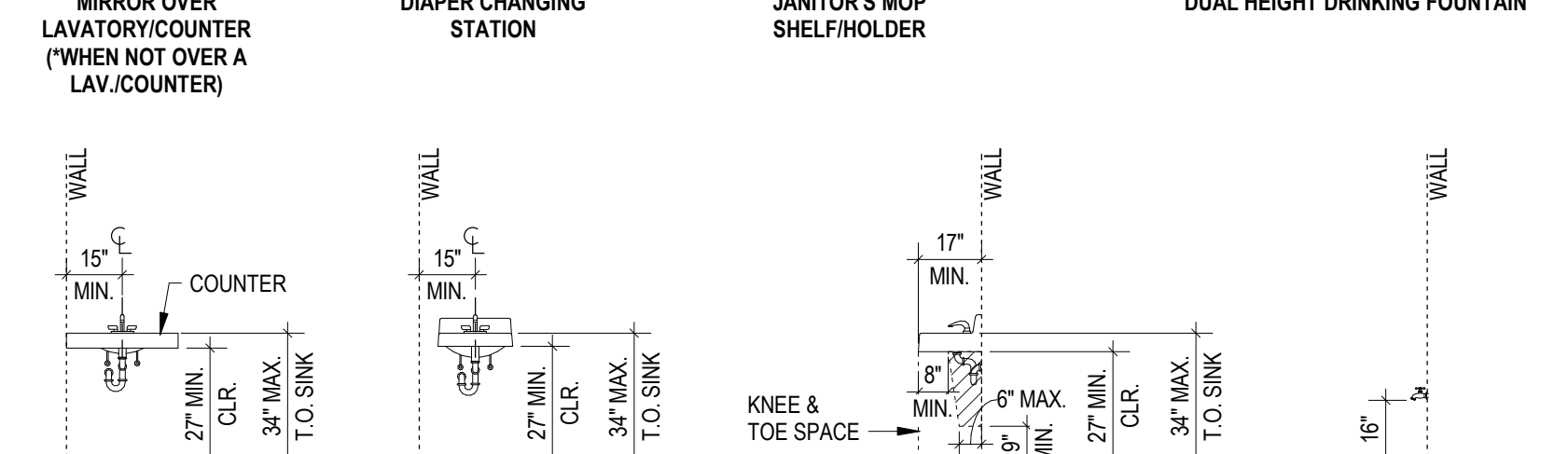
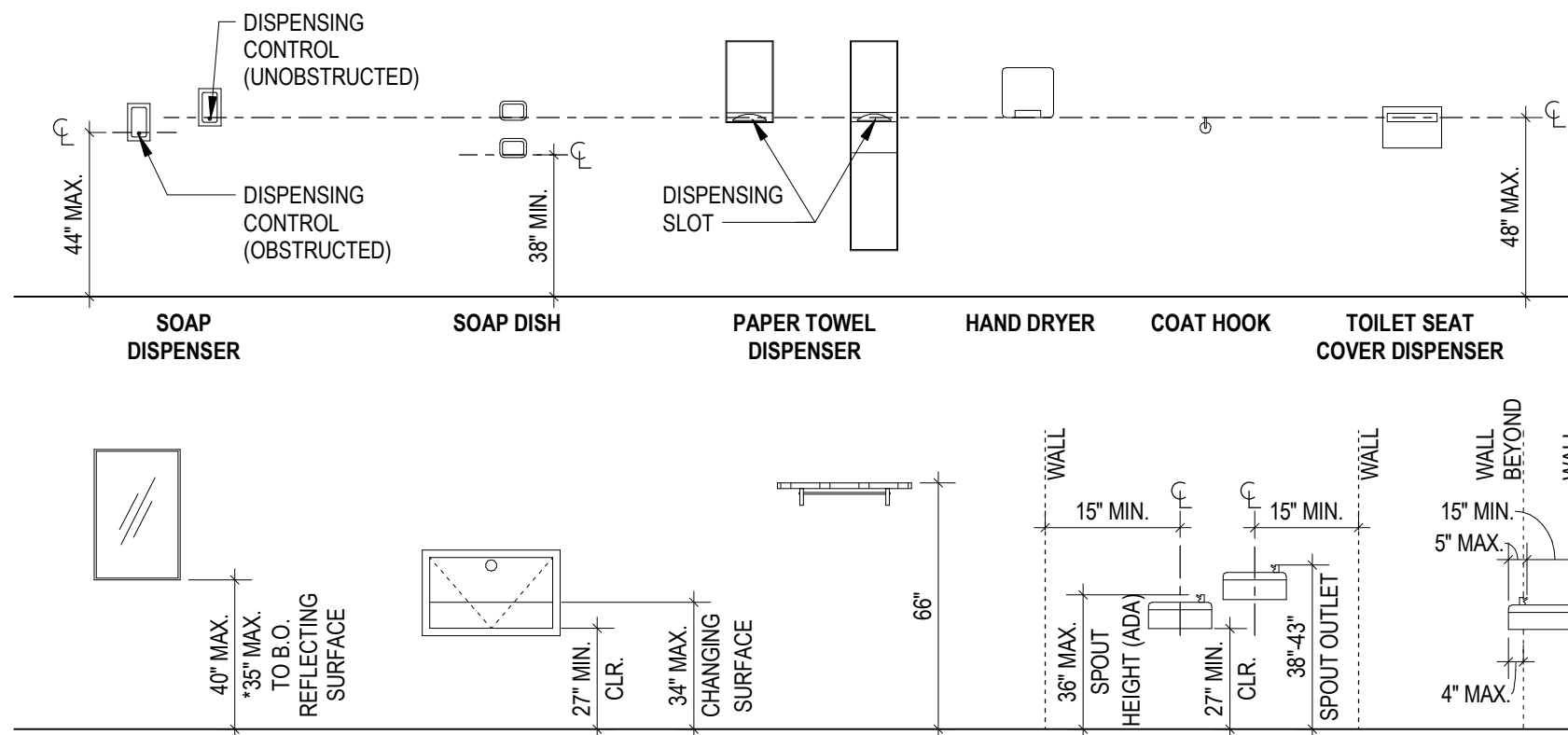
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- SEC200 SECURITY NEW WORK
- SEC400 SECURITY DETAILS

VICINITY MAP



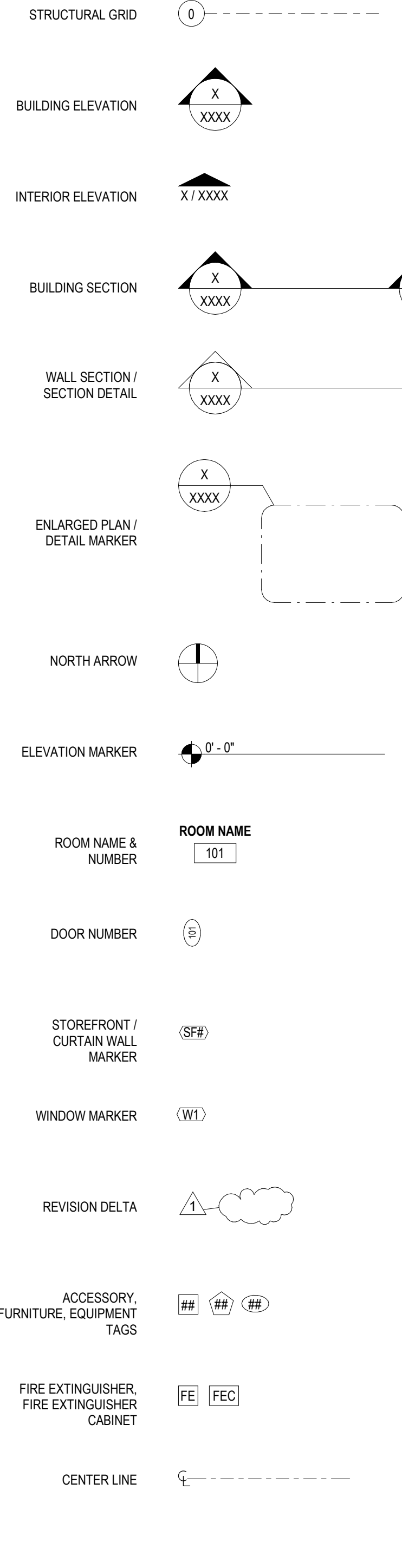
MOUNTING HEIGHTS



MOUNTING HEIGHTS & ALIGNMENT NOTES:

- NEW FIXTURES TO MATCH EXISTING MOUNTING HEIGHTS UNLESS THEY ARE NOT CODE-COMPLIANT. VERIFY MOUNTING HEIGHT DISCREPANCIES WITH ARCHITECT BEFORE INSTALLATION.
- GRAB BARS TO HAVE 1-1/2" CLEARANCE FROM WALL, TOP.
- ALIGN ALL ADJACENT DEVICES, SWITCHES, OUTLETS, ETC. AS SHOWN U.N.O. ON INTERIOR ELEVATIONS.
- WHERE MULTIPLE SWITCHES ARE INDICATED IN CLOSE PROXIMITY, THEY SHALL BE GANGED INTO A SINGLE BOX.
- ALIGN THERMOSTATS AND OTHER CONTROLS VERTICALLY WITH ADJACENT SWITCHES.

SYMBOLS



ABBREVIATIONS

&	AND	H	HEIGHT
<	ANGLE	HB	HOSE BIBB
*	ANGLE IN DEGREES	HC	HANDICAPPED, HOLLOW CORE
@	AT	HDWD	HARDWOOD
X	BY	HDWR	HARDWARE
Ø	DIAMETER	HM	HOLLOW METAL
(E)	EXISTING	HO	HOLD OPEN
(N)	NEW	HR	HORIZONTAL
%	PERCENT	HR	HOUR
#	POUNDS OR NUMBER	HSS	HOLLOW STRUCTURAL SECTION
		HVAC	HEATING, VENTILATION AND AIR CONDITIONING
ABV	ABOVE	ID	INSIDE DIAMETER
AC	ACCESSIBLE	IFO	INSIDE FACE OF
ACM	ALUMINUM COMPOSITE MATERIAL	INCAND	INCANDESCENT
ACT	ACOUSTICAL CEILING TILE	INCL	INCLUDE(D), INCLUSIVE
AD	ACCESS DOOR, AREA DRAIN	INFO	INFORMATION
ADA	AMERICANS WITH DISABILITIES ACT	INSUL	INSULATION
ADDL	ADDITIONAL	INT	INTERIOR
ADJ	ADJACENT	INV	INVERT
ADMIN	ADMINISTRATION	IRR	IRRIGATION
AF	ACCESS FLOOR		
AFF	ABOVE FINISH FLOOR	JB	JUNCTION BOX
AGGR	AGGREGATE	JST	JOIST
AHU	AIR HANDLING UNIT	JT	JOINT
ALT	ALTERNATE		
AL	ALUMINUM	LAM	LAMINATE(D)
ANOD	ANODIZED	LAV	LAVATORY
APPROX	APPROXIMATE(LY)	LB	POUND
ATR	ABOVE TOP OF RAIL	LD	LINEAR DIFFUSER
AUX	AUXILIARY	LDR	LEADER
AV	AUDIO VISUAL	LED	LIGHT EMITTING DIODE
		LH	LEFT HAND
BD	BOARD	LI	LINEAR
BIT	BITUMEN	LO	LOAD
BUILDG	BUILDING	LOC	LOCATION
BLST	BALLAST		
BLW	BELOW		
BM	BEAM		
BO	BOTTOM OF	MAINT	MAINTAIN, MAINTENANCE
BOF	BOTTOM OF FOOTING	MAS	MASONRY
BOL	BOLLARD	MATL	MATERIAL
BOL	BOLLARD	MC	MASONRY CEMENT
BOT	BOTTOM	MDF	MEDIUM DENSITY FIBERBOARD
BRKT	BRACKET	MECH	MECHANICAL
BTWN	BETWEEN	MEZZ	MEZZANINE
BUR	BUILT UP ROOF	MFR	MANUFACTURER
		MH	MANHOLE
CB	CATCH BASIN	MIN	MINIMUM
CEM.	CEMENT(TITIOUS)	MISC	MISCELLANEOUS
CI	CAST IRON	MO	MASONRY OPENING
C.I.P.	CAST IN PLACE	MTD	MOUNTED
CJ	CONTROL JOINT	MTL	METAL
CL	CENTER LINE	NC	NO FINISH
CLK	CAULKING	NA	NOT APPLICABLE
CLNG	CEILING	NF	NO FINISH
CLO	CLOSET	NFC	NO FINISH CEILING
CLR	CLEAR	N.I.C.	NOT IN CONTRACT
CMU	CONCRETE MASONRY UNIT	NO	NUMBER
COL	COLUMN	NOM	NOMINAL
COMP	COMPOSITE	NPN	NEOPRENE
CONC	CONCRETE	NTS	NOT TO SCALE
CONST	CONSTRUCTION		
CONT	CONTINUOUS	OE	OVER
CPT	CARPET	OAE	OR APPROVED EQUAL
CSJ	CONSTRUCTION JOINT	OC	ON CENTER
CTR	CENTER	OD	OUTSIDE DIAMETER
		OFF	OFFICE
DBL	DOUBLE	OFO	OUTSIDE FACE OF
DEG	DEGREE	O.F.	OWNER FURNISHED / CONTRACTOR INSTALLED
DEMO	DEMOLITION	O.I.O.	OWNER INSTALLED / OWNER INSTALLED
DET	DETAIL(S)	OH	OPPOSITE HAND
D.G.	DECOMPOSED GRANITE	OPP	OPPOSITE
D.I.	DIRECT/INDIRECT	OVFL	OVERFLOW
DIA	DIAMETER	OVHD	OVERHEAD
DIM	DIMENSION	OZ	OUNCE
DIST	DISTANCE		
DIV	DIVISION	PASS	PASSENGER
DN	DOWN	P/C	PRECAST
DN	DOWN	PERF	PERFORATED
DR	DR	PERP	PERPENDICULAR
DS	DOWNSPOUT	PKG	PACKAGING
DRY	DRY	PL	PROPERTY LINE
DTL	DETAIL	PLAM	PLASTIC LAMINATE
DWG	DRAWING	PLBG	PLUMBING
DWR	DRAWER	PLY	PLYWOOD
		POL	POLYSTYRENE(D)
E	EAST	POT	PATH OF TRAVEL
EA	EACH	PR	PAIR
EJ	EXPANSION JOINT	PREFIN	PREFINISHED
EL	ELEVATION	PRELIM	PRELIMINARY
ELEC	ELECTRICAL	PRESS	PRESSURE
ELEV	ELEVATION OR ELEVATOR	PROJ	PROJECT
EQ	EQUAL/EQUAL TO	PROP	PROPERTY
EQ	EQUAL/EQUAL TO	PROT	PROTECTION
EQUIV	EQUIVALENT	PT	PRESSURE TREATED
ES	EXIT SIGN	PTD	PAINTED
EW	ELECTRIC WATER COOLER	PVC	POLYVINYL CHLORIDE
EXT	EXTERIOR		
		RAD	RADIUS
F	FIRE ALARM	RCP	REFLECTED CEILING PLAN
FD	FLOOR DRAIN	RE	REFER TO
FDC	FIRE DEPARTMENT CONNECTION	REIN	REINFORCE(D)
FDN	FOUNDATION	REQD	REQUIRED
FE	FIRE EXTINGUISHER	RH	RIGHT HAND
FEC	FIRE EXTINGUISHER CABINET	RM	ROOM
FLL	FINISH FLOOR LEVEL	R.O.	ROUGH OPENING
FR	FIRE HYDRANT		
FLR	FLOOR	S	SOUTH
FLUOR	FLUORESCENT	SB	SPLASH BLOCK
FIN	FINISH	S.C.	SOLID CORE
F.O.	FACE OF	S.C.D.	SEE CIVIL DRAWINGS
FOC	FACE OF CONCRETE	SCHED	SCHEDULE
FOF	FACE OF FINISH	SECT	SECTION
FOM	FACE OF MASONRY	S.E.D.	SEE ELECTRICAL DRAWINGS
FOS	FACE OF STUD	SIM	SIMILAR
FR	FIRE RETARDANT	SL	SLOPE
FRP	FIBERGLASS REINFORCED PLASTIC	S.L.A.D.	SEE LANDSCAPE DRAWINGS
FRPT	FIRE RETARDANT/PT FASTENER	S.M.	SURFACE MOUNTED
FSR	FLAME SPREAD RATING	M.D.	SEE MECHANICAL DRAWINGS
FT	FOOT, FEET	S.P.D.	SEE PLUMBING DRAWINGS
FTG	FOOTING	SPECS	SPECIFICATIONS
FURN	FURNITURE	S.S.	STAINLESS STEEL
		S.S.D.	SEE STRUCTURAL DRAWINGS
GA	GAUGE	STL	STEEL
GALV	GALVANIZED	STRUCT	STRUCTURE
GC	GENERAL CONTRACTOR		
GLAZ	GLAZING	THK	THICK
GOVT	GOVERNMENT	THRU	THROUGH
GR	GRANITE	T.O.	TOP OF
GRD	GRADE	T.O.F.	TOP OF FOOTING
GSM	GALVANIZED SHEET METAL	TYP	TYPICAL
GT	GROUT		
GUT	GUTTER	UNO/UON	UNLESS NOTED OTHERWISE
GWB	GYPSUM BOARD		
GYP	GYPSUM BOARD		
		VER	VERIFY
		VIF	VERIFY IN FIELD
		W	WITH
		WC	WATER CLOSET
		WD	WOOD

GENERAL NOTES

GENERAL REGULATORY REQUIREMENTS

0-1. ALL WORK SHALL CONFORM TO:

- 2018 NORTH CAROLINA EXISTING STATE BUILDING CODE (2015 IBC AND CURRENT NC AMENDMENTS)
- CURRENT RULES AND REGULATIONS OF THE TOWN OF CARY, NORTH CAROLINA
- RULES AND REGULATIONS OF APPLICABLE STATE AND/OR LOCAL PUBLIC UTILITIES
- AMERICANS WITH DISABILITIES ACT, 26 JULY 1991 AND ANSI 117.1 (2009) WITH RESPECTIVE CURRENT AMENDMENTS

0-2. THE BUILDING CODE COMPLIANCE SUMMARIES AND LIFE SAFETY PLANS ARE GENERAL GUIDES TO THE CONSTRUCTION CRITERIA DEVELOPED FOR THIS PROJECT. THEY ARE NOT INTENDED TO BE A COMPLETE LIST OF CODE REQUIREMENTS.

0-3. PENETRATIONS OF ALL PIPES, CONDUITS, SWITCHES, OUTLETS, AND ANY OTHER ITEMS AT RATED ASSEMBLIES SHALL BE FIRE-STOPPED.

0-4. THE INTEGRITY OF THE FIRE RESISTANCE RATING OF ALL RATED SHAFT ENCLOSURES, CEILINGS, AND PARTITIONS SHALL BE MAINTAINED BEHIND RECESSED WALL OR CEILING ACCESSORIES, INCLUDING FIRE EXTINGUISHER CABINETS, TOILET ACCESSORIES, ELECTRICAL JUNCTION BOXES, AND ANY OTHER ITEMS WHERE THEY OCCUR.

GENERAL COORDINATION REQUIREMENTS

1-1. THE CONTRACT DOCUMENTS INCLUDE THE DRAWINGS, PROJECT MANUAL, ANY ADDENDA, AND ANY RELATED REGULATORY DOCUMENTS PROVIDED BY THE ARCHITECT. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, PART 2 HISTORIC TAX CREDIT APPLICATIONS AND LOCAL DESIGN OR HISTORIC APPROVALS.

1-2. REFER TO THE PROJECT MANUAL (IF PROVIDED) FOR COMPLETE GENERAL REQUIREMENTS AND CONDITIONS OF THE CONTRACT DOCUMENTS. IF A PROJECT MANUAL IS NOT PROVIDED, AIA DOCUMENT A201 (2007) GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION SHALL SERVE AS THE GENERAL REQUIREMENTS AND CONDITIONS OF THE CONTRACT DOCUMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE VARIOUS ELEMENTS OF CONTRACT DOCUMENTS, THE MORE RESTRICTIVE PROVISION OR REQUIREMENT SHALL APPLY.

1-3. THE CONTRACT DOCUMENTS REPRESENT THE DESIGN INTENT FOR THE FINISHED STRUCTURE AND/OR SITE. UNLESS SPECIFICALLY NOTED, THEY DO NOT INDICATE THE MEANS OR METHOD OF INSTALLATION. THE GENERAL CONTRACTOR SHALL COORDINATE, SUPERVISE, AND DIRECT ALL WORK, SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE, AND SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS.

1-4. PRIOR TO BIDDING, THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR ARE RESPONSIBLE FOR REVIEWING AND COMPARING THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS. BIDS ARE REQUIRED TO INCLUDE ALL WORK REQUIRED FOR A COMPLETE JOB BASED ON ALL ELEMENTS OF THE CONTRACT DOCUMENTS.

1-5. PRIOR TO BIDDING, THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR ARE RESPONSIBLE FOR VISITING THE PROJECT SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND ARE RESPONSIBLE FOR INCLUDING IN THEIR BID ALL WORK REQUIRED FOR A COMPLETE JOB.

1-6. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR REVIEWING AND COORDINATING THEIR WORK WITH ALL OF THE CONTRACT DOCUMENTS PRIOR TO BEGINNING ANY WORK ON SUBMITTALS, SHOP DRAWINGS, FABRICATION, OR INSTALLATION. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE GENERAL CONTRACTOR IN WRITING AND SHALL BE RESOLVED WITH THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK.

1-7. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OWNERS VENDORS INCLUDING, BUT NOT LIMITED TO, TELECOMMUNICATIONS, AUDIO/VISUAL AND SECURITY SYSTEMS. ANY CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF CONTRACT DOCUMENTS AND THE OWNER'S VENDORS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE GENERAL CONTRACTOR IN WRITING AND SHALL BE RESOLVED WITH THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK.

1-8. EXISTING CONDITIONS FOR THE BUILDING AND/OR SITE AS REPRESENTED IN THE CONTRACT DOCUMENTS ARE NOT GUARANTEED. PRIOR TO BEGINNING ANY WORK ON SUBMITTALS, SHOP DRAWINGS, FABRICATION, OR INSTALLATION, THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE EXISTENCE AND LOCATION OF EXISTING CONSTRUCTION AFFECTING THE WORK INCLUDING, BUT NOT LIMITED TO, UNDERGROUND AND OVERHEAD UTILITIES, EXISTING BUILDING SYSTEMS, FLOOR ELEVATIONS, AND OTHER STRUCTURAL OR BUILDING DATUMS.

GENERAL DIMENSIONING REQUIREMENTS

2-1. DIMENSIONS ARE NOTED OR CAN BE DETERMINED FROM OTHER INFORMATION INCLUDED IN THE DRAWINGS. VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY OMISSIONS, DO NOT PROCEED WITH AFFECTED WORK OR RELATED WORK UNTIL THE VARIATIONS OR OMISSIONS HAVE BEEN RESOLVED BY THE ARCHITECT. DO NOT SCALE DRAWINGS. DRAWING SHEETS LESS THAN 24x36" MAY HAVE BEEN REDUCED FROM THE ORIGINALS.

2-2. ALL DIMENSIONS ARE TO FINISHED FACE OF WALL UNLESS OTHERWISE NOTED.

2-3. WALLS, BULKHEADS AND/OR OTHER ARCHITECTURAL ELEMENTS SHOWN TO ALIGN ARE TO HAVE FINISH FACES ALIGN UNLESS OTHERWISE NOTED.

2-4. IF PROVIDED, REFER TO ENLARGED PLANS AND PLAN DETAILS FOR ADDITIONAL INFORMATION AND DIMENSIONS.

2-5. ANY DIMENSIONS AND/OR ELEVATIONS OF OR TYING INTO EXISTING BUILDING COMPONENTS ARE TO BE FIELD-VERIFIED BY GENERAL CONTRACTOR PRIOR TO COMMENCEMENT OF SHOP DRAWINGS, FABRICATION, OR INSTALLATION. VERIFY ANY DISCREPANCIES WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.

2-6. REFER TO P/IMP/FP DRAWINGS FOR QUANTITY AND DESIGN OF ALL FIXTURES / DEVICES / ETC. REFER TO ARCHITECTURAL ENLARGED PLANS AND ELEVATIONS FOR EXACT PLACEMENT OF ANY DEVICES INDICATED. LOCATIONS OF ALL PLUMBING, MECHANICAL, ELECTRICAL, FIRE ALARM, SPRINKLER, AND TELECOMMUNICATIONS DEVICES, FIXTURES, AND ACCESSORIES DIMENSIONED, NOTED, OR OTHERWISE DESCRIBED ON ARCHITECTURAL ENLARGED PLANS AND ELEVATIONS, ARE EXACT. ALL NEW FRAMING MUST ACCOMMODATE THESE LOCATIONS.

2-7. ALIGN ALL ELECTRICAL, MECHANICAL, FIRE ALARM, AND TELEDATA / CABLE DEVICES WHERE IN CLOSE PROXIMITY. COORDINATE WITH OTHER TRADES TO RESERVE PATHWAYS TO MULTIPLE DEVICES - THIS MAY REQUIRE PIPING TO THE SIDES OF JUNCTION BOXES OR DEVICES.

GENERAL MATERIAL REQUIREMENTS

3-1. PROVIDE GALVANIC ISOLATION AT ALL DISIMILAR MATERIALS.

3-2. PROVIDE PRESSURE-TREATED MATERIAL AT LOCATIONS OF WOOD IN CONTACT WITH MASONRY. PROVIDE TYPE 304 STAINLESS STEEL FASTENERS WITH PRESSURE-TREATED MATERIAL.

3-3. MAINTAIN CONTINUITY OF AIRWEATHER BARRIER AT ALL OPENINGS AND PENETRATIONS.

3-4. PROVIDE END DAMS AT ALL SILL CONDITIONS.

OTHER REQUIREMENTS

4-1. TYPICAL DETAILS SHOWN ON THE DRAWINGS SHALL BE INCORPORATED AT ALL APPROPRIATE LOCATIONS WHETHER OR NOT SPECIFICALLY REFERENCED AT EACH LOCATION.

4-2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED DEMOLITION, TEMPORARY SUPPORT OF, AND/OR DAMAGE TO NEW OR EXISTING STRUCTURE DURING CONSTRUCTION. ANY UTILITY LINES, PIPING, EQUIPMENT, FINISHES, OR ANY OTHER PORTIONS OF THE EXISTING BUILDING OR NEW CONSTRUCTION DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT THE ARCHITECT'S DIRECTION AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR.

4-3. THE GENERAL CONTRACTOR IS TO COORDINATE, PROVIDE, AND INSTALL CONCEALED BLOCKING FOR ALL WALL- AND CEILING-MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO, HAND RAILS, GRAB BARS, CABINETS AND OTHER PRELIMINARY OWNER- AND/OR VENDOR-PROVIDED ITEMS, ETC. BLOCKING IS TO BE FIRE-RETARDANT WOOD OR 20ga METAL WITH A FLAME SPREAD AND SMOKE DEVELOPMENT RATING <25 IF THE PROJECT IS IDENTIFIED AS A TYPE 1 OR TYPE 2 BUILDING IN THE CODE SUMMARY.

4-4. CONDUIT, WIRING, OR PIPING SHALL BE ROUTED SUCH THAT IT MAY BE CONCEALED WHEREVER POSSIBLE UNLESS SPECIFICALLY NOTED OTHERWISE. ANY CONDUIT, WIRING, OR PIPING THAT CANNOT BE CONCEALED IN A CONCEALED MANNER MUST BE IDENTIFIED BY THE GENERAL CONTRACTOR AND REVIEWED AND COORDINATED WITH ARCHITECT PRIOR TO COORDINATION DRAWINGS (IF REQUIRED) OR INSTALLATION (IF COORDINATION DRAWINGS ARE NOT REQUIRED).

4-5. IN AREAS OF HARD CEILING, BUILDING SYSTEMS SHALL BE CONFIGURED TO MINIMIZE REQUIRED ABOVE-CEILING ACCESS. THE LOCATION OF ALL ACCESS DOORS MUST BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY ABOVE-CEILING EQUIPMENT, DAMPERS, VALVES, JUNCTION BOXES, ETC. ACCESS DOORS SHALL BE PROVIDED AND INSTALLED FOR ANY WORK THAT REQUIRES ABOVE-CEILING ACCESS. ADDITIONALLY, ANY ACCESS DOORS OR PANELS REQUIRED IN WALLS MUST BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY EQUIPMENT REQUIRING ACCESS.

4-6. ALL FRAMING, SOUND ATTENUATION, AND GYP BOARD FOR NON-RATED SOUND-ATTENUATED WALLS SHALL CONTINUE TO THE UNDERSIDE OF DECK UNLESS SPECIFICALLY NOTED OTHERWISE. GYP BOARD SHALL BE SEALED TO DECK AT EACH FACE WITH JOINT COMPOUND, SEALANT, AND/OR EXPANDING FOAM (ACCEPTABLE ONLY IN CONCEALED CONDITIONS). ANY REQUIRED PIPE, DUCT, OR WIRING PENETRATIONS SHALL BE SEALED AS DESCRIBED ABOVE.

4-7. ALL DEBRIS SHALL BE TRANSPORTED FROM THE SITE AND LEGALLY DISPOSED OF BY THE GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.

4-8. ALL MATERIALS, COMPONENTS, AND SYSTEMS SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION REQUIREMENTS/RECOMMENDATIONS AND WARRANTY REQUIREMENTS EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE REQUIRED BY THE CONTRACT DOCUMENTS OR APPLICABLE CODES OR REGULATIONS.



No.	Description	Date

DATE:	10.29.2024
DRAWN:	LP
CHECKED:	EM
PROJECT NO.:	2023_0030
PRINTING:	PERMIT SET

GENERAL NOTES

SHEET NO.
G001

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: WEST REGIONAL LIBRARY RENOVATION
Address: 4000 LOUIS STEPHENS DR, CARY, NC
Owner/Authorized Agent: PATRICK MCHUGH
E-Mail: patrick.mchugh@wake.gov

Contact table listing designer, firm, name, license #, telephone #, and e-mail for various professionals and firms involved in the project.

2018 NC BUILDING CODE: Renovation

2018 NC EXISTING BUILDING CODE: Alteration Level III
CONSTRUCTED: 2006 CURRENT OCCUPANCY(S) (Ch. 3): A-3
RENOVATED: PROPOSED OCCUPANCY(S) (Ch. 3): A-3

RISK CATEGORY (Table 1604.5): Current: III Proposed: III

BASIC BUILDING DATA

Construction Type: II-B
Sprinklers: Yes NFPA 13
Standpipes: No
Primary Fire District: No
Floor Hazard Area: No
Special Inspections Required: No

Gross Building Area Table showing existing and new square footage for various floors (3rd, 2nd, Mezzanine, 1st, Basement) and a total of 29,480 sq ft.

ALLOWABLE AREA

Primary Occupancy Classification(s): Assembly - A-3
Accessory Occupancy Classification(s): Business/Storage: 2,579 SF (8.75%)
Incidental Uses (Table 509): N/A
Special Uses (Chapter 4 - List Code Sections): N/A
Special Provisions (Chapter 5 - List Code Sections): N/A

Mixed Occupancy: No
Non-Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building.

Actual Area of Occupancy A + Actual Area of Occupancy B
Allowable Area of Occupancy A Allowable Area of Occupancy B

Table with 6 columns: STORY NO., DESCRIPTION AND USE, (A) BLDG AREA PER STORY (ACTUAL), (B) TABLE 506.2 AREA, (C) AREA FOR FRONTAGE INCREASE, (D) ALLOWABLE AREA PER STORY OR UNLIMITED.

1 Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)
b. Total Building Perimeter = (P)
c. Ratio (F/P) = (F/P)
d. W = Minimum width of public way = (W)
e. Percent of frontage increase I1 = 100(F/P - 0.25) x W/30 = (%)

ALLOWABLE HEIGHT

Table with 4 columns: Building Height in Feet (Table 504.3)2, ALLOWABLE, SHOWN ON PLANS, CODE REFERENCE 1.

1 Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.
2 The maximum height of air traffic control towers must comply with Table 412.3.1.
3 The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

Large table detailing fire protection requirements for various building elements, including structural frame, bearing walls, nonbearing walls, floor construction, roof construction, shaft enclosures, and corridor separation.

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

Table with 4 columns: FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES, DEGREE OF OPENINGS PROTECTION (TABLE 705.8), ALLOWABLE AREA (%), ACTUAL SHOWN ON PLANS (%).

LIFE SAFETY SYSTEM REQUIREMENTS

Table with 2 columns: Requirement (Emergency Lighting, Exit Signs, Fire Alarm, Smoke Detection Systems, Carbon Monoxide Detection) and Status (Yes, No).

LIFE SAFETY PLAN REQUIREMENTS

- List of life safety plan requirements including fire and/or smoke rated wall locations, assumed and real property line locations, occupancy use for each area, occupant loads, exit sign locations, exit access travel distances, common paths, dead end lengths, clear exit widths, maximum calculated occupant load capacity, actual occupant load, location of doors with panic hardware, delayed egress locks, doors with electromagnetic egress locks, doors with hold-open devices, emergency escape windows, square footage of each fire area, square footage of each smoke compartment, and code exceptions.

ACCESSIBLE DWELLING UNITS (SECTION 1107)

Table detailing accessible dwelling unit requirements by unit classification and accessibility level.

ACCESSIBLE PARKING (SECTION 1106) EXISTING, NO CHANGE

Table showing accessible parking spaces provided for various lot types (Side Lot, Front Lot, Total).

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

Table detailing plumbing fixture requirements by use (Water Closets, Urinals, Lavatories, Showers, Drinking Fountains) and sex.

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

Through the Interlocal Agreement dated July 1, 2017:

- Town of Cary - Responsible for review for compliance with ordinances and regulations related to zoning, stormwater, transportation, landscaping, buffers, utilities, and other aspects of site development that are not governed by the NC State Building Code.
Wake County - Responsible for building plan review in accordance with the NC State Building Codes

ENERGY SUMMARY

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided.

Existing building envelope complies with code: No

Exempt Building: Yes Provide code or statutory reference: 2018 NC Existing Building Code: Building Envelope is Existing, No Change

Climate Zone: 4A

Method of Compliance: Other - Performance (If "Other" specify source here) 2018 NC Existing Building Code Section 908

THERMAL ENVELOPE (Prescriptive method only)

Table detailing thermal envelope requirements for roof/ceiling assembly, exterior walls, walls below grade, and floors over/under/unconditioned space, including U-values and R-values.

EXISTING, NO CHANGE

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS: Importance Factors, Live Loads, Ground Snow Load, Wind Load.

EXISTING, NO CHANGE

SEISMIC DESIGN CATEGORY: Select one

Provide the following Seismic Design Parameters: Risk Category (Table 1604.5), Spectral Response Acceleration, Site Classification (ASCE 7), Analysis Procedure: Architectural, Mechanical, Components anchored?

LATERAL DESIGN CONTROL: Select one

Soil Bearing Capacities: Select one, Pile size, type, and capacity.

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone

winter dry bulb, summer dry bulb

Interior design conditions

winter dry bulb, summer dry bulb, relative humidity

Building heating load:

Building cooling load:

Mechanical Spacing/Conditioning System

Unitary: description of unit, heating efficiency, cooling efficiency, size category of unit, boiler, chiller.

List equipment efficiencies:

SEE MECHANICAL DRAWING SHEETS

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Select one

Lighting schedule (each fixture type)

lamp type required in fixture, number of lamps in fixture, ballast type, number of ballasts in fixture, total wattage per fixture, total interior wattage specified vs. allowed, total exterior wattage specified vs. allowed.

Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)

- Options for energy efficiency including More Efficient HVAC Equipment, Reduced Lighting Power Density, Enhanced Digital Lighting Controls, On-Site Renewable Energy, Dedicated Outdoor Air System, and Reduced Energy Use in Service Water Heating.

SEE SHEET E001



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CONSULTANTS

MEP Engineer

Sigma Engineered Solutions, PC https://www.sigmaes.com/ 5909 Falls of Neuse Rd., Suite #101 Raleigh, NC 919.840.9300

SEALS



PERMIT SET 01.29.2024

PROJECT

WEST REGIONAL LIBRARY RENOVATION

4000 LOUIS STEPHENS DR. CARY, NC 27519

REVISIONS

Table with 3 columns: No., Description, Date for project revisions.

PROJECT DATA

DATE: 01.29.2024
DRAWN: LP
CHECKED: EM
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

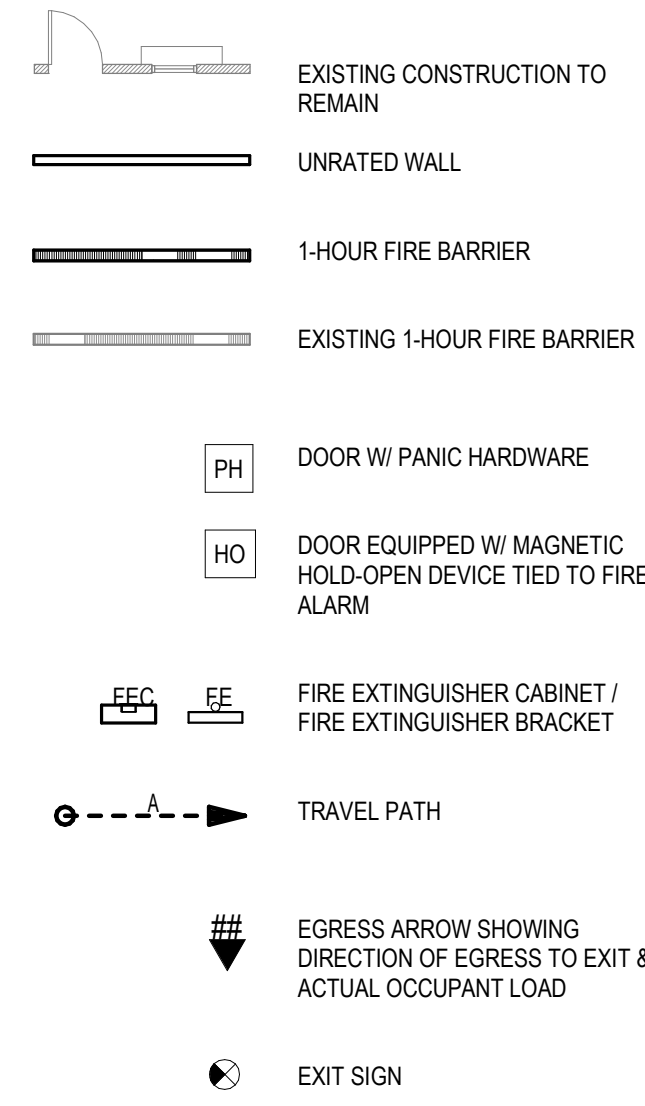
SHEET DATA

CODE SUMMARY

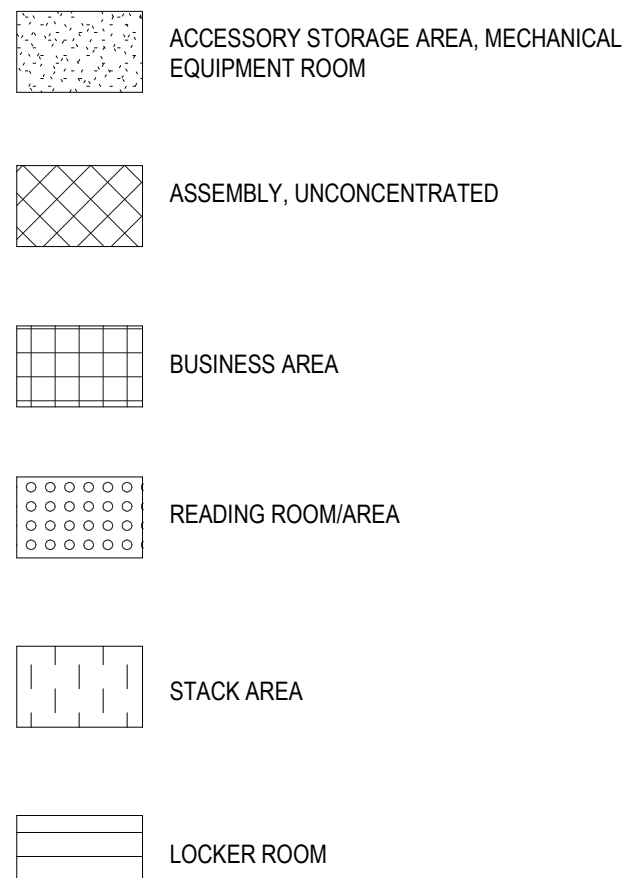
SHEET NO.

G002

LIFE SAFETY PLAN LEGEND



FUNCTION OF SPACE (TABLE 1004.1.2)

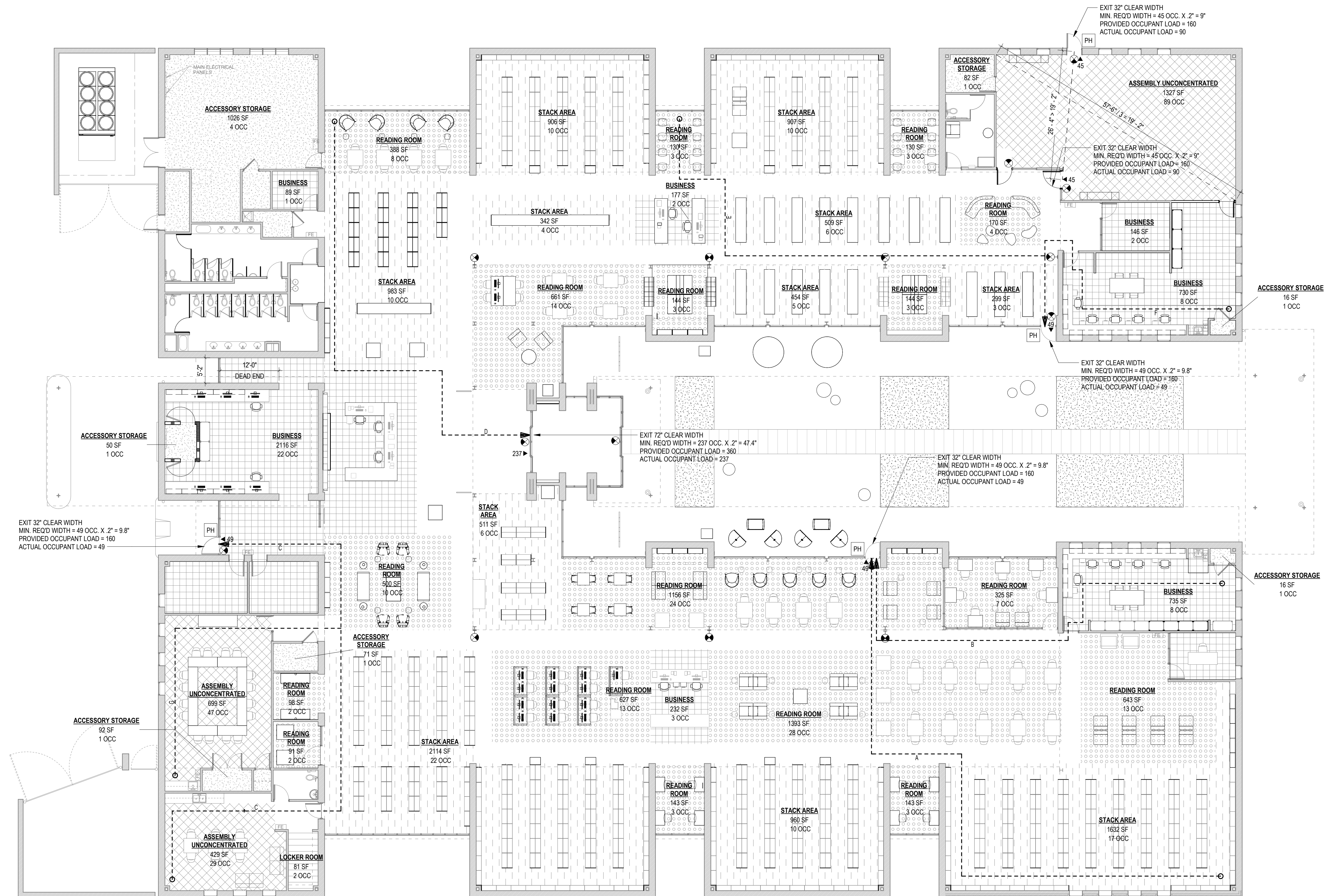


LIFE SAFETY OCCUPANCY SCHEDULE				
FUNCTION OF SPACE (TABLE 1004.1.2)	OCCUPIED AREA	SF PER PERSON	SF TYPE	OCCUPANT LOAD
ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM	1352 SF	300 SF	GROSS	10
ASSEMBLY UNCONCENTRATED (TABLES & CHAIRS)	2517 SF	15 SF	NET	170
BUSINESS	4225 SF	100 SF	GROSS	46
LIBRARY STACK AREA	9617 SF	100 SF	GROSS	103
LOCKER ROOM	81 SF	50 SF	GROSS	2
READING ROOM	6885 SF	50 SF	NET	143
BUILDING TOTAL OCCUPIED AREA	24678 SF			474

EGRESS TRAVEL DISTANCES				
PATH ID	ACTUAL TRAVEL DISTANCE	ALLOWABLE TRAVEL DISTANCE	ACTUAL COMMON PATH OF TRAVEL	ALLOWABLE COMMON PATH
A	136'-5"	250'-0"	0'-0"	75'-0"
B	99'-2"	250'-0"	43'-2"	75'-0"
C	128'-1"	250'-0"	48'-6"	75'-0"
D	104'-3"	250'-0"	11'-0"	75'-0"
E	117'-3"	250'-0"	12'-4"	75'-0"
F	54'-9"	250'-0"	0'-0"	75'-0"
G	64'-0"	250'-0"	34'-0"	75'-0"

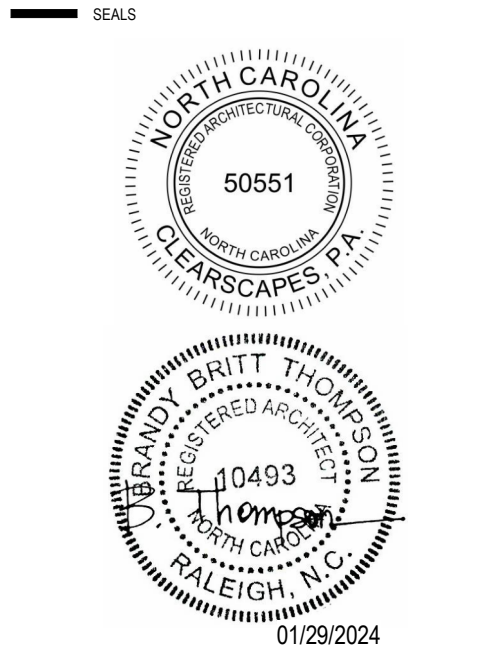
NOTES

- TRAVEL DISTANCES SHOWN EGRESS TO AN AREA OF SAFE DISPERSAL AS NOTED OR TO A PUBLIC RIGHT OF WAY.
- MAX. OCCUPANT EGRESS LOAD PER 3'-0" DOOR = 160 (32' x 0.2' = 160)
- MAX. OCCUPANT EGRESS LOAD PER 6'-0" DOOR = 340 (68' x 0.2' = 340)



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PERMIT SET
01.29.2024

PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

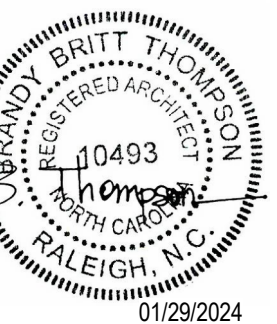
REVISIONS		
No.	Description	Date

PROJECT DATA
DATE: 01.29.2024
DRAWN: LP
CHECKED: EM
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

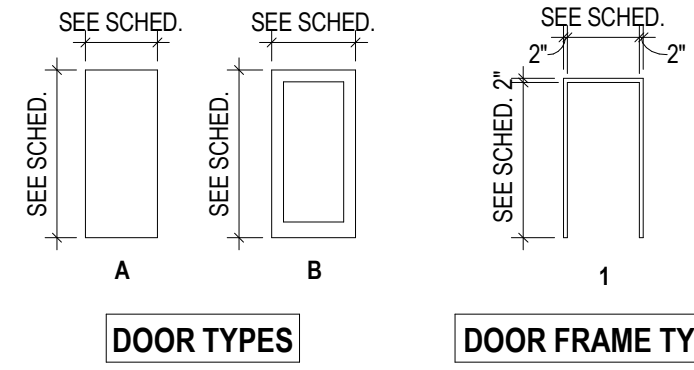
SHEET DATA
LIFE SAFETY PLANS

SHEET NO.
G003

1 LEVEL 1 LIFE SAFETY PLAN
3/32" = 1'-0"

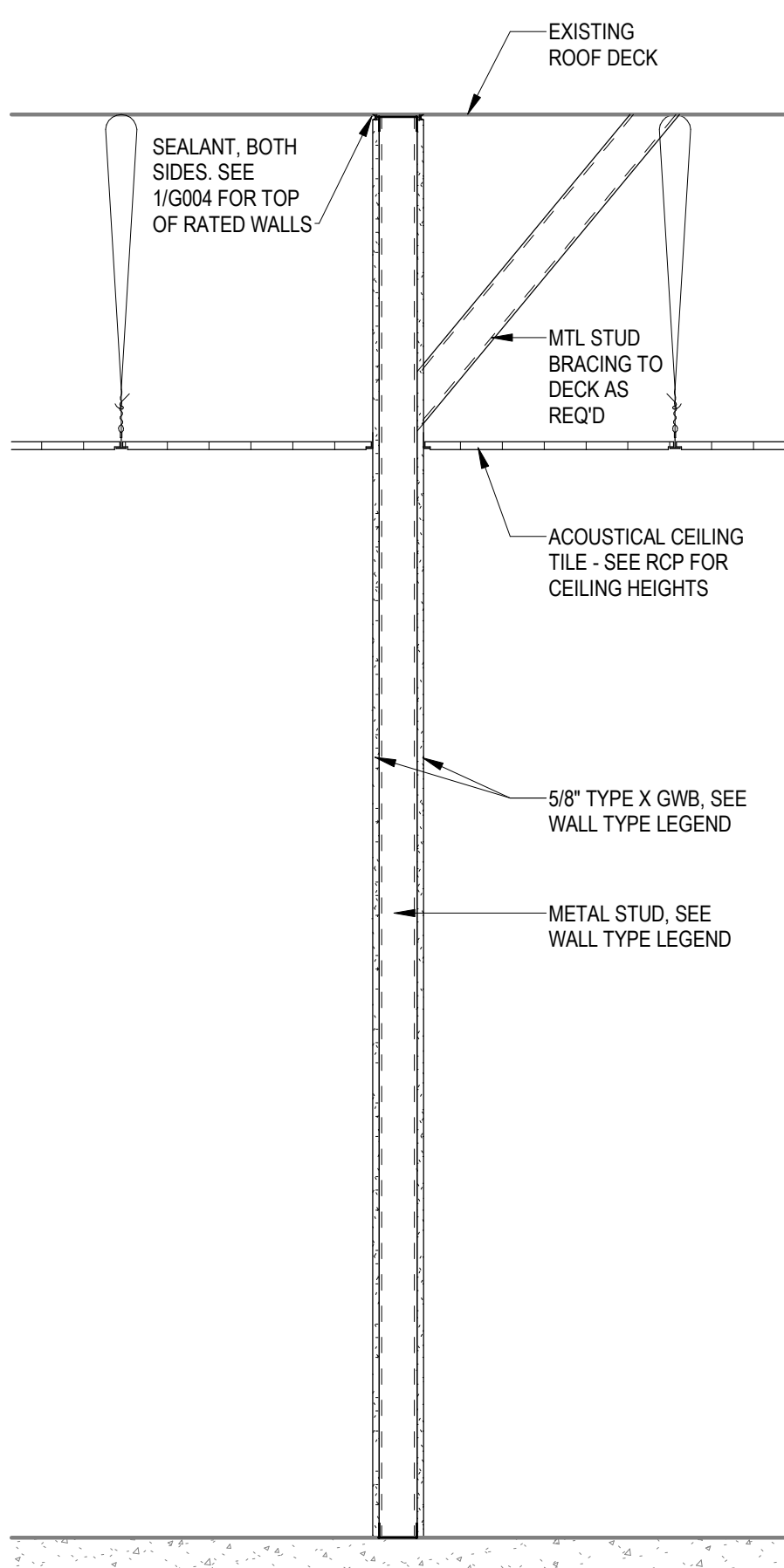


No.	Description	Date



DOOR SCHEDULE											
DOOR NUMBER	TO ROOM: NAME	DOOR			FRAME		FINISH DESCRIPTION	FIRE RATING IN MINUTES	HARDWARE SET	NOTES	
		TYPE	WIDTH	HEIGHT	TYPE	MATERIAL					
110	YOUTH SERVICES	B (EXISTING, NO CHANGE)	3'-0"	7'-10"	ALUM., GLASS	STOREFRONT	ALUMINUM (EXISTING, NO CHANGE)	CLEAR ANODIZED (EXISTING, NO CHANGE)	-	EXISTING PANIC HARDWARE TO REMAIN, ADD CARD READER	THE ONLY WORK ON THIS EXISTING DOOR IS PROVIDING A NEW CARD READER.
111		14	3'-0"	6'-0"							
112		14	3'-0"	6'-0"							
113B	YOUTH PROGRAM ROOM	A (EXISTING, NO CHANGE)	3'-0"	7'-10"	SOLID CORE WOOD & GLASS (EXISTING, NO CHANGE)	STOREFRONT	ALUMINUM (EXISTING, NO CHANGE)	CLEAR ANODIZED (EXISTING, NO CHANGE)	-	CLASSROOM LOCK LEVER	THE ONLY WORK ON THIS EXISTING DOOR IS CHANGING THE LEVER HARDWARE. TURN OVER OLD LOCKSET TO OWNER.
113C	YOUTH PROGRAM ROOM	B (EXISTING, NO CHANGE)	3'-6"	7'-10"	SOLID CORE WOOD & GLASS (EXISTING, NO CHANGE)	STOREFRONT	ALUMINUM (EXISTING, NO CHANGE)	CLEAR ANODIZED (EXISTING, NO CHANGE)	-	CLASSROOM LOCK LEVER	THE ONLY WORK ON THIS EXISTING DOOR IS CHANGING THE LEVER HARDWARE. TURN OVER OLD LOCKSET TO OWNER.
113D	STAFF WORKROOM - A	A	3'-0"	7'-10"	SOLID CORE WOOD	1	HOLLOW METAL	PREFINISH: STAIN & SHEEN TO MATCH EXISTING DOORS, PAINT FRAME TO MATCH W12 - SEE FINISH SCHEDULE	-	CLASSROOM LOCK LEVER	
125AA	BOOK RETURN	A	3'-0"	7'-10"	SOLID CORE WOOD	1	HOLLOW METAL	PAINT DOOR & FRAME TO MATCH SURROUNDING GWB WALL COLOR	3/4 HR	180 DEGREE DOOR CLOSER, PASSAGE LEVER, 36"H PROTECTION PLATE ON PUSH SIDE	
125AB	BOOK RETURN	A	3'-0"	7'-10"	SOLID CORE WOOD	1	HOLLOW METAL	PAINT DOOR & FRAME TO MATCH SURROUNDING GWB WALL COLOR	3/4 HR	180 DEGREE DOOR CLOSER, PASSAGE LEVER, 36"H PROTECTION PLATE ON PUSH SIDE	

NOTES:
1. SEE SECTION 087100 FOR DOOR HARDWARE SCHEDULE
2. SEE PREFERRED ALTERNATE NO. A FOR PREFERRED DOOR HARDWARE BRANDS



1 INT. MTL STUD WALL TO DECK
3/4" = 1'-0"

EXISTING WALL TYPES - NOT TO SCALE

TYPE 1A
- 3 5/8" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD EACH SIDE

TYPE 1B
- 3 5/8" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD EACH SIDE
- SOUND ATTENUATION BLANKET

TYPE 2A
- 3 5/8" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD ON NON-RESTROOM SIDE OF WALL
- (1) LAYER 1/2" CEMENTITIOUS BOARD ON RESTROOM SIDE OF WALL AT CT WAINSCOT, GYP. BD. ABOVE

TYPE 2B
- 3 5/8" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD ON NON-RESTROOM SIDE OF WALL
- (1) LAYER 1/2" CEMENTITIOUS BOARD ON RESTROOM SIDE OF WALL AT CT WAINSCOT, GYP. BD. ABOVE
- SOUND ATTENUATION BLANKET

TYPE 3
- 6" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD EACH SIDE

TYPE 4
- 6" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD ON NON-RESTROOM SIDE OF WALL
- (1) LAYER 1/2" CEMENTITIOUS BOARD ON RESTROOM SIDE OF WALL AT CT WAINSCOT, GYP. BD. ABOVE
- SOUND ATTENUATION BLANKET

TYPE 5A
- (1) LAYER 4" BRICK VENEER
- 1" AIRSPACE
- (1) LAYER 3" RIGID INSULATION ONLY ON EXTERIOR WALLS
- (1) LAYER 8" DECORATIVE FACE CMU

TYPE 5B
- (1) LAYER 4" BRICK VENEER
- (1) AIRSPACE
- (1) LAYER 3" RIGID INSULATION ONLY ON EXTERIOR WALLS
- (1) LAYER 8" CMU

NOTE: CLEAN EXPOSED MASONRY FACES

TYPE 6
- (1) LAYER 8" DECORATIVE FACE (ALL EXPOSED SIDES) CMU

NOTE: CLEAN EXPOSED MASONRY FACES

TYPE 8A
- (1) LAYER 4" BRICK VENEER
- (1) LAYER 8" DECORATIVE FACE CMU

NOTE: CLEAN EXPOSED MASONRY FACES

TYPE 8B
- (1) LAYER 4" BRICK VENEER
- (1) LAYER 8" CMU

NOTE: CLEAN EXPOSED MASONRY FACES

TYPE 9
- (2) LAYERS 3 5/8" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD ON INTERIOR OF WALL
- (1) LAYER 1/2" + (1) LAYER 5/8" GLASS MAT REINFORCED GYP BOARD ON EXTERIOR OF WALL
- BATT INSULATION: R-19 MIN.

TYPE 10
- 6" METAL STUD @ 16" O.C.
- (1) LAYER 5/8" GYP BOARD ON INTERIOR OF WALL
- (1) LAYER 5/8" GLASS MAT REINFORCED GYP BOARD ON EXTERIOR OF WALL
- BATT INSULATION: R-19 MIN.

PARTITION LEGEND

100 KEYNOTE
EXISTING CONSTRUCTION TO REMAIN
UNRATED WALL
PARTITION TYPE
1-HOUR FIRE BARRIER

INTERIOR PARTITION TYPES

WALL TAG	DESCRIPTION	CONSTRUCTION			HEAD DETAIL / UL	BASE DETAIL / UL	PLAN IMAGE (NTS)	FIRE PROTECTION	
		THICKNESS	HEIGHT	TO DECK				RATING	UL #
2.3	5/8" TYPE X GWB EA. SIDE, 3-5/8" MTL STUDS @ 16" O.C.	4 7/8"	TO DECK	-	-		0	N/A	
2.6R1	5/8" TYPE X GWB EA. SIDE, 6" MTL STUDS @ 16" O.C. W/ 5-1/2" SOUND BATTS	7 1/4"	TO DECK	1/G004	BW-S-0001		1 HOUR	U419	

DEMOLITION GENERAL NOTES

THE DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED AS DESCRIBED IN THE DEMOLITION DOCUMENTS. THE WORK REQUIRED SHALL BE DONE WITH CARE, AND SHALL INCLUDE ALL REQUIRED SHORING, BRACING, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE, WHICH MAY BE CAUSED BY DEMOLITION AND REMOVAL WORK TO ANY PART OR PARTS OF EXISTING STRUCTURES OR ITEMS DESIGNATED FOR REUSE OR TO REMAIN. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A DETAILED DESCRIPTION OF METHODS AND EQUIPMENT TO BE USED FOR EACH OPERATION AND THE SEQUENCE THEREOF FOR REVIEW BY THE ARCHITECT.

INVESTIGATION

THE CONTRACTOR SHALL MAKE SUCH INVESTIGATIONS, EXPLORATIONS AND PROBES AS ARE NECESSARY TO ASCERTAIN ANY REQUIRED PROTECTIVE MEASURES BEFORE PROCEEDING WITH DEMOLITION AND REMOVAL. THE CONTRACTOR SHALL GIVE PARTICULAR ATTENTION TO SHORING AND BRACING REQUIREMENTS SO AS TO PREVENT ANY DAMAGE TO NEW OR EXISTING CONSTRUCTION.

HAZARDOUS MATERIAL

THE CONTRACTOR MAY ENCOUNTER HAZARDOUS MATERIAL. ALL HAZARDOUS MATERIALS SHALL BE ADDRESSED IN ACCORDANCE WITH OSHA AND NCEM/RV REQUIREMENTS. ANY QUESTIONABLE MATERIALS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT. THE OWNER WILL MAKE ARRANGEMENTS TO SAMPLE AND TEST MATERIALS. IF DEEMED HAZARDOUS, THE OWNER WILL FURTHER ARRANGE ABATEMENT OF THE MATERIAL.

MATERIAL DISPOSAL/SALVAGE

ALL DEBRIS RESULTING FROM THE DEMOLITION AND REMOVAL WORK SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. MATERIAL DESIGNATED BY THE ARCHITECT OR ENGINEER TO BE SALVAGED SHALL BE STORED AS DIRECTED. A PRE-DEMOLITION WALKTHROUGH WITH THE ARCHITECT AND OWNER SHALL BE CONDUCTED TO IDENTIFY COMPONENTS THAT ARE TO BE SALVAGED. RECYCLING AND/OR DISPOSAL IS TO BE CONDUCTED IN ACCORDANCE WITH LEED REQUIREMENTS.

EXISTING STRUCTURES

WHERE PORTIONS OF THE EXISTING STRUCTURE TO REMAIN ARE TO BE IMPACTED, DEMOLISH THE PORTIONS TO BE REMOVED, REPAIR DAMAGE, AND LEAVE THE STRUCTURE IN PROPER CONDITION FOR THE INTENDED USE. REMOVE CONCRETE AND MASONRY TO THE LINES DESIGNATED BY DRILLING, CHIPPING, OR OTHER SUITABLE METHODS UNLESS DIRECTED OTHERWISE BY ARCHITECT. LEAVE THE RESULTING SURFACES REASONABLY TRUE AND EVEN, WITH SHARP STRAIGHT CORNERS THAT WILL RESULT IN NEAT JOINTS WITH NEW CONSTRUCTION AND BE SATISFACTORY FOR THE PURPOSE INTENDED. WHERE ALTERATIONS OCCUR, OR NEW AND OLD WORK ARE TO JOIN, THE CONTRACTOR SHALL CUT, REMOVE, PLUG, REPAIR OR REMOVE THE ADJACENT MATERIALS TO THE EXTENT REQUIRED BY THE CONSTRUCTION CONDITIONS, SO AS TO LEAVE THE ALTERED WORK IN AS GOOD A CONDITION AS PRACTICAL.

TEMPORARY PROTECTION

THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN, LIGHTS, BARRIERS, WEATHER PROTECTION, WARNING SIGNS AND OTHER ITEMS AS REQUIRED FOR PROPER PROTECTION OF THE PUBLIC AS WELL AS WORKERS ENGAGED IN DEMOLITION OPERATIONS. THE CONTRACTOR SHALL ALSO PROTECT WALLS, WINDOWS, ROOFS, AND OTHER ADJACENT EXTERIOR CONSTRUCTION THAT ARE TO REMAIN AND THAT ARE EXPOSED TO BUILDING DEMOLITION OPERATIONS. THE CONTRACTOR SHALL REMOVE TEMPORARY WORK, SUCH AS ENCLOSURES, SIGNS, GUARDS, AND THE LIKE WHEN SUCH TEMPORARY WORK IS NO LONGER REQUIRED OR WHEN DIRECTED AT THE COMPLETION OF THE WORK.

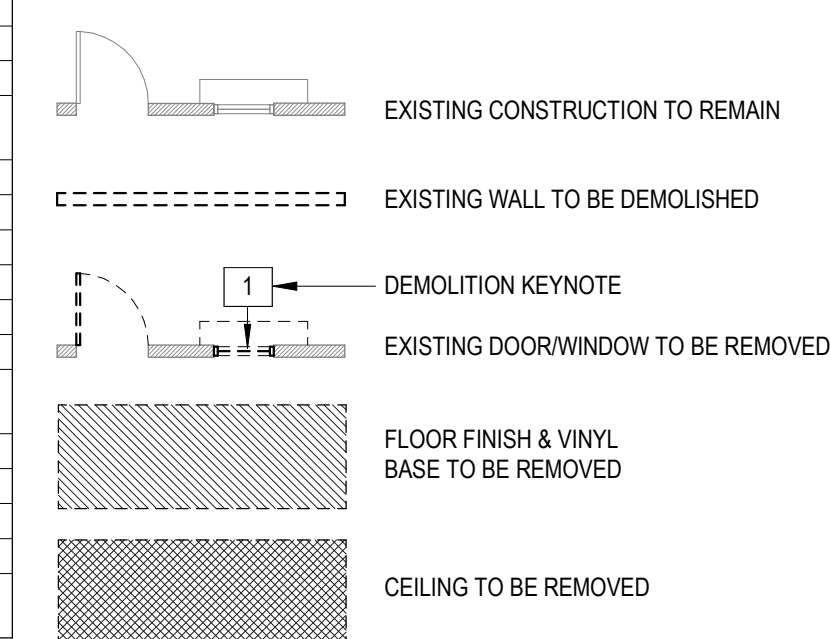
KEYNOTES - DEMOLITION

NO.	DESCRIPTION
1	EXISTING INTERIOR METAL STUD WALL, SOLID WOOD CORE DOOR & WALL-MOUNTED SIGN TO BE REMOVED
2	EXISTING STAGE, RAMP, & SUPPORTING FRAMING TO BE REMOVED
3	EXISTING BENCH & SUPPORTING FRAMING TO BE REMOVED
4	EXISTING WATER FOUNTAIN TO BE REMOVED - SEE PME
5	EXISTING DISPLAY CASE & INTERNAL LIGHTING TO BE REMOVED. CREATE OPENING IN EXISTING CMU + METAL STUD WALL FOR BOOK DROP. SEE ELEVATION 2/A403 FOR LOCATION + SIZE.
6	EXISTING INTERIOR CMU WALL TO BE REMOVED
7	EXISTING STOREFRONT, WINDOW TREATMENT, & ROOM SIGNS TO BE REMOVED
8	EXISTING SERVICE DESK TO BE REMOVED. SEE ELECTRICAL DRAWINGS FOR EXTENT OF ELECTRICAL DEMOLITION.
9	EXISTING CASEWORK TO BE REMOVED
10	EXISTING FAUCET TO BE REMOVED, SINK TO REMAIN. REFER TO PLUMBING DRAWINGS.
11	SECTION OF EXISTING OPEN SHELVING TO BE REMOVED. PREP FOR NEW CABINETS. SEE ELEVATION 2/D101

KEYNOTES - DEMOLITION

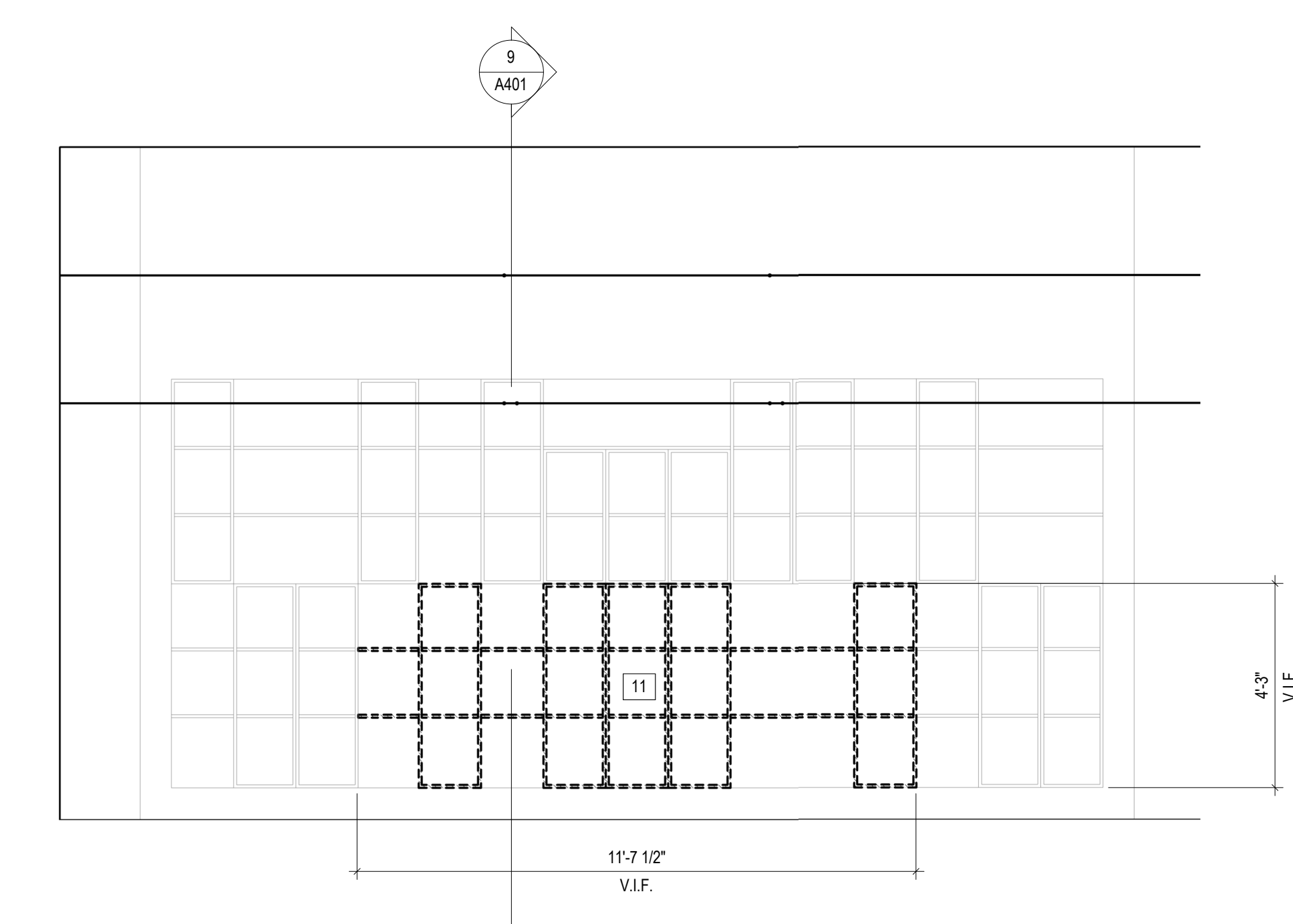
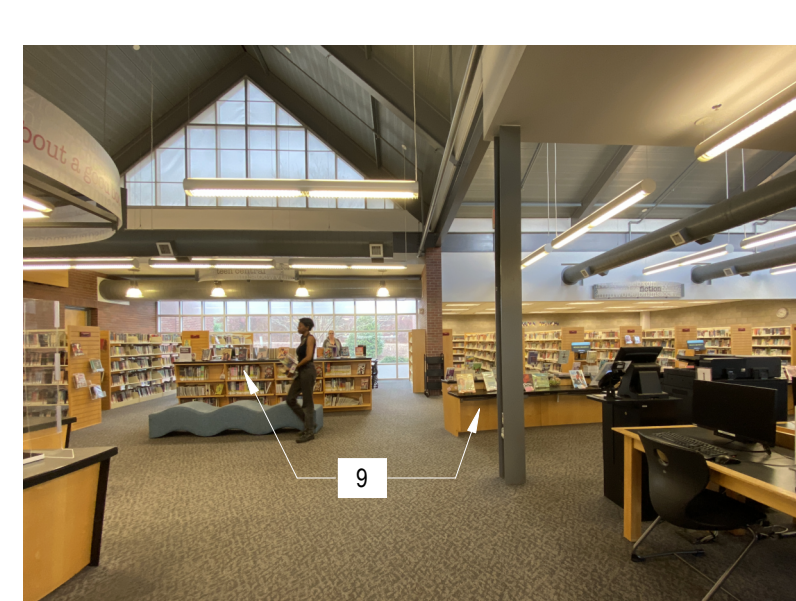
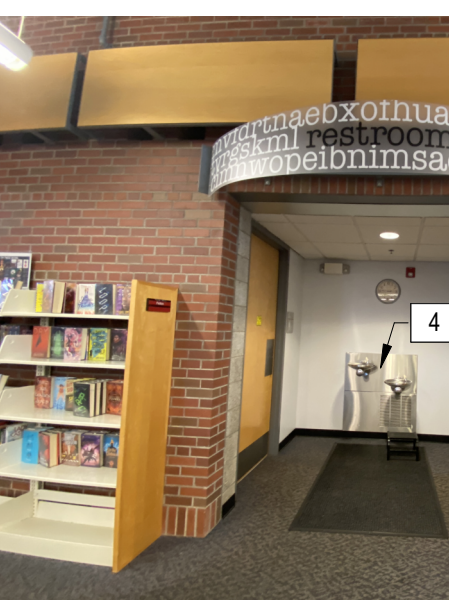
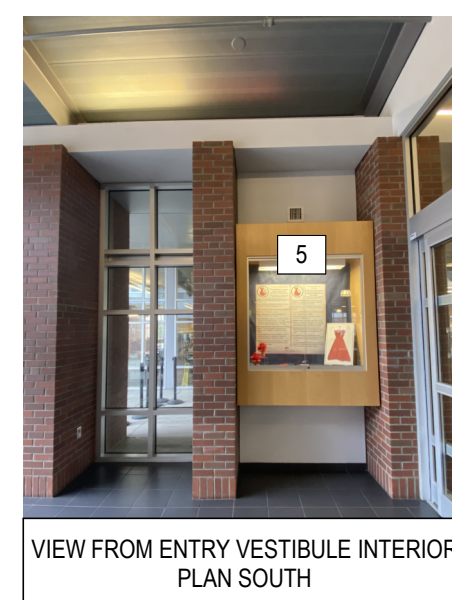
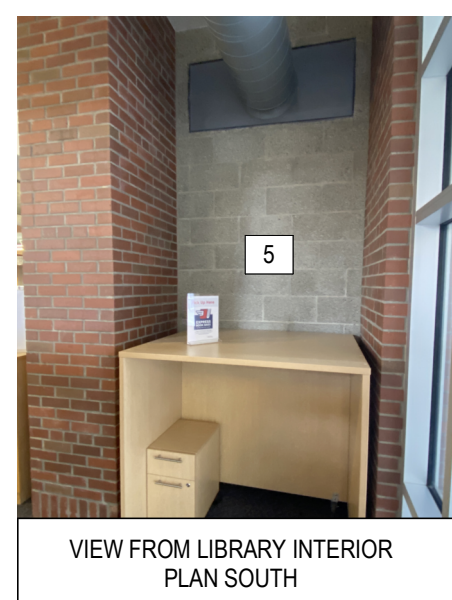
NO.	DESCRIPTION
12	EXISTING OVERHEAD SHELVING TO BE REMOVED. PREP FOR NEW UPPER CABINETS.
13	EXISTING MURAL TO BE REMOVED. PROVIDE LEVEL 5 G/WB FINISH IN PREP FOR NEW VINYL WALLCOVERING ENTIRE WALL (BOTH EXISTING + NEW PORTIONS).
14	EXISTING COUNTERTOP TO REMAIN.
15	EXISTING STEEL COLUMNS TO REMAIN, TYP.
16	EXISTING LANDSCAPE BEDS.
17	EXISTING ART SCULPTURES TO REMAIN
18	EXISTING BIKE RACK TO REMAIN.
19	EXISTING STEEL COLUMNS TO REMAIN, TYP.
20	EXISTING COUNTERTOP, SINK, & FAUCET TO BE REMOVED. PRESERVE EXISTING WALL TILE.
21	EXISTING BABY CHANGING STATION TO REMAIN.
22	EXISTING LOUVERED OPENINGS TO REMAIN
23	EXISTING SHELVING TO REMAIN.
24	EXISTING WINDOW TREATMENTS TO BE REMOVED, STORED, AND REINSTALLED.
25	EXISTING TOILET PARTITIONS TO BE REMOVED. PREP FOR NEW TOILET PARTITIONS. ALTERNATE NO. 2, EXISTING TOILET COMPARTMENTS TO REMAIN.

DEMOLITION PLAN LEGEND

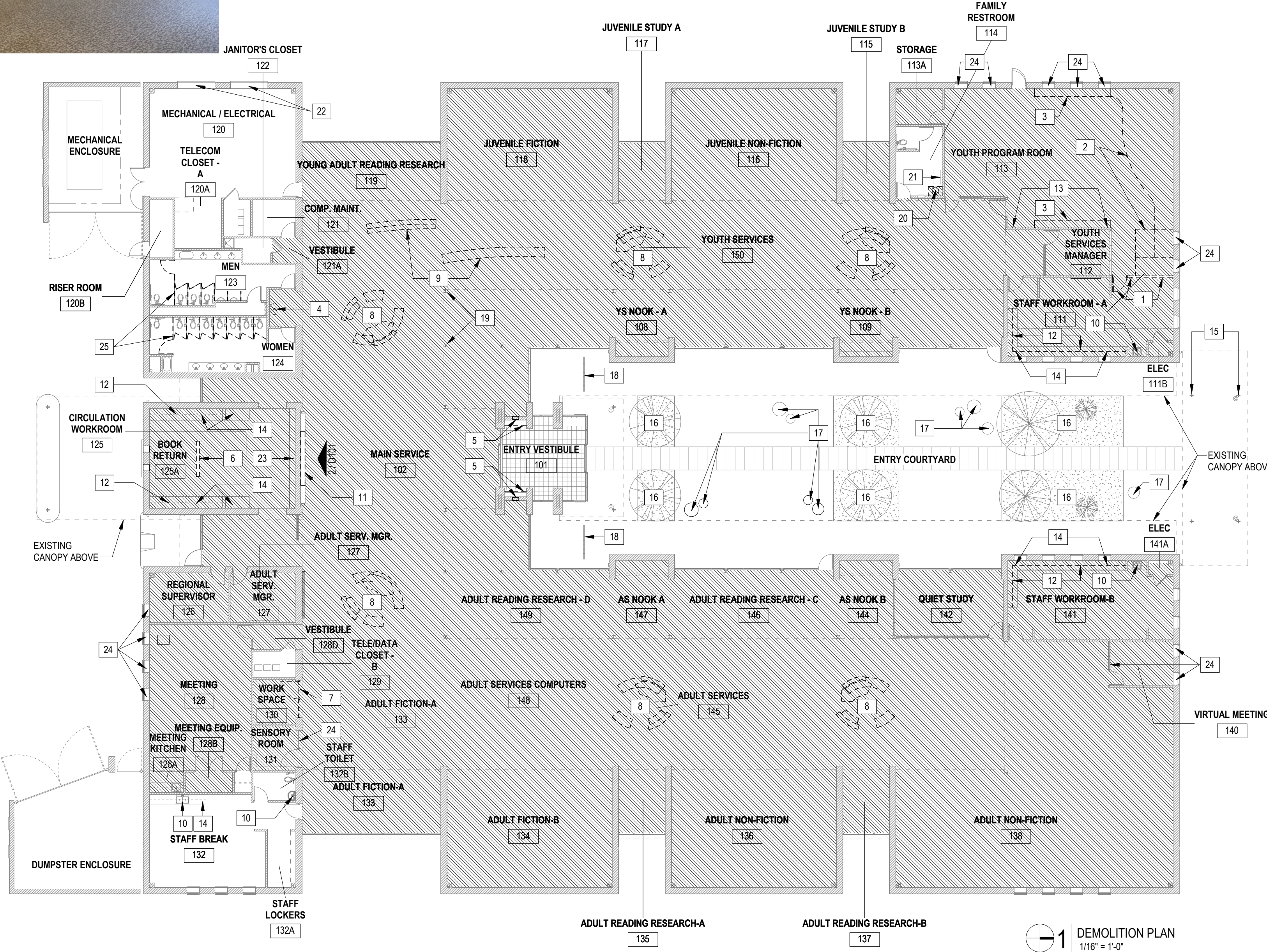


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2 MARKETPLACE MILLWORK DEMOLITION
3/8" = 1'-0"



1 DEMOLITION PLAN
1/16" = 1'-0"

SEALS

50551
10493
1/29/2024

PERMIT SET
01.29.2024

PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

No.	Description	Date

PROJECT DATA

DATE: 01.29.2024
DRAWN: LP
CHECKED: EM/MT
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

SHEET DATA
DEMOLITION PLAN

SHEET NO.
D101

DEMOLITION GENERAL NOTES

THE DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED AS DESCRIBED IN THE DEMOLITION DOCUMENTS. THE WORK REQUIRED SHALL BE DONE WITH CARE, AND SHALL INCLUDE ALL REQUIRED SHORING, BRACING, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE, WHICH MAY BE CAUSED BY DEMOLITION AND REMOVAL WORK TO ANY PART OR PARTS OF EXISTING STRUCTURES OR ITEMS DESIGNATED FOR REUSE OR TO REMAIN. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A DETAILED DESCRIPTION OF METHODS AND EQUIPMENT TO BE USED FOR EACH OPERATION AND THE SEQUENCE THEREOF FOR REVIEW BY THE ARCHITECT.

INVESTIGATION

THE CONTRACTOR SHALL MAKE SUCH INVESTIGATIONS, EXPLORATIONS AND PROBES AS ARE NECESSARY TO ASCERTAIN ANY REQUIRED PROTECTIVE MEASURES BEFORE PROCEEDING WITH DEMOLITION AND REMOVAL. THE CONTRACTOR SHALL GIVE PARTICULAR ATTENTION TO SHORING AND BRACING REQUIREMENTS SO AS TO PREVENT ANY DAMAGE TO NEW OR EXISTING CONSTRUCTION.

HAZARDOUS MATERIAL

THE CONTRACTOR MAY ENCOUNTER HAZARDOUS MATERIAL. ALL HAZARDOUS MATERIALS SHALL BE ADDRESSED IN ACCORDANCE WITH OSHA AND NCDENR REQUIREMENTS. ANY QUESTIONABLE MATERIALS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT. THE OWNER WILL MAKE ARRANGEMENTS TO SAMPLE AND TEST MATERIALS. IF DEEMED HAZARDOUS, THE OWNER WILL FURTHER ARRANGE ABATEMENT OF THE MATERIAL.

MATERIAL DISPOSAL/SALVAGE

ALL DEBRIS RESULTING FROM THE DEMOLITION AND REMOVAL WORK SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. MATERIAL DESIGNATED BY THE ARCHITECT OR ENGINEER TO BE SALVAGED SHALL BE STORED AS DIRECTED. A PRE-DEMOLITION WALKTHROUGH WITH THE ARCHITECT AND OWNER SHALL BE CONDUCTED TO IDENTIFY COMPONENTS THAT ARE TO BE SALVAGED. RECYCLING AND/OR DISPOSAL IS TO BE CONDUCTED IN ACCORDANCE WITH LEED REQUIREMENTS.

EXISTING STRUCTURES

WHERE PORTIONS OF THE EXISTING STRUCTURE TO REMAIN ARE TO BE IMPACTED, DEMOLISH THE PORTIONS TO BE REMOVED, REPAIR DAMAGE, AND LEAVE THE STRUCTURE IN PROPER CONDITION FOR THE INTENDED USE. REMOVE CONCRETE AND MASONRY TO THE LINES DESIGNATED BY DRILLING, CHIPPING, OR OTHER SUITABLE METHODS UNLESS DIRECTED OTHERWISE BY ARCHITECT. LEAVE THE RESULTING SURFACES REASONABLY TRUE AND EVEN, WITH SHARP STRAIGHT CORNERS THAT WILL RESULT IN NEAT JOINTS WITH NEW CONSTRUCTION AND BE SATISFACTORY FOR THE PURPOSE INTENDED. WHERE ALTERATIONS OCCUR, OR NEW AND OLD WORK ARE TO JOIN, THE CONTRACTOR SHALL CUT, REMOVE, PLUG, REPAIR OR REMOVE THE ADJACENT MATERIALS TO THE EXTENT REQUIRED BY THE CONSTRUCTION CONDITIONS, SO AS TO LEAVE THE ALTERED WORK IN AS GOOD A CONDITION AS PRACTICAL.

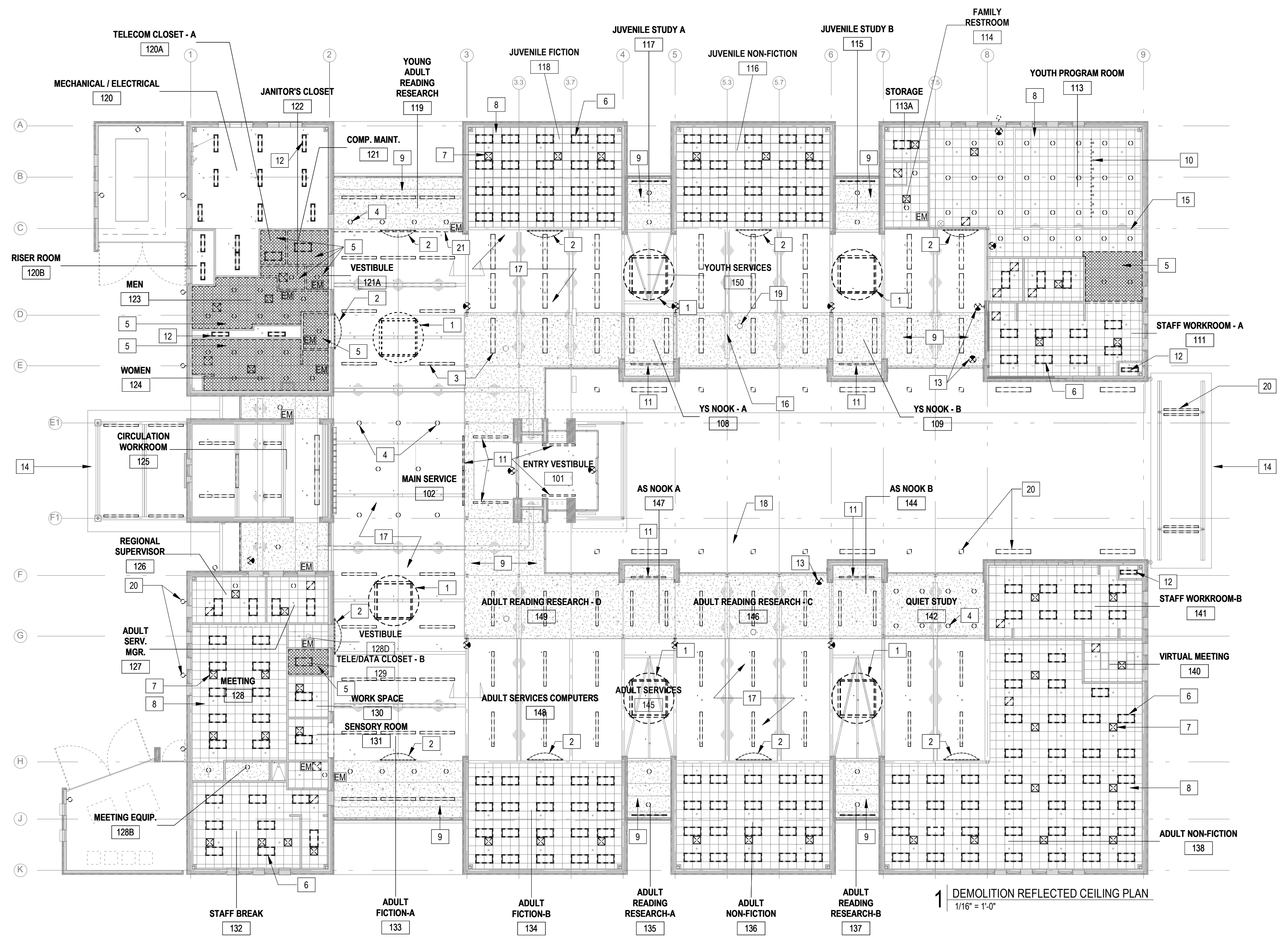
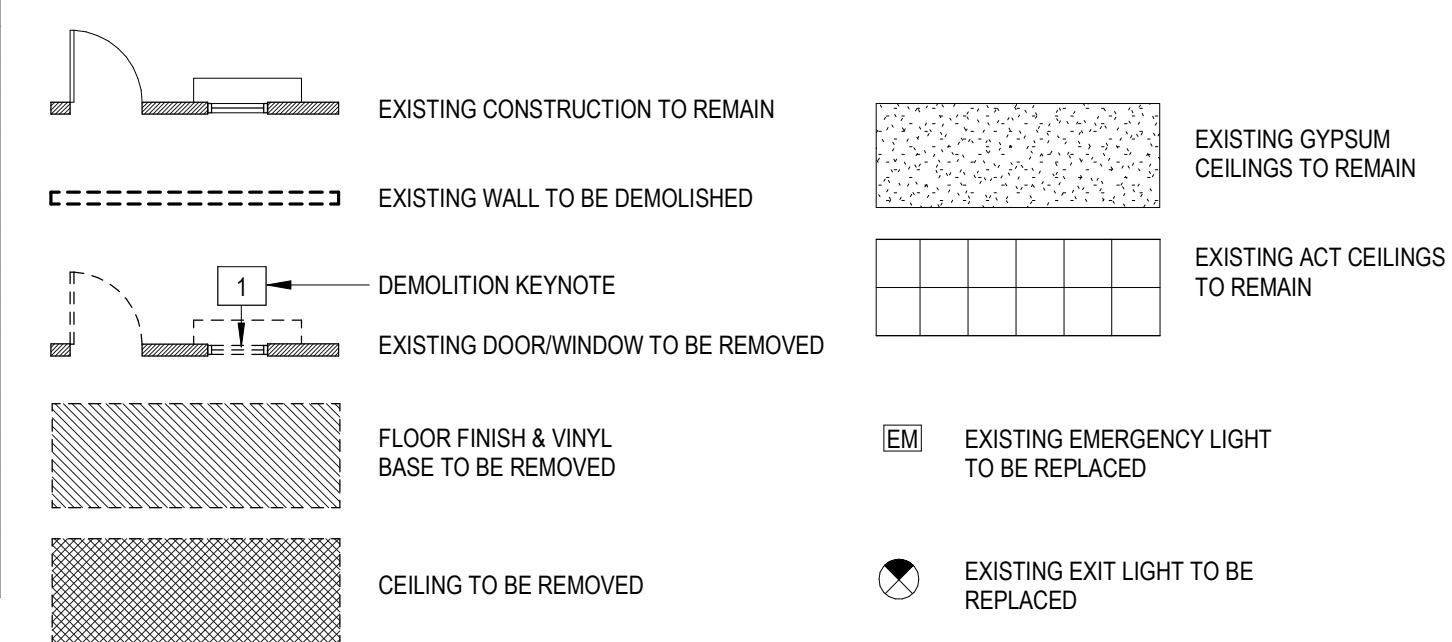
TEMPORARY PROTECTION

THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN, LIGHTS, BARRIERS, WEATHER PROTECTION, WARNING SIGNS AND OTHER ITEMS AS REQUIRED FOR PROPER PROTECTION OF THE PUBLIC AS WELL AS WORKERS ENGAGED IN DEMOLITION OPERATIONS. THE CONTRACTOR SHALL ALSO PROTECT WALLS, WINDOWS, ROOFS, AND OTHER ADJACENT EXTERIOR CONSTRUCTION THAT ARE TO REMAIN AND THAT ARE EXPOSED TO BUILDING DEMOLITION OPERATIONS. THE CONTRACTOR SHALL REMOVE TEMPORARY WORK, SUCH AS ENCLOSURES, SIGNS, GUARDS, AND THE LIKE WHEN SUCH TEMPORARY WORK IS NO LONGER REQUIRED OR WHEN DIRECTED AT THE COMPLETION OF THE WORK.

KEYNOTES - DEMOLITION RCP	
NO.	DESCRIPTION
1	EXISTING SUSPENDED SIGNAGE STEEL SUPPORT FRAME, RADUSED RESIN SIGN PANEL, & INTEGRAL LIGHT FIXTURE TO BE REMOVED.
2	EXISTING WALL MOUNTED SIGNAGE STEEL SUPPORT FRAME & RADUSED RESIN SIGN PANEL TO BE REMOVED.
3	EXISTING LINEAR DIRECT/INDIRECT FIXTURES TO BE REMOVED, TYP.
4	EXISTING DECORATIVE INDUSTRIAL FIXTURES TO BE REMOVED, TYP.
5	EXISTING 2X2 ACT CEILING TO BE REMOVED.
6	EXISTING LAY-IN FIXTURES TO BE REMOVED, TYP.
7	EXISTING GRID-MOUNTED DIFFUSERS AND GRILLES TO BE REMOVED, TYP.
8	EXISTING ACT TO REMAIN, REPAIR AS REQUIRED, TYP. U.N.O.
9	EXISTING GWB CEILING TO REMAIN, REPAIR AS REQUIRED, TYP. U.N.O.

KEYNOTES - DEMOLITION RCP	
NO.	DESCRIPTION
10	EXISTING TRACK LIGHTING TO BE REMOVED.
11	EXISTING COVE LIGHTING TO BE REMOVED, TYP.
12	EXISTING INDUSTRIAL LIGHT FIXTURE TO BE REMOVED, TYP.
13	EXISTING EXIT SIGNS TO BE REMOVED, TYP.
14	EXISTING CANOPY TO REMAIN, TYP.
15	EXISTING GWB BULKHEAD.
16	EXISTING EXPOSED DUCTWORK TO REMAIN, TYP.
17	EXISTING EXPOSED STEEL STRUCTURE & ACOUSTICAL DECK.
18	EXISTING METAL SOFFIT TO REMAIN, TYP.
19	EXISTING SPEAKER TO REMAIN, TYP.
20	EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED, TYP.
21	REMOVE EXISTING FIXED WINDOW SHADE IN TRIANGLE CLERESTORY.

DEMOLITION PLAN LEGEND



NOTE: SEE ELECTRICAL DRAWINGS FOR FULL EXTENT OF POWER & LIGHTING DEMOLITION

1 DEMOLITION REFLECTED CEILING PLAN
1/16" = 1'-0"

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SEALS

PERMIT SET
01.29.2024

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SHEET DATA
DEMOLITION REFLECTED CEILING PLAN

SHEET NO.
D102

FLOOR PLAN / REFLECTED CEILING PLAN GENERAL NOTES

- 1-1. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR REVIEWING AND COORDINATING THEIR WORK WITH ALL OF THE CONTRACT DOCUMENTS PRIOR TO BEGINNING ANY WORK ON SUBMITTALS, SHOP DRAWINGS, FABRICATION, OR INSTALLATION. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE GENERAL CONTRACTOR IN WRITING AND SHALL BE RESOLVED WITH THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK.
- 1-2. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OWNERS VENDORS INCLUDING, BUT NOT LIMITED TO, TELECOMMUNICATIONS, AUDIO/VISUAL AND SECURITY SYSTEMS. ANY CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF CONTRACT DOCUMENTS AND THE OWNERS VENDORS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE GENERAL CONTRACTOR IN WRITING AND SHALL BE RESOLVED WITH THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK.
- 1-3. EXISTING CONDITIONS FOR THE BUILDING AND/OR SITE AS REPRESENTED IN THE CONTRACT DOCUMENTS ARE NOT GUARANTEED. PRIOR TO BEGINNING ANY WORK ON SUBMITTALS, SHOP DRAWINGS, FABRICATION, OR INSTALLATION, THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE EXISTENCE AND LOCATION OF EXISTING CONSTRUCTION AFFECTING THE WORK INCLUDING, BUT NOT LIMITED TO, UNDERGROUND UTILITIES, EXISTING BUILDING SYSTEMS, FLOOR ELEVATIONS, AND OTHER STRUCTURAL OR BUILDING DATUMS.

- 2-1. ALL DIMENSIONS ARE TO FINISHED FACE OF WALL UNLESS OTHERWISE NOTED.
- 2-2. WALLS SHOWN TO ALIGN ARE TO HAVE FINISHED FACES ALIGN UNLESS NOTED OTHERWISE.
- 2-3. IF PROVIDED, REFER TO ENLARGED PLANS AND PLAN DETAILS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
- 2-4. LOCATIONS OF ALL DEVICES AND FIXTURES DIMENSIONED, NOTED OR OTHERWISE DESCRIBED ARE EXACT. ALL NEW FRAMING MUST ACCOMMODATE THESE LOCATIONS.
- 2-5. ANY DIMENSIONS OF OR TYING INTO EXISTING BUILDING COMPONENTS ARE TO BE FIELD-VERIFIED PRIOR TO COMMENCEMENT OF WORK. VERIFY WITH ARCHITECT.
- 3-1. TYPICAL DETAILS SHOWN ON THE DRAWINGS SHALL BE INCORPORATED AT ALL APPROPRIATE LOCATIONS WHETHER OR NOT SPECIFICALLY REFERENCED AT EACH LOCATION.
- 3-2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED DEMOLITION, TEMPORARY SUPPORT OF, AND/OR DAMAGE TO NEW OR EXISTING STRUCTURE DURING CONSTRUCTION. ANY UTILITY LINES, PIPING, EQUIPMENT, FINISHES, OR ANY OTHER PORTIONS OF THE EXISTING BUILDING OR NEW CONSTRUCTION DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT THE ARCHITECT'S DIRECTION AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR.
- 3-3. THE GENERAL CONTRACTOR IS TO COORDINATE, PROVIDE, AND INSTALL CONCEALED BLOCKING FOR ALL WALL- AND CEILING-MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO, HAND RAILS, GRAB BARS, CABINETS AND OTHER CASEWORK, EQUIPMENT, OWNER- AND/OR VENDOR-PROVIDED ITEMS, ETC. BLOCKING IS TO BE FIRE-RETARDANT WOOD OR 20ga METAL WITH A FLAME SPREAD AND SMOKE DEVELOPMENT RATING ≤ 25 IF THE PROJECT IS IDENTIFIED AS A TYPE 1 OR TYPE 2 BUILDING IN THE CODE SUMMARY.

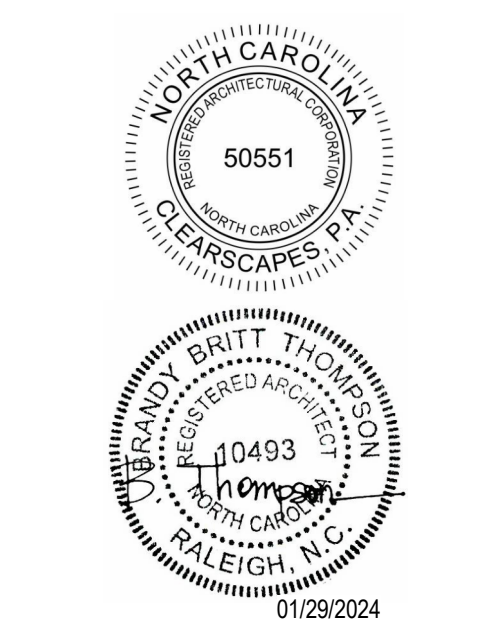
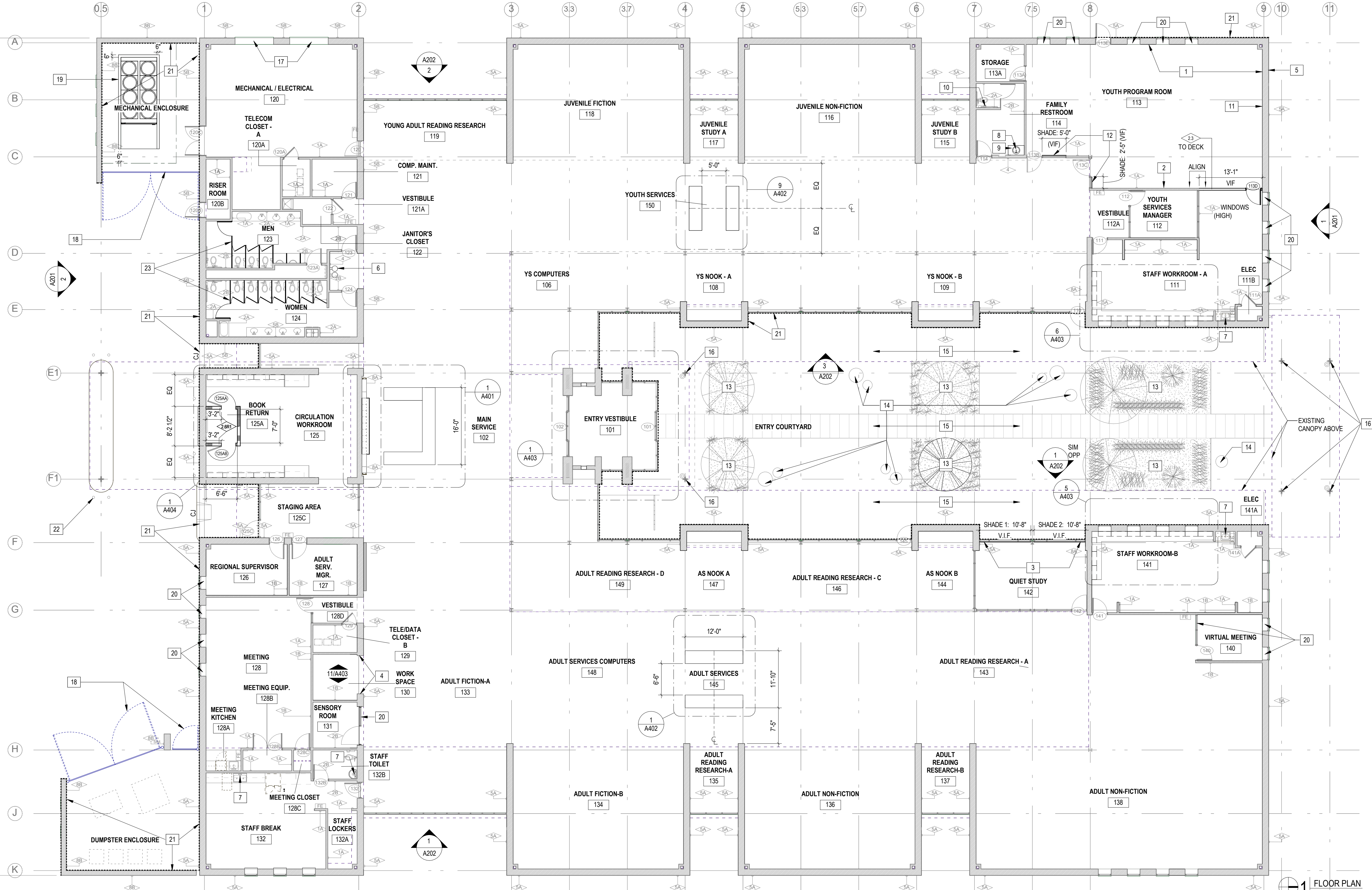
- 3-4. CONDUIT, WIRING, OR PIPING SHALL BE ROUTED SUCH THAT IT MAY BE CONCEALED WHEREVER POSSIBLE UNLESS SPECIFICALLY NOTED OTHERWISE. ANY CONDUIT, WIRING, OR PIPING THAT CANNOT BE ROUTED IN A CONCEALED MANNER MUST BE IDENTIFIED BY THE GENERAL CONTRACTOR AND REVIEWED AND COORDINATED W/ ARCHITECT PRIOR TO COORDINATION DRAWINGS (IF REQUIRED) OR INSTALLATION (IF COORDINATION DRAWINGS ARE NOT REQUIRED).
- 3-5. IN AREAS OF HARD CEILING, BUILDING SYSTEMS SHALL BE CONFIGURED TO MINIMIZE REQUIRED ABOVE-CEILING ACCESS. THE LOCATION OF ALL ACCESS DOORS MUST BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY ABOVE-CEILING EQUIPMENT, DAMPERS, VALVES, JUNCTION BOXES, ETC. ACCESS DOORS SHALL BE PROVIDED AND INSTALLED FOR ANY WORK THAT REQUIRES ABOVE-CEILING ACCESS. ADDITIONALLY, ANY ACCESS DOORS OR PANELS REQUIRED IN WALLS MUST BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY EQUIPMENT REQUIRING ACCESS.
- 3-6. ALL FRAMING, SOUND ATTENUATION, AND GYP BOARD FOR NON-RATED SOUND-ATTENUATED WALLS SHALL CONTINUE TO THE UNDERSIDE OF DECK UNLESS SPECIFICALLY NOTED OTHERWISE. GYP BOARD SHALL BE SEALED TO DECK AT EACH FACE WITH JOINT COMPOUND, SEALANT, AND/OR EXPANDING FOAM (ACCEPTABLE ONLY IN CONCEALED CONDITIONS). ANY REQUIRED PIPE, DUCT, OR WIRING PENETRATIONS SHALL BE SEALED AS DESCRIBED ABOVE.
- 3-7. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL ACT CEILING GRIDS SHALL BE CENTERED WITHIN EACH ROOM OR SPACE WITH NO CUT PERIMETER TILES TO BE $6'$.

- 3-8. ALL ELECTRICAL, CATV, AND TELEDATA OUTLETS TO MATCH EXISTING HEIGHT ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. ALL ELECTRICAL FIXTURES AT KITCHEN COUNTERS AND BATHROOM VANITIES TO BE LOCATED 46" O.C. ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. ALL ELECTRICAL SWITCHES, THERMOSTATS, AND OTHER CONTROL DEVICES TO BE CENTERED 46" O.C. ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
- 3-9. UNLESS DIMENSIONED OR OTHERWISE NOTED, SET THE NEAREST EDGE OF SWITCH-PLATES 24" FROM THE CENTER OF DOOR OPENINGS. AT ALL LOCATIONS WHERE MULTIPLE SWITCHES ARE SHOWN, THEY SHOULD BE GANGED UNLESS SPECIFICALLY NOTED OTHERWISE. IN ANY LOCATIONS WITH MULTIPLE DEVICES (ELECTRICAL OUTLETS, ELECTRICAL SWITCHES, HORN/STROBES, EMERGENCY LIGHTS, ETC), ALL DEVICES ARE TO BE CENTERED ON A VERTICAL AXIS UNLESS SPECIFICALLY NOTED OTHERWISE.
- 3-10. ACOUSTICAL INSULATION NOT SHOWN FOR CLARITY. REFER TO PARTITION TYPES FOR LOCATION OF ACOUSTICAL INSULATION.
- 3-11. ALL HINGE SIDE DOOR JAMBS TO BE LOCATED 4" FROM ADJACENT WALL U.N.O.

4-1. SEE G001 FOR ADDITIONAL NOTES, SYMBOLS AND ABBREVIATIONS

KEYNOTES - FLOOR PLAN

NO.	DESCRIPTION
1	PATCH & REPAIR EXISTING CMU WALL AT LOCATIONS OF DEMOLISHED STAGE BENCHRAMP. TO MATCH APPEARANCE OF SURROUNDING EXISTING FINISH.
2	PATCH, REPAIR, AND REPAINT EXISTING GWB WALL. PROVIDE LEVEL 5 GWB FINISH UNDER NEW VINYL WALLCOVERING ENTIRE WALL (BOTH EXISTING & NEW PORTIONS).
3	(2) NEW SOLAR ROLLER SHADES, BASIS OF DESIGN: HUNTER DOUGLAS ARCHITECTURAL, GLACIERS SCREEN BASKETWEAVE, 3% OPENING, BEADED LOOP CONTROL, COLOR: WHITE/GREY
4	CLEAN, PATCH, AND REPAIR EXISTING BRICK/CMU WALL AT AREAS OF DEMOLISHED STOREFRONT TO MATCH APPEARANCE OF SURROUNDING EXISTING FINISH.
5	BUILDING EXTERIOR TO BE WASHED, ALL ELEVATIONS TYP. W/ LOW - PRESSURE MILD DETERGENT.
6	NEW WATER COOLER - SEE PLUMBING DRAWINGS. ALTER WALL FRAMING AS NEEDED TO ADJUST EXISTING ROUGH-INS, & REPAIR FINISHES AS REQUIRED.
7	NEW FAUCET ON EXISTING SINK/LAVATORY - SEE PLUMBING DRAWINGS.
8	NEW SINK & FAUCET - SEE PLUMBING DRAWINGS
9	NEW COUNTER - SEE FINISH PLAN
10	PROVIDE NEW 18" VERTICAL GRAB BAR. SEE G001, ELEVATION OF ACCESSIBLE WATER CLOSET SIDE FOR MOUNTING LOCATION.
11	REINSTALL EXISTING PROJECTOR SCREEN
12	NEW PRIVACY ROLLER SHADES, BASIS OF DESIGN: HUNTER DOUGLAS ARCHITECTURAL, GLACIERS SCREEN BASKETWEAVE, 1% OPENING, BEADED LOOP CONTROL, COLOR: WHITE/GREY
13	EXISTING LANDSCAPE BEDS. PROVIDE ALLOWANCE FOR NEW MULCH, WEED REMOVAL, & PRUNING OF EXISTING PLANTINGS
14	EXISTING ART SCULPTURES
15	EXISTING CONCRETE PAVEMENT. POWER WASH.
16	EXISTING COLUMN
17	EXISTING LOUVERED OPENINGS.
18	EXISTING STEEL SCREENING/GATE SYSTEM - PAINT W/ HIGH PERFORMANCE COATING TO MATCH PAINTED ARCHITECTURAL EXPOSED STRUCTURAL STEEL
19	EXPAND EXISTING CHILLER PAD TO BE 6" WIDER THAN CHILLER FOOTPRINT DIMENSIONS AS REQUIRED, SEE MECHANICAL DRAWINGS FOR CHILLER SPECS.
20	EXISTING WINDOW TREATMENTS TO BE REMOVED, STORED, AND REINSTALLED.
21	REPLACE EXTERIOR JOINT SEALANTS BETWEEN SIDEWALK/PAVEMENT AND BUILDING WALLS, INCLUDING MECHANICAL YARDS, TYP. (DOTTED LINE - GC TO CONFIRM EXTENT ON SITE)
22	PROVIDE NEW BOLLARD SLEEVES AT EXISTING BOLLARDS, TYP. BASIS OF DESIGN: RELIANCE FOUNDRY CO. PLASTIC BOLLARD COVER. REPLACE BOLLARDS IF NECESSARY.
23	REPLACE EXISTING TOILET PARTITIONS & URINAL SCREENS IN MEN 123 AND WOMEN 124 - MATCH EXISTING LAYOUT & HEIGHT. BASIS OF DESIGN: BRADLEY SERIES 400 SOLID HDPE TOILET PARTITION, OVERHEAD BRACED & FLOOR-ANCHORED, COLOR: STARRY NIGHT S228. GC TO PROVIDE SANITARY NAPKIN DISPOSAL. OWNER TO PROVIDE TOILET PAPER DISPENSER TO BE INSTALLED BY GC. ALTERNATE NO.2: EXISTING TOILET COMPARTMENTS TO REMAIN.



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SHEET DATA
FLOOR PLAN

FLOOR PLAN
3/32" = 1'-0"

FLOOR PLAN / REFLECTED CEILING PLAN GENERAL NOTES

1.1. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR REVIEWING AND COORDINATING THEIR WORK WITH ALL OF THE CONTRACT DOCUMENTS PRIOR TO BEGINNING ANY WORK ON SUBMITTALS, SHOP DRAWINGS, FABRICATION, OR INSTALLATION. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE GENERAL CONTRACTOR IN WRITING AND SHALL BE RESOLVED WITH THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK.

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1.3. EXISTING CONDITIONS FOR THE BUILDING AND/OR SITE AS REPRESENTED IN THE CONTRACT DOCUMENTS ARE NOT GUARANTEED. PRIOR TO BEGINNING ANY WORK ON SUBMITTALS, SHOP DRAWINGS, FABRICATION, OR INSTALLATION, THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE EXISTENCE AND LOCATION OF EXISTING CONSTRUCTION AFFECTING THE WORK INCLUDING, BUT NOT LIMITED TO, UNDERGROUND UTILITIES, EXISTING BUILDING SYSTEMS, FLOOR ELEVATIONS, AND OTHER STRUCTURAL OR BUILDING DATUMS.

2.1. ALL DIMENSIONS ARE TO FINISHED FACE OF WALL UNLESS OTHERWISE NOTED.

2.2. WALLS SHOWN TO ALIGN ARE TO HAVE FINISHED FACES ALIGN UNLESS NOTED OTHERWISE.

2.3. IF PROVIDED, REFER TO ENLARGED PLANS AND PLAN DETAILS FOR ADDITIONAL INFORMATION AND DIMENSIONS.

2.4. LOCATIONS OF ALL DEVICES AND FIXTURES DIMENSIONED, NOTED OR OTHERWISE DESCRIBED ARE EXACT. ALL NEW FRAMING MUST ACCOMMODATE THESE LOCATIONS.

2.5. ANY DIMENSIONS OF OR TYING INTO EXISTING BUILDING COMPONENTS ARE TO BE FIELD-VERIFIED PRIOR TO COMMENCEMENT OF WORK. VERIFY WITH ARCHITECT.

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3.3. THE GENERAL CONTRACTOR IS TO COORDINATE, PROVIDE, AND INSTALL CONCEALED BLOCKING FOR ALL WALL- AND CEILING-MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO, HAND RAILS, GRAB BARS, CABINETS AND OTHER CASEWORK, EQUIPMENT, OWNER- AND/OR VENDOR-PROVIDED ITEMS, ETC. BLOCKING IS TO BE FIRE-RETARDANT WOOD OR 20ga METAL WITH A FLAME SPREAD AND SMOKE DEVELOPMENT RATING <25 IF THE PROJECT IS IDENTIFIED AS A TYPE 1 OR TYPE 2 BUILDING IN THE CODE SUMMARY.

3.4. CONDUIT, WIRING, OR PIPING SHALL BE ROUTED SUCH THAT IT MAY BE CONCEALED WHEREVER POSSIBLE UNLESS SPECIFICALLY NOTED OTHERWISE. ANY CONDUIT, WIRING, OR PIPING THAT CANNOT BE ROUTED IN A CONCEALED MANNER MUST BE IDENTIFIED BY THE GENERAL CONTRACTOR AND REVIEWED AND COORDINATED W/ ARCHITECT PRIOR TO COORDINATION DRAWINGS (IF REQUIRED) OR INSTALLATION (IF COORDINATION DRAWINGS ARE NOT REQUIRED).

3.5. IN AREAS OF HARD CEILING, BUILDING SYSTEMS SHALL BE CONFIGURED TO MINIMIZE REQUIRED ABOVE-CEILING ACCESS. THE LOCATION OF ALL ACCESS DOORS MUST BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY ABOVE-CEILING EQUIPMENT, DAMPERS, VALVES, JUNCTION BOXES, ETC. ACCESS DOORS SHALL BE PROVIDED AND INSTALLED FOR ANY WORK THAT REQUIRES ABOVE-CEILING ACCESS. ADDITIONALLY, ANY ACCESS DOORS OR PANELS REQUIRED IN WALLS MUST BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY EQUIPMENT REQUIRING ACCESS.

3.6. ALL FRAMING, SOUND ATTENUATION, AND GYP BOARD FOR NON-RATED SOUND-ATTENUATED WALLS SHALL CONTINUE TO THE UNDERSIDE OF DECK UNLESS SPECIFICALLY NOTED OTHERWISE. GYP BOARD SHALL BE SEALED TO DECK AT EACH FACE WITH JOINT COMPOUND, SEALANT, AND/OR EXPANDING FOAM (ACCEPTABLE ONLY IN CONCEALED CONDITIONS). ANY REQUIRED PIPE, DUCT, OR WIRING PENETRATIONS SHALL BE SEALED AS DESCRIBED ABOVE.

3.7. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL ACT CEILING GRIDS SHALL BE CENTERED WITHIN EACH ROOM OR SPACE WITH NO CUT PERIMETER TILES TO BE <6".

3.8. ALL ELECTRICAL, CATV, AND TELEDATA OUTLETS TO MATCH EXISTING HEIGHT ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. ALL ELECTRICAL FIXTURES AT KITCHEN COUNTERTOPS AND BATHROOM VANITIES TO BE LOCATED 48" O.C. ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. ALL ELECTRICAL SWITCHES, THERMOSTATS, AND OTHER CONTROL DEVICES TO BE CENTERED 48" O.C. ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.

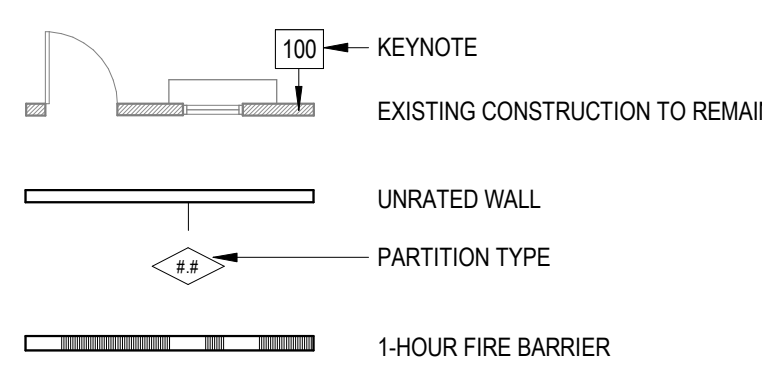
3.9. UNLESS DIMENSIONED OR OTHERWISE NOTED, SET THE NEAREST EDGE OF SWITCHPLATES 24" FROM THE CENTER OF DOOR OPENINGS. AT ALL LOCATIONS WHERE MULTIPLE SWITCHES ARE SHOWN, THEY SHOULD BE GANGED UNLESS SPECIFICALLY NOTED OTHERWISE. IN ANY LOCATIONS WITH MULTIPLE DEVICES (ELECTRICAL OUTLETS, ELECTRICAL SWITCHES, HORNSTROBES, EMERGENCY LIGHTS, ETC.), ALL DEVICES ARE TO BE CENTERED ON A VERTICAL AXIS UNLESS SPECIFICALLY NOTED OTHERWISE.

3.10. ACOUSTICAL INSULATION NOT SHOWN FOR CLARITY. REFER TO PARTITION TYPES FOR LOCATION OF ACOUSTICAL INSULATION.

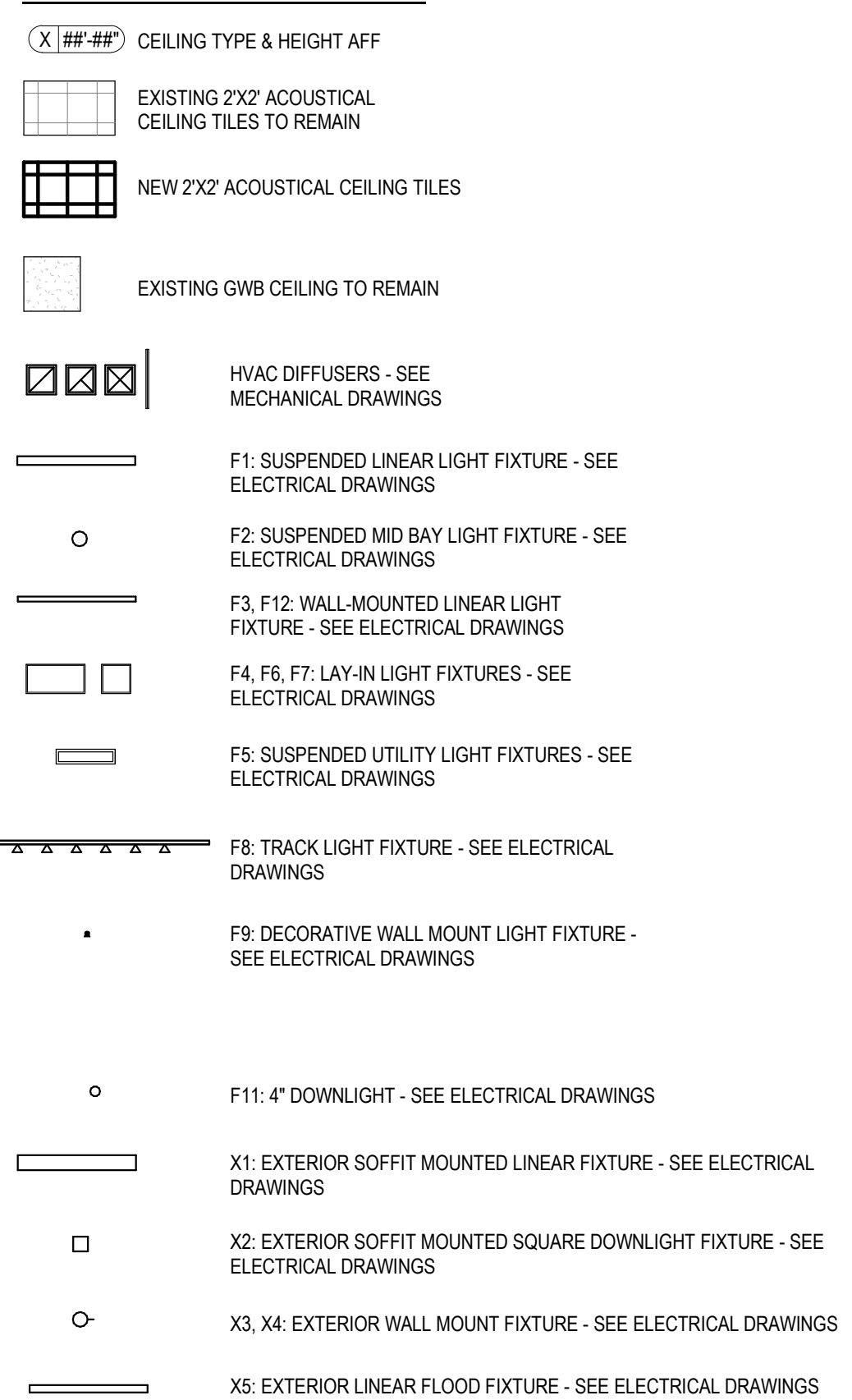
3.11. ALL HINGE SIDE DOOR JAMBS TO BE LOCATED 4" FROM ADJACENT WALL U.N.O.

4.1. SEE G001 FOR ADDITIONAL NOTES, SYMBOLS AND ABBREVIATIONS

PARTITION LEGEND



REFLECTED CEILING PLAN LEGEND

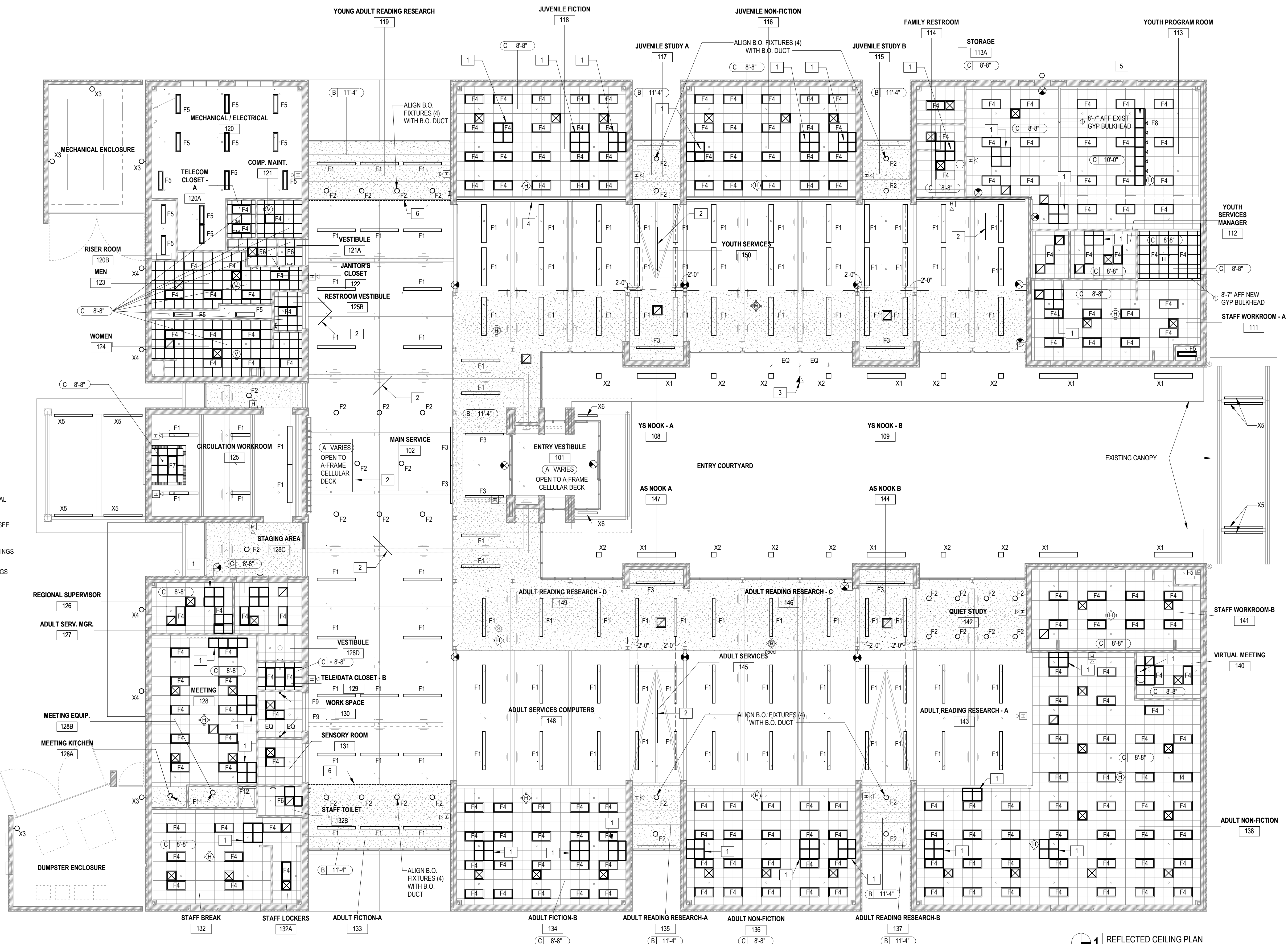


CEILING SCHEDULE

TYPE	DESCRIPTION
A	EXPOSED STRUCTURE
B	GWB, PAINTED
C	2'X2' ACT W/ 3/4" BEVELED TEGULAR EDGE TO MATCH EXISTING - SEE PREFERRED ALTERNATE NO. B.

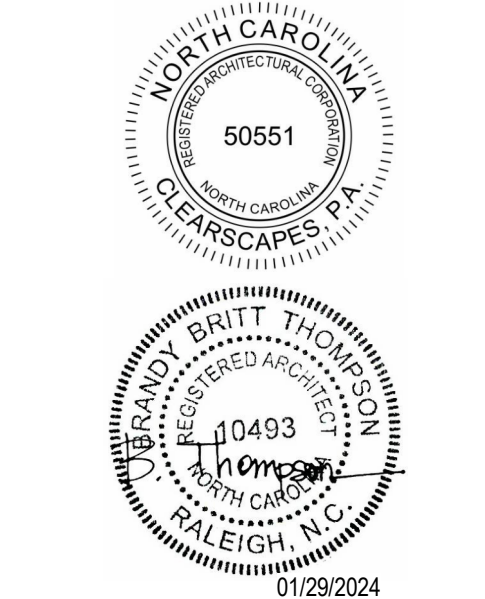
KEYNOTES - RCP

NO.	DESCRIPTION
1	REPLACE ACT TILES AND GRID AS NEEDED AT EXISTING VAV BOX LOCATIONS DURING CONSTRUCTION. LOCATIONS AND QUANTITIES ARE APPROXIMATE. GC TO VERIFY IN FIELD. SEE MECHANICAL DRAWINGS FOR SCOPE OF WORK.
2	NEW OVERHEAD SIGN - SEE SIGNAGE PLAN
3	NEW WIRELESS ACCESS POINT MOUNTED IN SOFFIT - SEE ELECTRICAL DRAWINGS
4	PATCH AND REPAIR EXISTING GWB WALL AT AREAS OF DEMOLISHED WALL-MOUNTED SIGNS TO MATCH APPEARANCE OF SURROUNDING WALL FINISH TYP.
5	REPLACE ACT TILES AND GRID AS NEEDED AT PREVIOUS TRACK LIGHT LOCATION DURING CONSTRUCTION. LOCATIONS AND QUANTITIES ARE APPROXIMATE. GC TO VERIFY IN FIELD.
6	NEW CUSTOM FIXED WINDOW TREATMENT IN TRIANGLE CLERESTORY: VELCRO FIXED PANELS WITH ATTACHED HEMBAR ALONG BOTTOM. BASIS OF DESIGN PANEL FABRIC: MERMET E SCREEN, 10% OPENING, COLOR: 00207 WHITE/PEARL. SEE A121



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PERMIT SET
01.29.2024

PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

No.	Description	Date

PROJECT DATA
DATE: 01.29.2024
DRAWN: LP
CHECKED: EMBT
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

SHEET DATA
REFLECTED CEILING PLAN

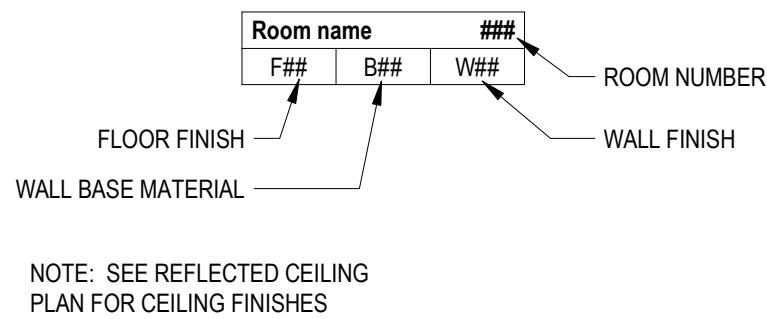
SHEET NO.
A111

REFLECTED CEILING PLAN
3/32" = 1'-0"

FINISH PLAN NOTES

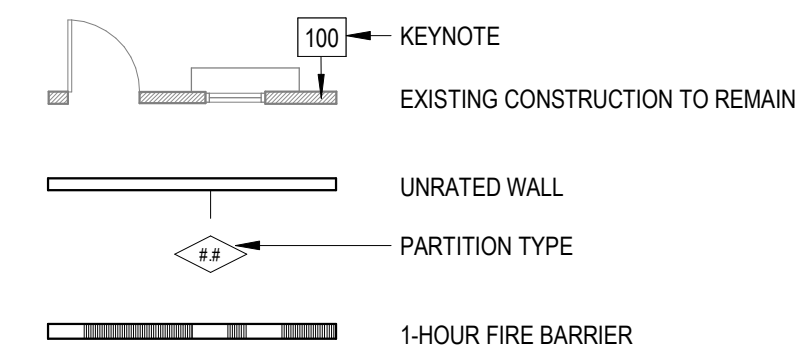
- SEE 0001 FOR ADDITIONAL NOTES, SYMBOLS AND ABBREVIATIONS.
- HOLLOW METAL FRAMES AND DOORS TO RECEIVE SEMI-GLOSS FINISH U.N.O.
- METAL YARD FRAMES AND DOORS TO RECEIVE SEMI-GLOSS FINISH U.N.O.
- BOLLARDS TO RECEIVE SEMI-GLOSS FINISH U.N.O.
- IF NOT DIMENSIONED, ALIGN FLOOR MATERIALS AT ARCHITECTURAL ELEMENTS WHERE SHOWN ON FINISH PLAN. I.E. AT EDGE OF WALL.
- ALL PAINT FINISHES TO BE EGGSHELL U.N.O.
- ALL NEW PAINTED CONDUIT & DUCTWORK TO BE SEMI-GLOSS FINISH. IF MATCHING EXISTING, CONFIRM EXISTING FINISH.
- SEE DOOR SCHEDULE FOR FRAME AND DOOR COLORS.
- ALL CMU AND BRICK ON THE PROJECT TO REMAIN IN ITS NATURAL APPEARANCE (NO PAINT).
- ALL SPACES REQUIRE CLASS C FLAME SPREAD INDEX AT A MINIMUM PER TABLE 803.11.
- SEE INTERIOR ELEVATIONS FOR CLARIFICATION OF EXTENT OF FINISH MATERIALS.
- ALL GWB CEILINGS AND SOFFITS TO BE PAINTED W10 U.N.O. ON CEILING PLANS.
- PROVIDE ADDITIONAL 10% ATTIC STOCK OF ALL CARPET TILE TYPES.
- PROVIDE MOCKUP SAMPLES OF EACH PAINT/STAIN SYSTEM INDICATED AND EACH COLOR AND FINISH SELECTED TO VERIFY PRELIMINARY SELECTIONS. ARCHITECT TO SELECT ONE SURFACE TO REPRESENT SURFACES AND CONDITIONS FOR EACH SYSTEM. APPLY AFTER PERMANENT LIGHTING AND OTHER ENVIRONMENTAL SERVICES HAVE BEEN ACTIVATED.
- DO NOT PROVIDE WALL BASE AT EXPOSED BRICK WALL FINISH. FLOORING TO BE TIGHT TO WALL AT THOSE LOCATIONS.
- PROTECT ALL FINISHES TO REMAIN.

FINISH PLAN LEGEND



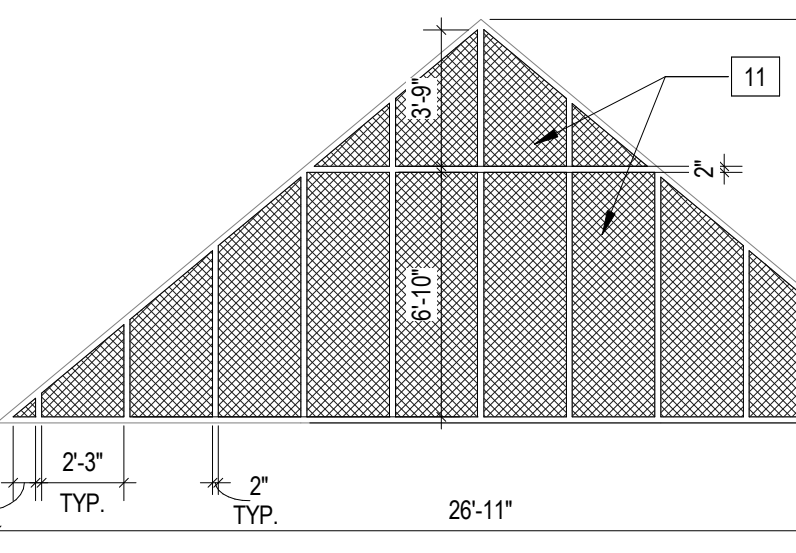
NOTE: SEE REFLECTED CEILING PLAN FOR CEILING FINISHES

PARTITION LEGEND



KEYNOTES - FINISH PLAN

NO.	DESCRIPTION
1	EXISTING WOOD VENEER CABINET FRONTS TO BE CLEANED, SANDED & REFINISHED WITH CLEAR WATERPROOF SEAL, SATIN SHEEN.
2	EXISTING WALL FINISH TO REMAIN
3	EXISTING CHAIR RAIL TO REMAIN. PRIME AND PAINT TO MATCH WALL COLOR.
4	PROVIDE ADA COMPLIANT TRANSITION STRIP AT CARPET/RESILIENT FLOORING CONDITION. SEE A404.
5	PROVIDE ADA COMPLIANT TRANSITION STRIP AT CARPET/VCT CONDITION. SEE A404.
6	PROVIDE ADA COMPLIANT TRANSITION STRIP AT CARPET/CONCRETE CONDITION. SEE A404.
7	CONFIRM EXISTING MARBLE THRESHOLD IS ADA COMPLIANT W/ INSTALLATION OF NEW RESILIENT FLOORING IN VESTIBULE. IF EXISTING THRESHOLD IS NOT ADA COMPLIANT, REPLACE WITH NEW ADA COMPLIANT THRESHOLD.
8	PROVIDE ADA COMPLIANT TRANSITION STRIP AT CARPET/TILE CONDITION. SEE A404.
9	EXPOSED STEEL COLUMN (INTERIOR), PAINT W11, TYP.
10	CONFIRM EXISTING MARBLE THRESHOLD IS ADA COMPLIANT W/ INSTALLATION OF NEW CARPET
11	NEW CUSTOM FIXED WINDOW TREATMENT (INTERIOR); VELCRO FIXED PANELS WITH ATTACHED HEMBAR ALONG BOTTOM. BASIS OF DESIGN PANEL FABRIC: MERMET E SCREEN, 10% OPENING, COLOR: 002007 WHITE/PEARL
12	STAINLESS STEEL CORNER GUARD



2 A19
3/16" = 1'-0"

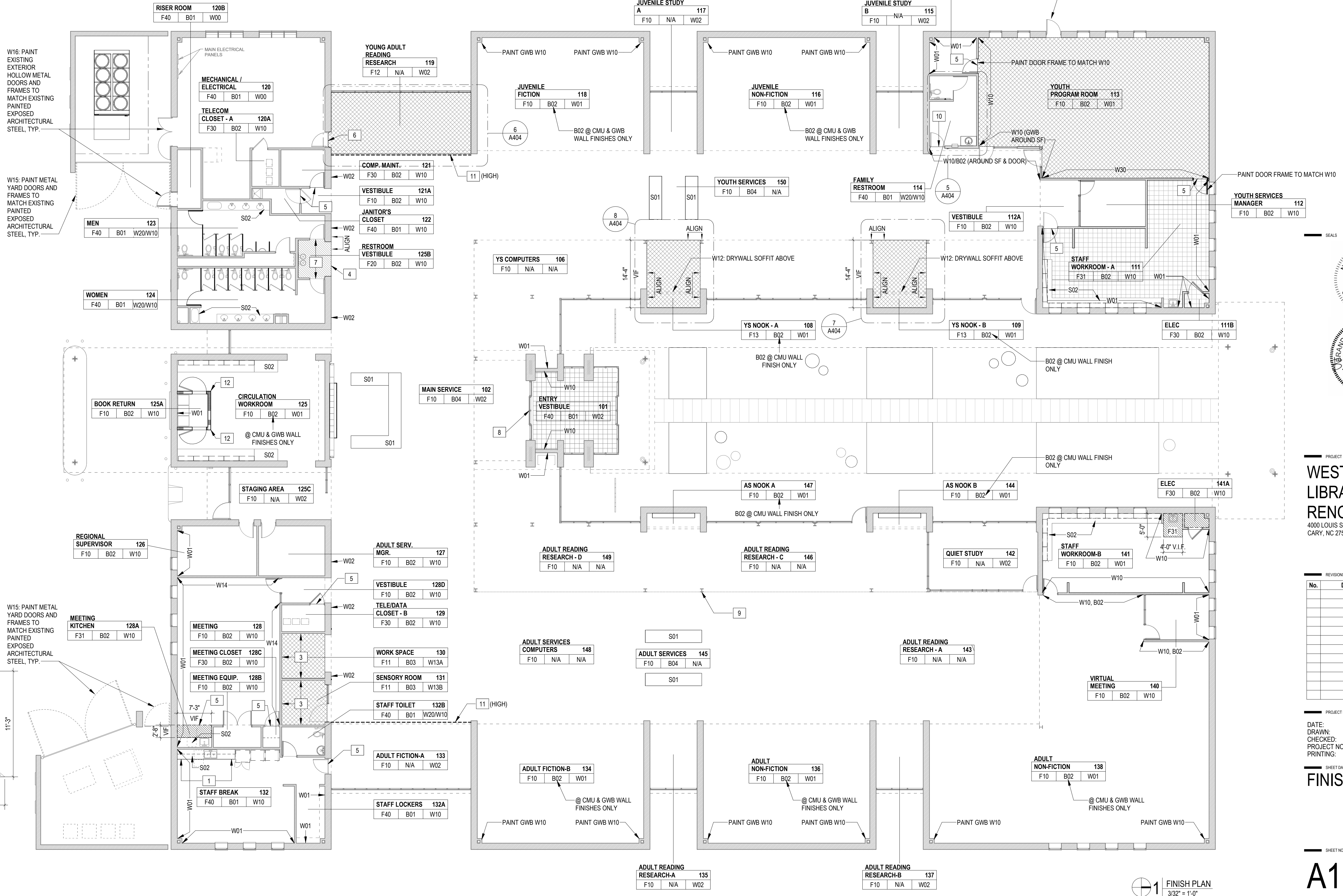
KEY	FLOOR MATERIAL
F10	CARPET A: INTERFACE VERTICALS, STYLE: 138880A000, CUSTOM COLOR: A+B THREADS: 104009 PRINCIPAL, C+D THREADS: 104008 ZENITH, INSTALLATION: ASHLAR
F11	CARPET B: INTERFACE WOVEN GRADIENCE, STYLE: WG100, COLOR: 108061 NAVY, INSTALLATION: QUARTER TURN
F12	CARPET C: INTERFACE SYNCOPATION, STYLE: 1240202500, COLOR 1: MARITIME, COLOR 2: OCEAN, & COLOR 3: QUARTZ; INSTALLATION: SEE A404
F13	CARPET D: INTERFACE WOVEN GRADIENCE, STYLE: WG100, COLOR 1: 108061 NAVY COLOR 2: 108059 CARIBBEAN, & COLOR 3: 108048 LINEN; INSTALLATION: SEE A404
F20	RESILIENT FLOORING: INTERFACE MESHED VINYL SHEET, COLOR: A03003 PUTTY (COORDINATING WELD ROD COLOR: 1123365)
F30	VCT: ARMSTRONG EXCELON SDT E - COLOR: 51957 RIDGE
F31	VCT: ARMSTRONG IMPERIAL TEXTURE - COLOR: 51903 BLUE/GRAY
F40	EXISTING FLOOR FINISH TO REMAIN - PROTECT FROM DAMAGE

KEY	SURFACE MATERIAL
S01	QUARTZ - CAMBRIA WEYBOURNE MATTE
S02	EXISTING COUNTERTOP TO REMAIN
S03	QUARTZ - CAMBRIA FIELDSTONE MATTE

KEY	LAMINATE MATERIAL
PLAM1	PIONITE FOLKSTONE GRAY, SG241, TEXTURED/SUEDE FINISH
PLAM2	PIONITE INDIJO BLUE, SB006 S0, TEXTURED/SUEDE FINISH
PLAM3	PIONITE FRENCH BLUE, SB006S02, METALZ FINISH
PLAM4	PIONITE STORM GRAY, HP565, TEXTURED/SUEDE FINISH
PLAM5	PIONITE SUGAR MAPLE II, WM115, TEXTURED/SUEDE FINISH

KEY	BASE MATERIAL
B01	EXISTING WALL BASE TO REMAIN
B02	4" RUBBER COVE BASE: ROPPE 129 CHARCOAL
B03	4" RUBBER COVE BASE: ROPPE 139 DEEP NAVY
B04	4" RUBBER STRAIGHT BASE AT SERVICE DESKS: ROPPE 129 CHARCOAL

KEY	WALL MATERIAL
W00	EXISTING WALL FINISH TO REMAIN
W01	EXISTING DECORATIVE FACE CMU TO REMAIN
W02	EXISTING BRICK VENEER TO REMAIN
W10	PAINT: SHERWIN WILLIAMS, COLOR: CITY LOFT 7631
W11	PAINT: SHERWIN WILLIAMS, COLOR: CITYSCAPE 7067 - VERIFY MATCH EXISTING PAINT COLOR AND SHEEN
W12	PAINT: SHERWIN WILLIAMS, COLOR: FRENCH MOIRE 9056
W13A	PAINT: SHERWIN WILLIAMS, COLOR: DISTANCE 6243 - WALL ACCENT COLOR UP TO 4'-0" AFF, THEN W10 ABOVE
W13B	PAINT: SHERWIN WILLIAMS, COLOR: DISTANCE 6243 - WALL COLOR FULL HEIGHT
W14	PAINT: SHERWIN WILLIAMS, COLOR: SECRET COVE 9058
W15	HIGH PERFORMANCE PAINT (EXTERIOR); MATCH EXISTING PAINTED EXPOSED ARCHITECTURAL STEEL
W16	HIGH PERFORMANCE PAINT (EXTERIOR HOLLOW METAL DOORS AND FRAMES); MATCH EXISTING PAINTED EXPOSED ARCHITECTURAL STEEL
W20	EXISTING TILE TO REMAIN
W30	VINYL WALLCOVERING: MANUFACTURER: LEVEL, DESIGN #: L14-1004, NAME: SPRINGTIME BLOOMS, COLOR: SUMMER GARDEN. PROVIDE LEVEL 5 GWB FINISH UNDER NEW VINYL WALLCOVERING ENTIRE WALL (BOTH EXISTING & NEW PORTIONS).



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SHEET DATA

FINISH PLAN



KEYNOTES - EXTERIOR	
NO.	DESCRIPTION
1	REPLACE EXTERIOR JOINT SEALANTS AT MASONRY CONTROL & EXPANSION JOINTS, TYP.
2	REPLACE EXTERIOR JOINT SEALANTS AT WINDOWS, LOUVERS, DOORS, & OTHER OPENINGS, TYP.
3	REPLACE EXTERIOR JOINT SEALANTS BETWEEN SIDEWALK/PAVEMENT AND BUILDING WALLS, TYP.
4	EXISTING JOINT SEALANTS BETWEEN METAL PANELS IN ACM SYSTEM TO REMAIN, TYP.
5	REPLACE EXTERIOR JOINT SEALANTS AT JOINTS BETWEEN DIFFERENT MATERIALS, TYP.
6	REMOVE AND REINSTALL EXISTING DOWNSPOUTS AS NEEDED DURING CONSTRUCTION TO REPLACE EXTERIOR JOINT SEALANTS, TYP.
7	REPLACE EXTERIOR JOINT SEALANTS AT GAS PIPE PENETRATIONS, TYP.
8	REPLACE EXTERIOR JOINT SEALANTS AT ENCASED WALL HYDRANTS, TYP.

BUILDING EXTERIOR NOTES:

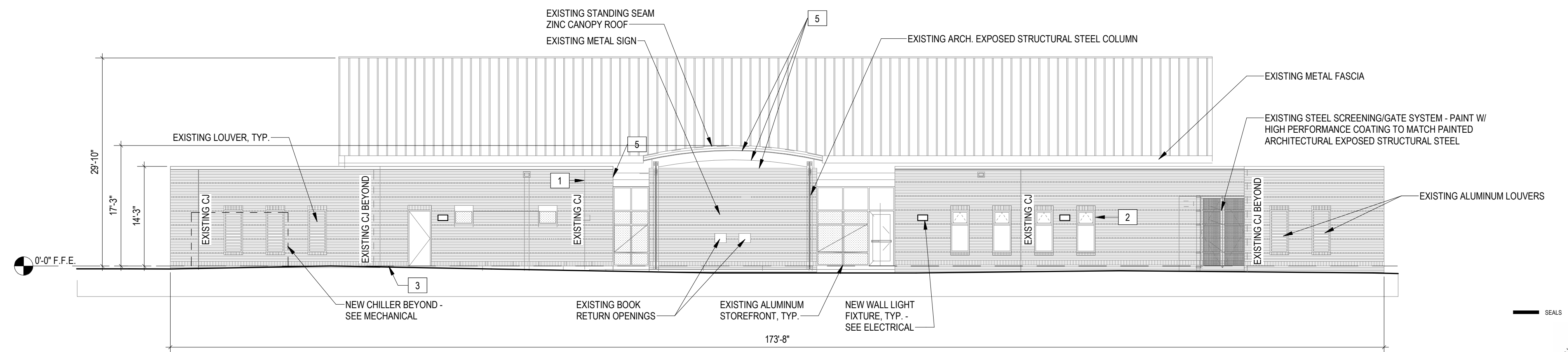
- CLEAN ENTIRE BUILDING EXTERIOR, SEE SECTION 025140.
- REPLACE ALL EXTERIOR JOINT SEALANTS, EXCLUDING THE FIELD JOINTS OF THE ACM PANEL SYSTEM. NOTE THAT NOT ALL JOINTS ARE SPECIFICALLY LISTED/CALLED OUT IN THE EXTERIOR KEYNOTES. GO TO FIELD VERIFY QUANTITY/EXTENTS OF JOINT SEALANTS. SEE SECTION 075200 FOR MORE INFORMATION.

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2 BUILDING ELEVATION - SOUTH
3/32" = 1'-0"
VERIFY ALL DIMENSIONS IN FIELD

SEALS



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WEST REGIONAL LIBRARY RENOVATION
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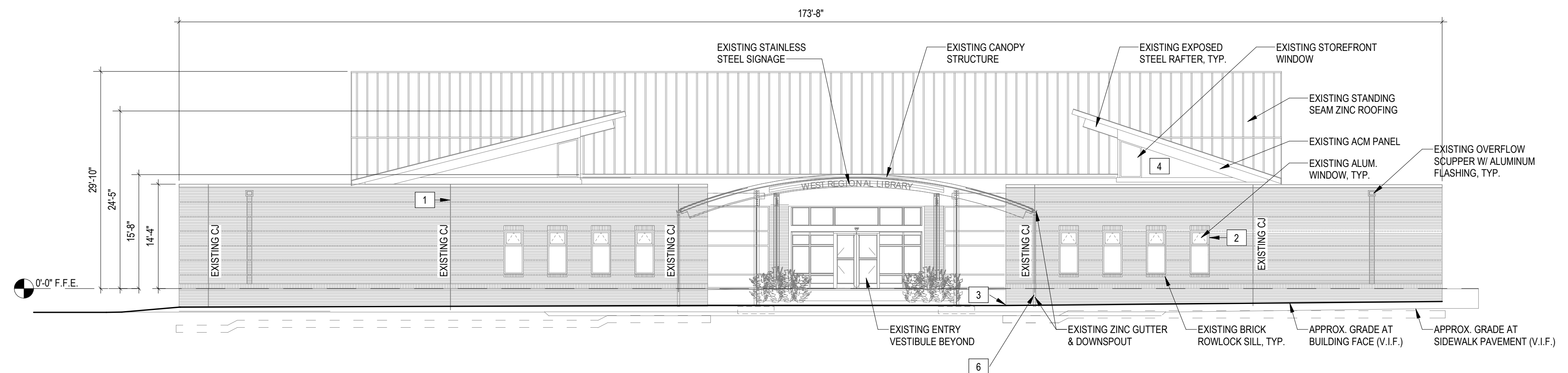
DATE: 01.29.2024
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SHEET DATA

BUILDING ELEVATIONS

SHEET NO.

A201



1 BUILDING ELEVATION - NORTH
3/32" = 1'-0"
VERIFY ALL DIMENSIONS IN FIELD

KEYNOTES - EXTERIOR	
NO.	DESCRIPTION
1	REPLACE EXTERIOR JOINT SEALANTS AT MASONRY CONTROL & EXPANSION JOINTS, TYP.
2	REPLACE EXTERIOR JOINT SEALANTS AT WINDOWS, LOUVERS, DOORS, & OTHER OPENINGS, TYP.
3	REPLACE EXTERIOR JOINT SEALANTS BETWEEN SIDEWALK/PAVEMENT AND BUILDING WALLS, TYP.
4	EXISTING JOINT SEALANTS BETWEEN METAL PANELS IN ACM SYSTEM TO REMAIN, TYP.
5	REPLACE EXTERIOR JOINT SEALANTS AT JOINTS BETWEEN DIFFERENT MATERIALS, TYP.
6	REMOVE AND REINSTALL EXISTING DOWNSPOUTS AS NEEDED DURING CONSTRUCTION TO REPLACE EXTERIOR JOINT SEALANTS, TYP.
7	REPLACE EXTERIOR JOINT SEALANTS AT GAS PIPE PENETRATIONS, TYP.
8	REPLACE EXTERIOR JOINT SEALANTS AT ENCASED WALL HYDRANTS, TYP.

BUILDING EXTERIOR NOTES:

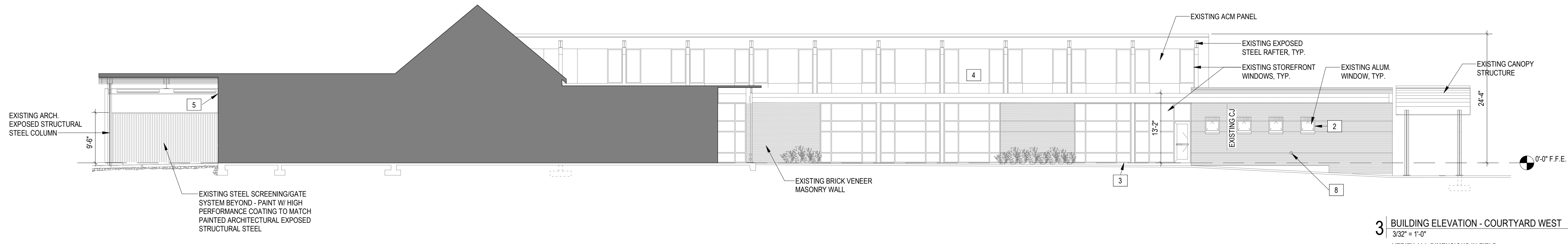
- CLEAN ENTIRE BUILDING EXTERIOR, SEE SECTION 025140.
- REPLACE ALL EXTERIOR JOINT SEALANTS, INCLUDING THOSE NOT SPECIFICALLY LISTED IN THE EXTERIOR KEYNOTES. GC TO FIELD VERIFY QUANTITY/EXTENTS OF JOINT SEALANTS. SEE SECTION 072200 FOR MORE INFORMATION.

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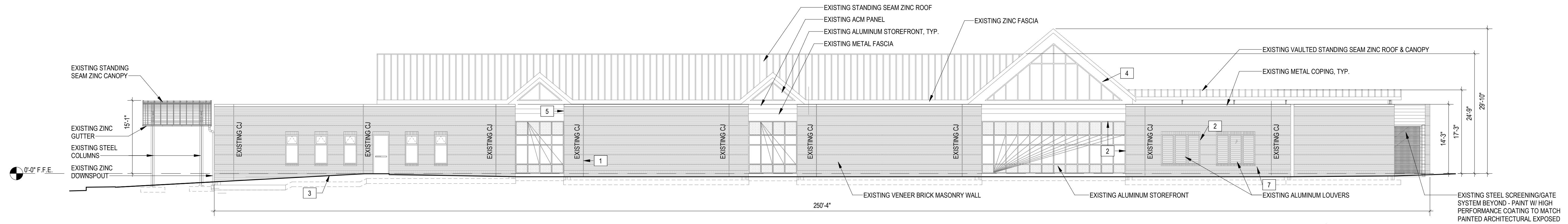
CONSULTANTS

MEP Engineer

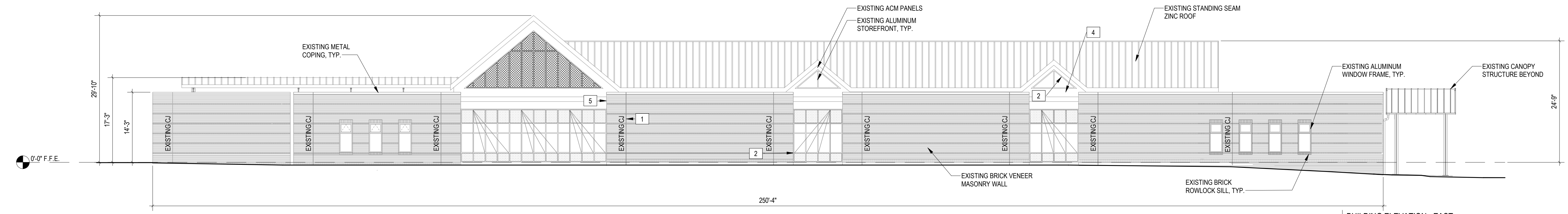
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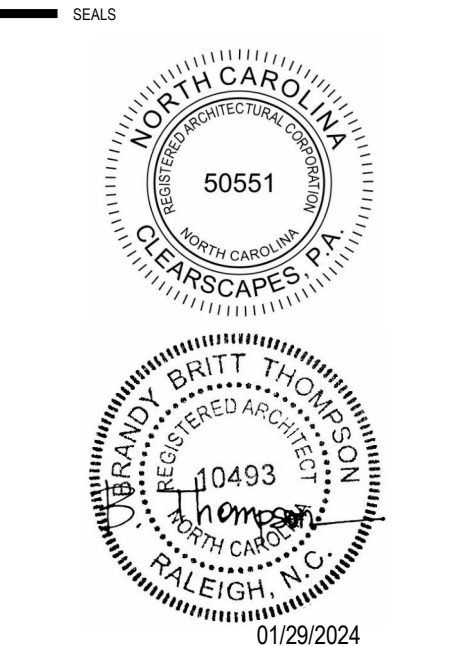
3 BUILDING ELEVATION - COURTYARD WEST
3/32" = 1'-0"
VERIFY ALL DIMENSIONS IN FIELD



2 BUILDING ELEVATION - WEST
3/32" = 1'-0"
VERIFY ALL DIMENSIONS IN FIELD



1 BUILDING ELEVATION - EAST
3/32" = 1'-0"
VERIFY ALL DIMENSIONS IN FIELD



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DATE: 01.29.2024
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PROJECT NO: 2023_0030
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SHEET DATA
BUILDING ELEVATIONS

SHEET NO.
A202

MILLWORK NOTES

- ELEVATIONS DEMONSTRATE TYPICAL DESIGN FOR ALL 3 CIRCULATION DESKS. DIMENSIONS VARY AND ARE INDICATED IN PLAN AND ELEVATION.
- COORDINATE INSTALLATION OF DURESS BUTTONS WITH SECURITY CONTRACTOR AND OWNER - ALL DESKS.
- COORDINATE GROMMET LOCATIONS ON SITE WITH THE OWNER AHEAD OF INSTALLATION.
- ALL FURNITURE, FIXTURES, AND EQUIPMENT SHOWN ARE FOR REFERENCE ONLY U.N.O.

CONSULTANTS

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SEALS



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PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
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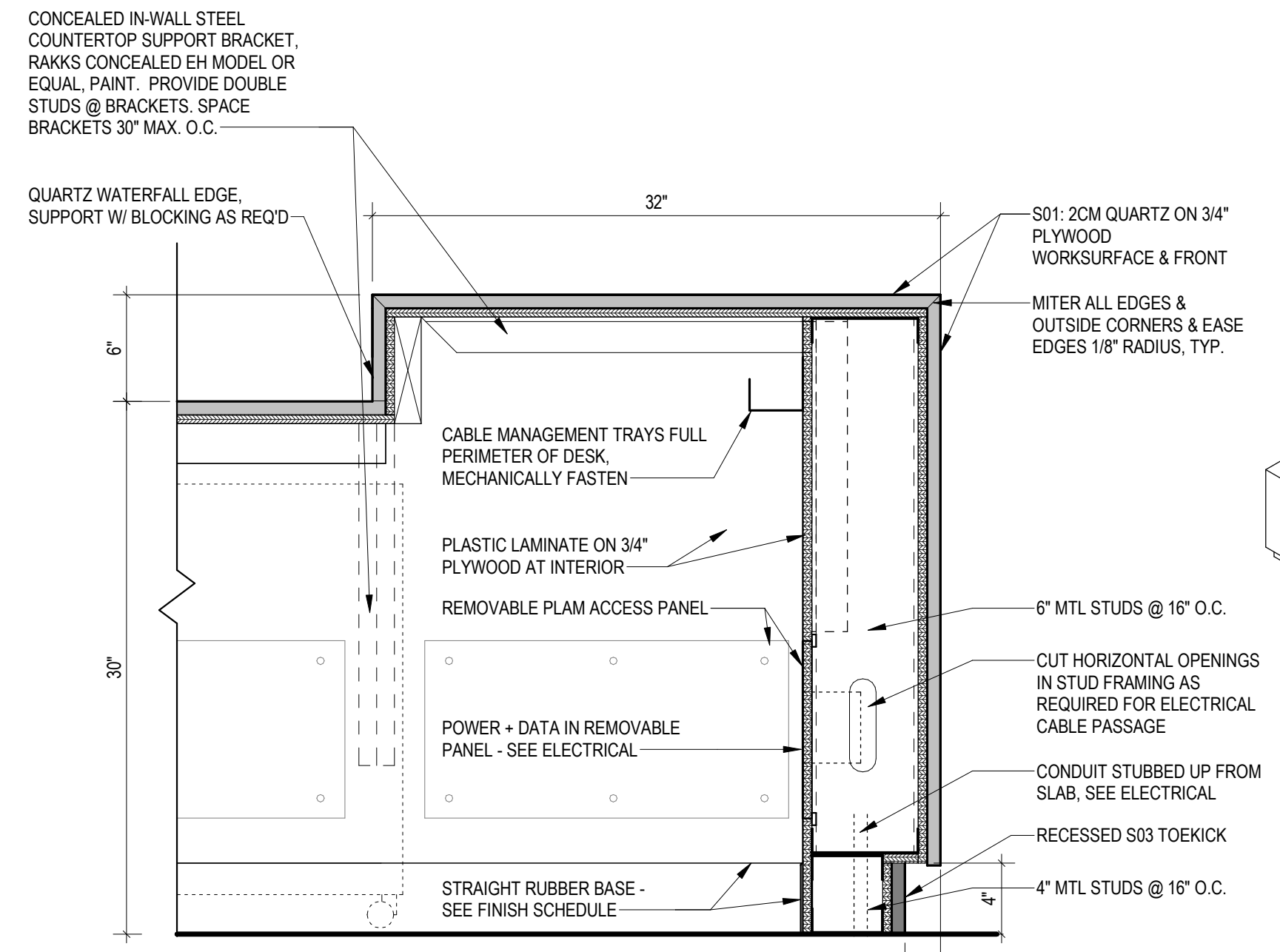
REVISIONS

No.	Description	Date

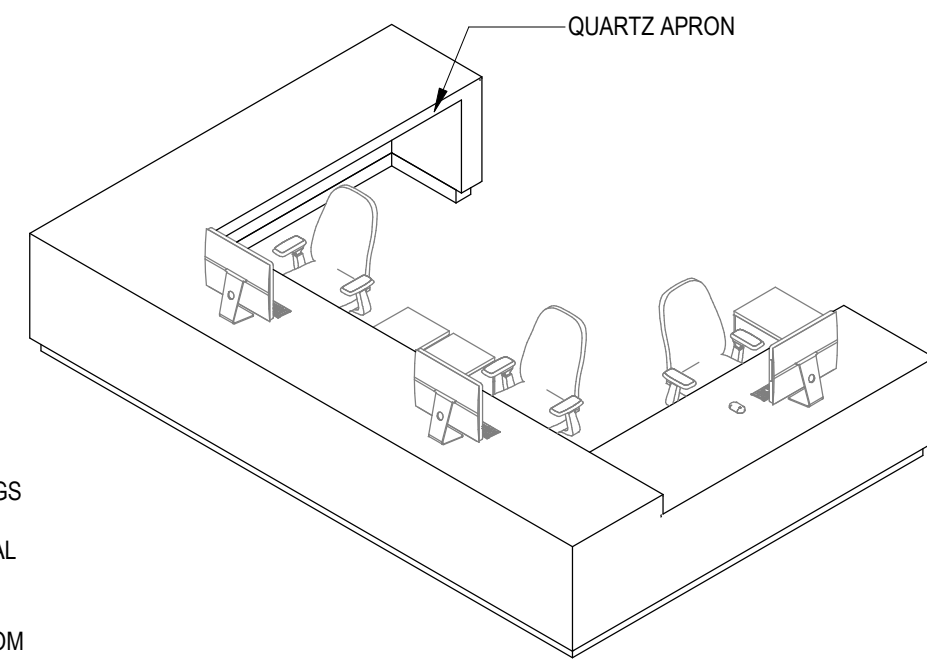
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DATE: 01.29.2024
DRAWN: LP
CHECKED: EM/MT
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

SHEET DATA
ENLARGED PLANS, INT. ELEV. & DETAILS
SHEET NO.

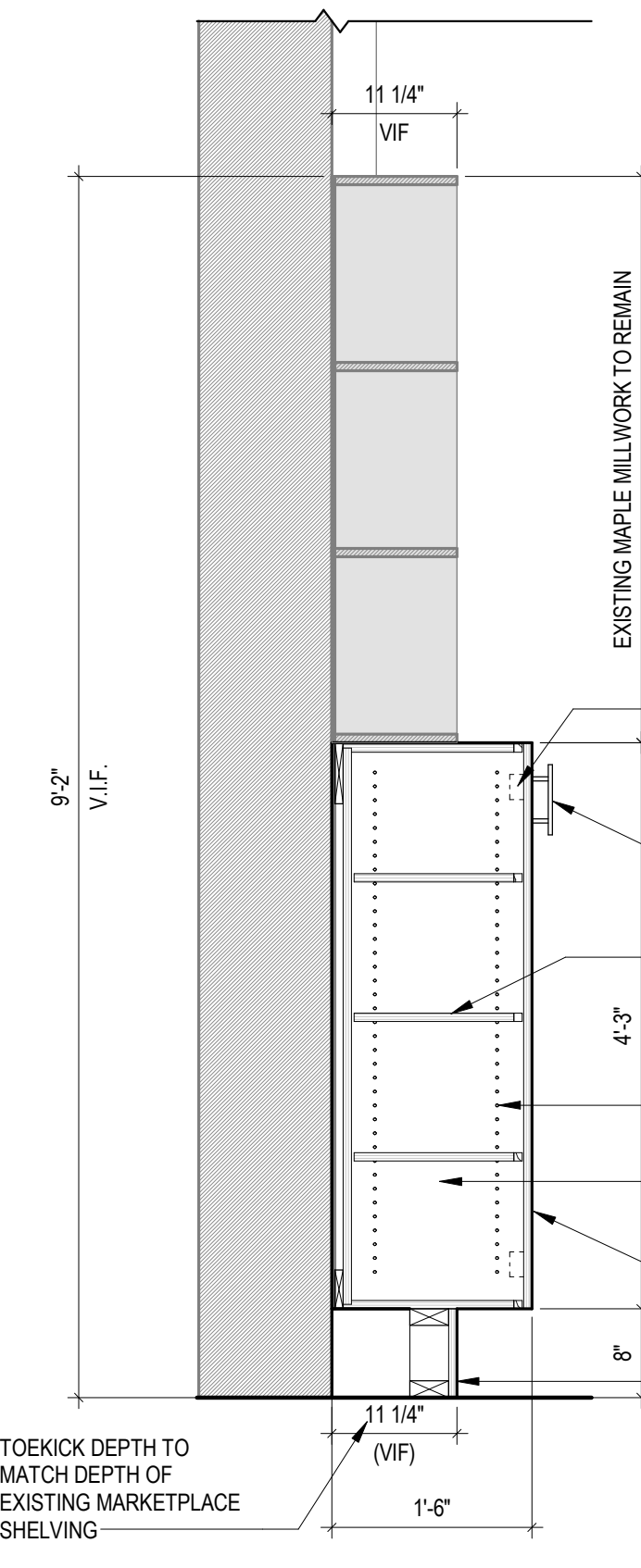
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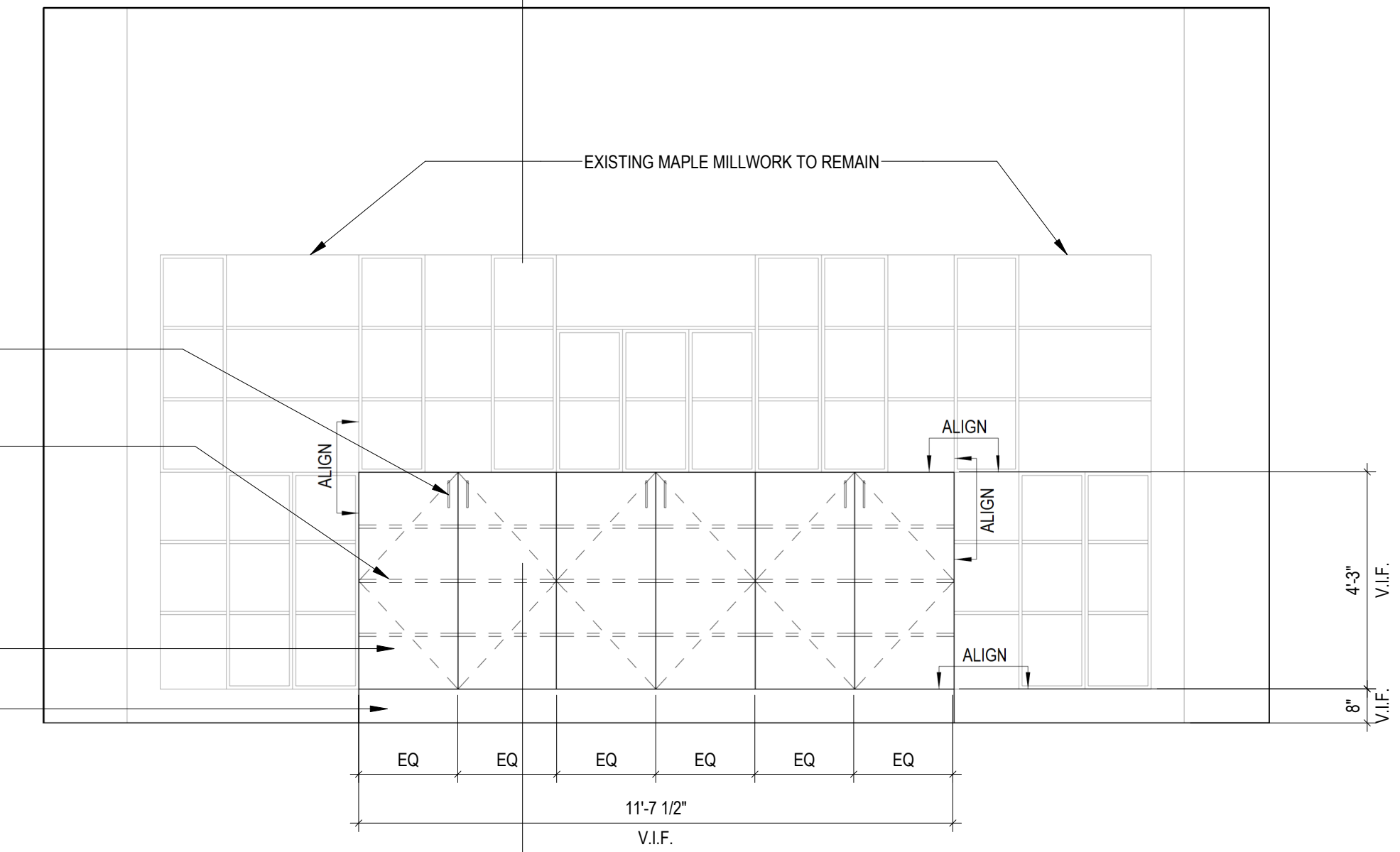
11 DETAIL AT MAIN SERVICE DESK
1 1/2" = 1'-0"



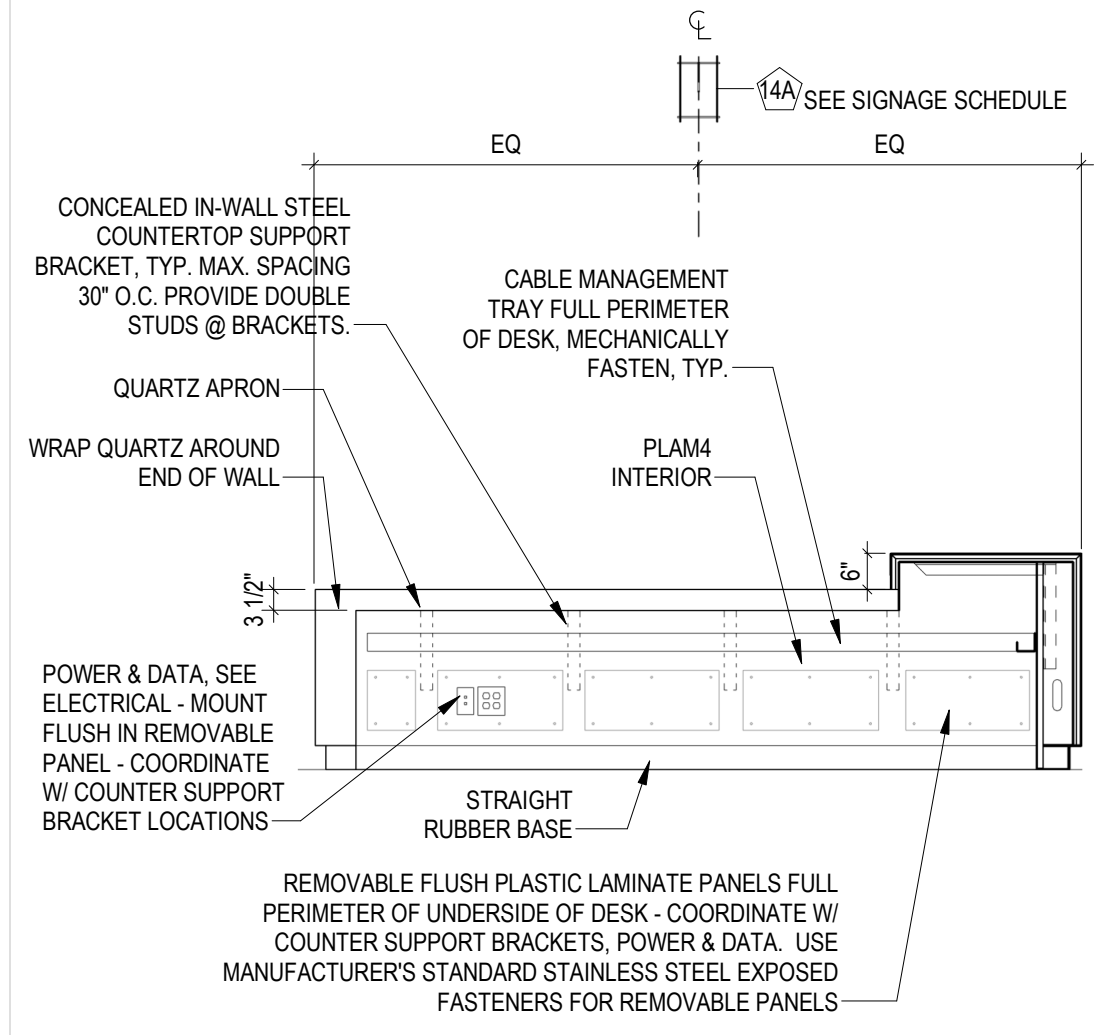
10 MAIN SERVICE DESK - AXONOMETRIC



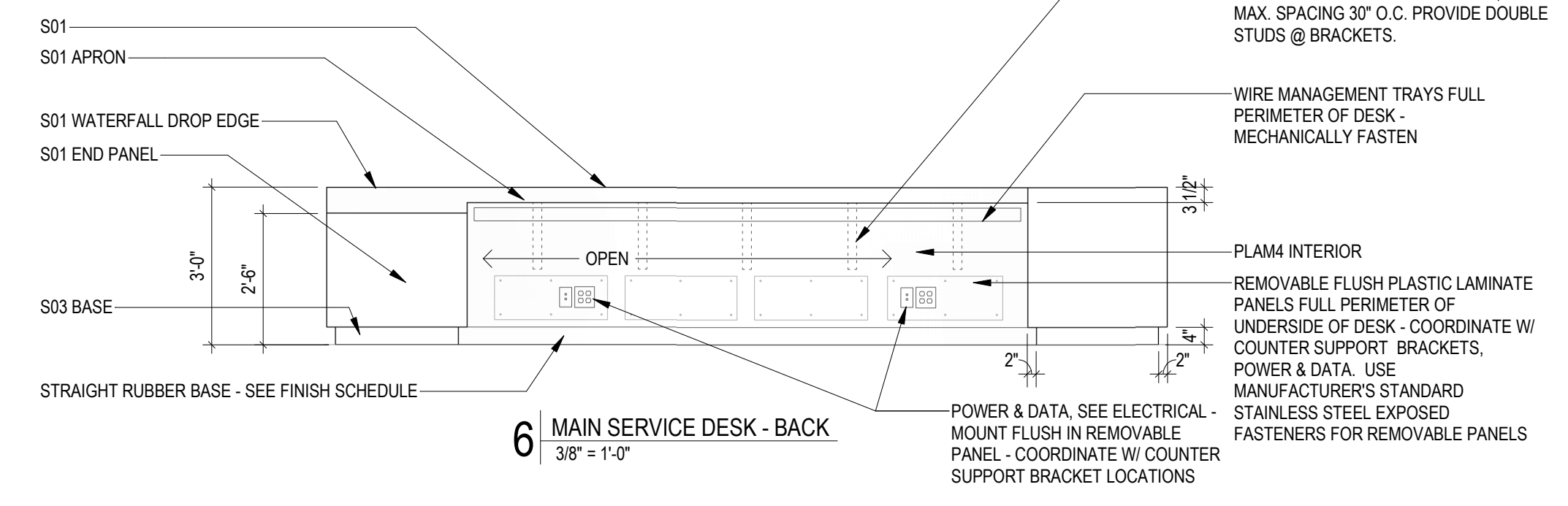
9 DETAIL AT MARKETPLACE MILLWORK
3/4" = 1'-0"



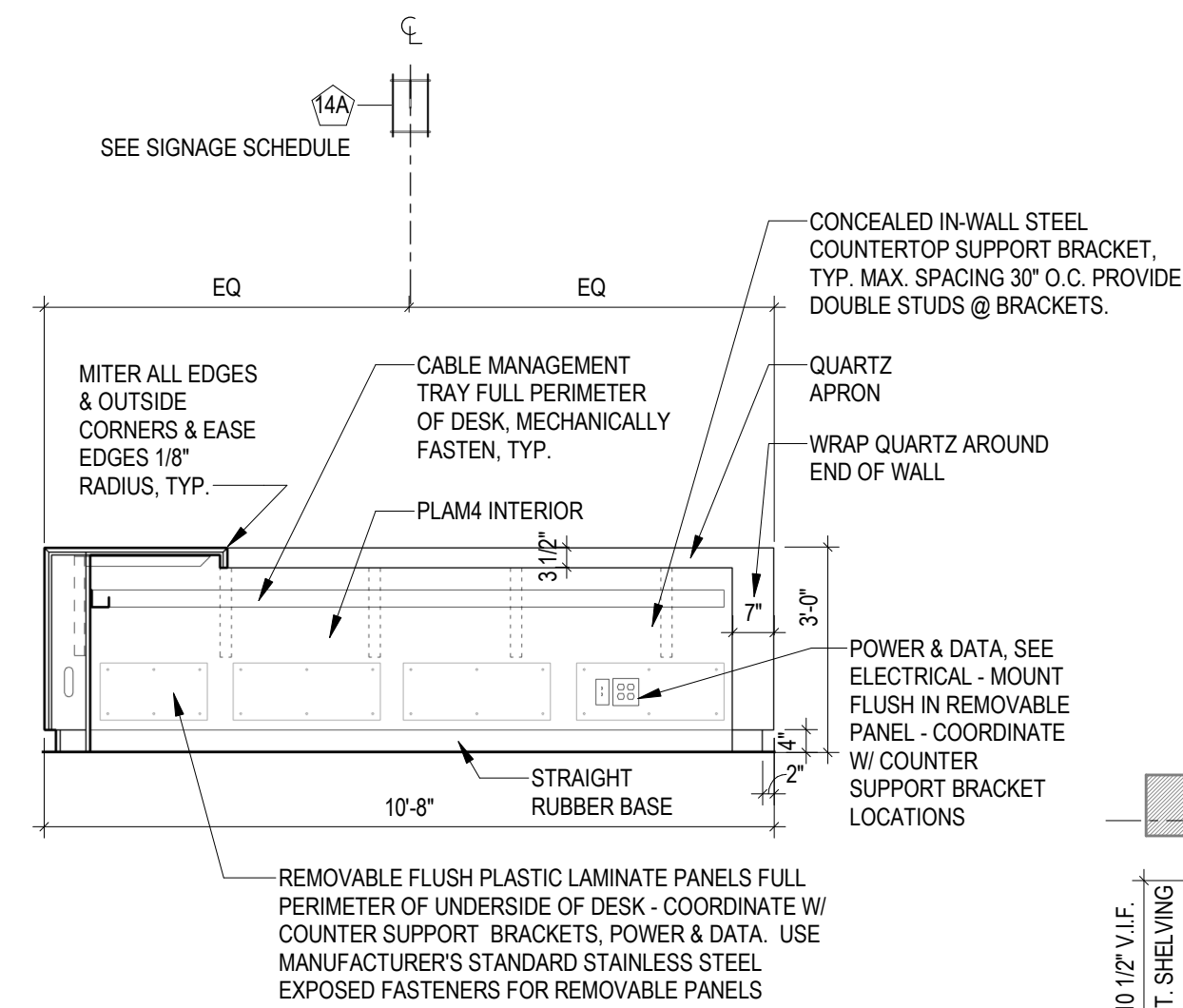
8 MARKETPLACE MILLWORK
3/8" = 1'-0"



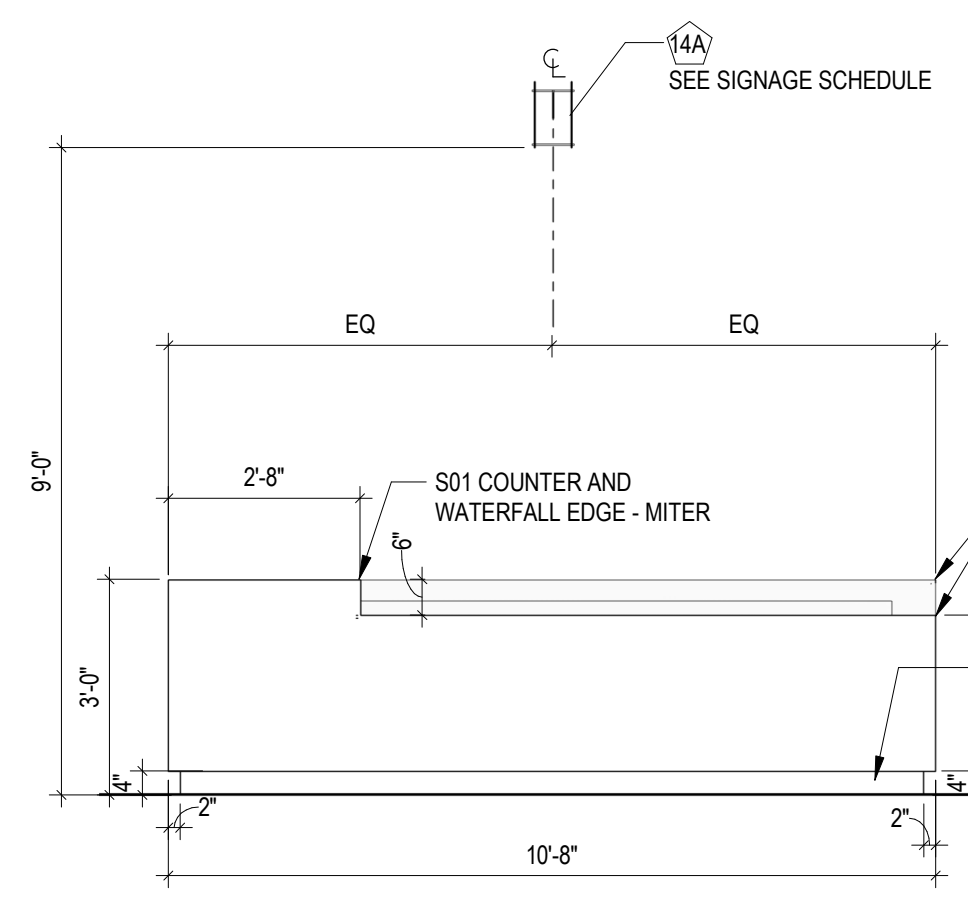
7 MAIN SERVICE DESK - INTERIOR - PLAN NORTH
3/8" = 1'-0"



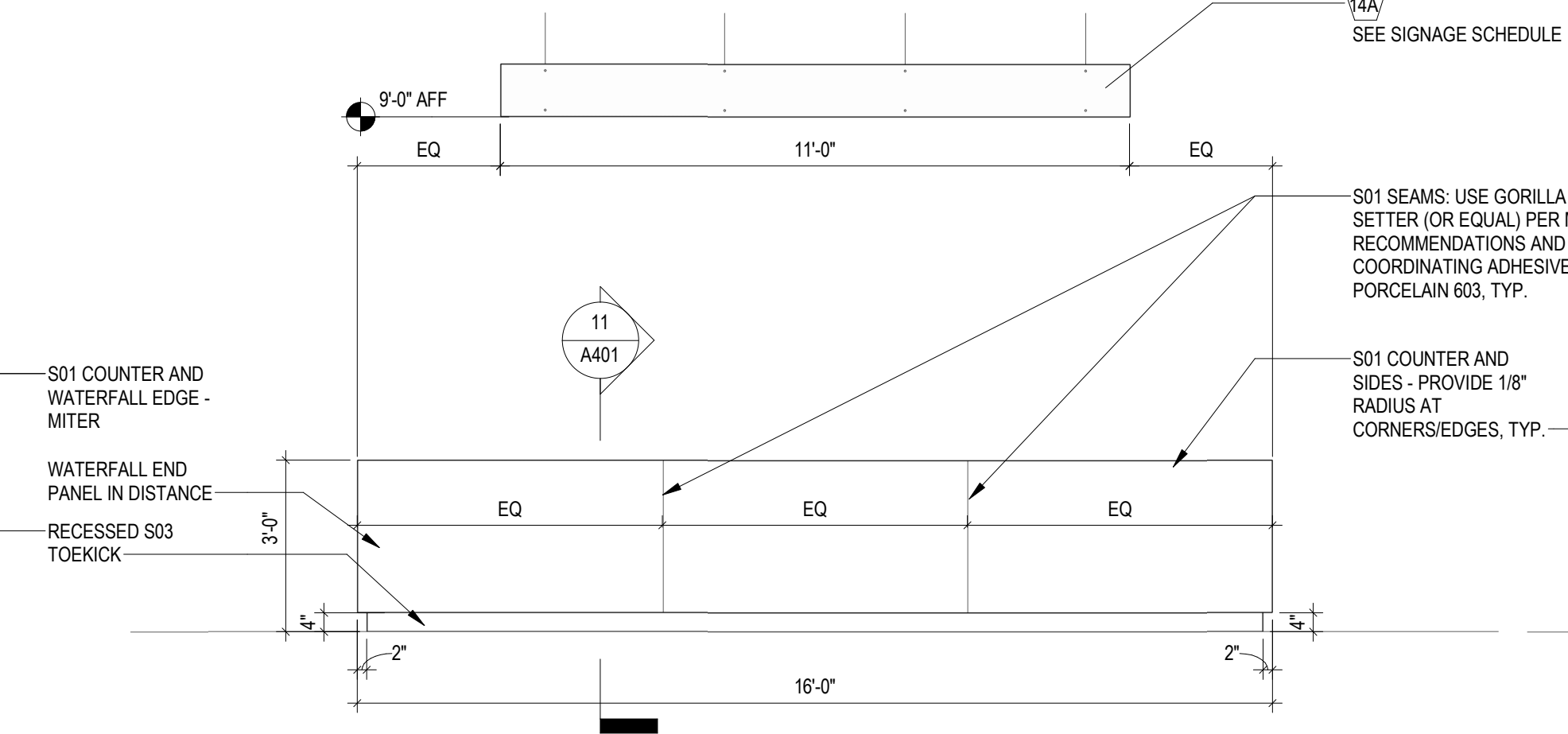
6 MAIN SERVICE DESK - BACK
3/8" = 1'-0"



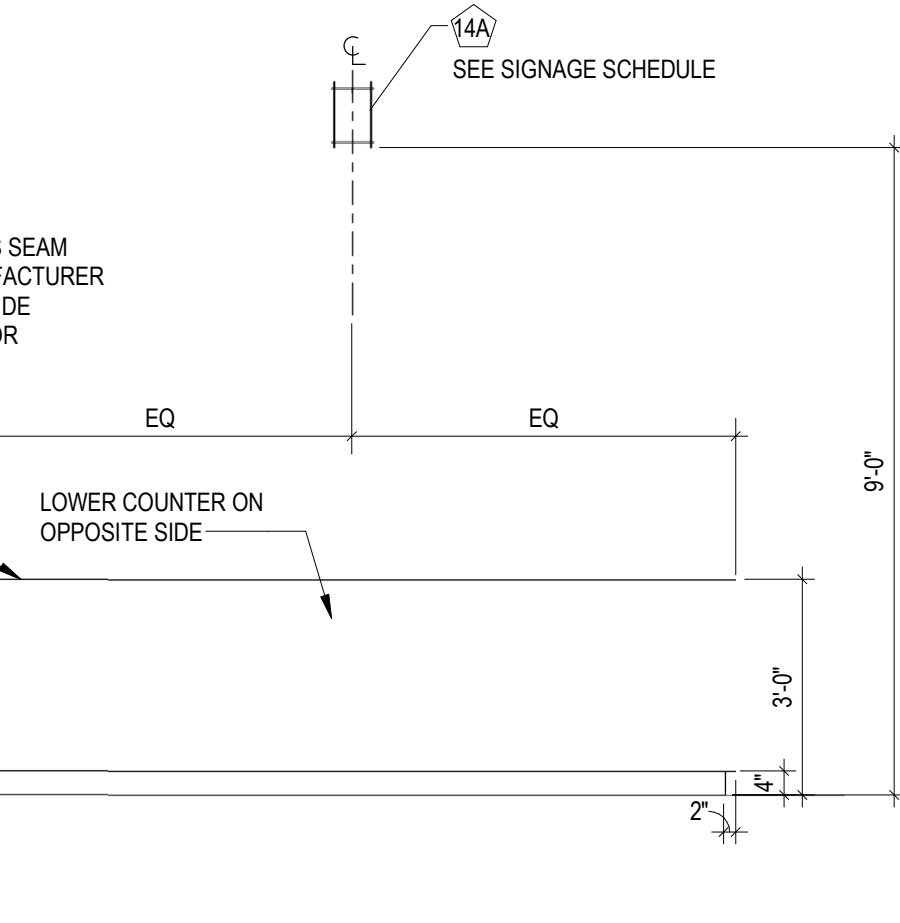
5 MAIN SERVICE DESK - INTERIOR - PLAN SOUTH
3/8" = 1'-0"



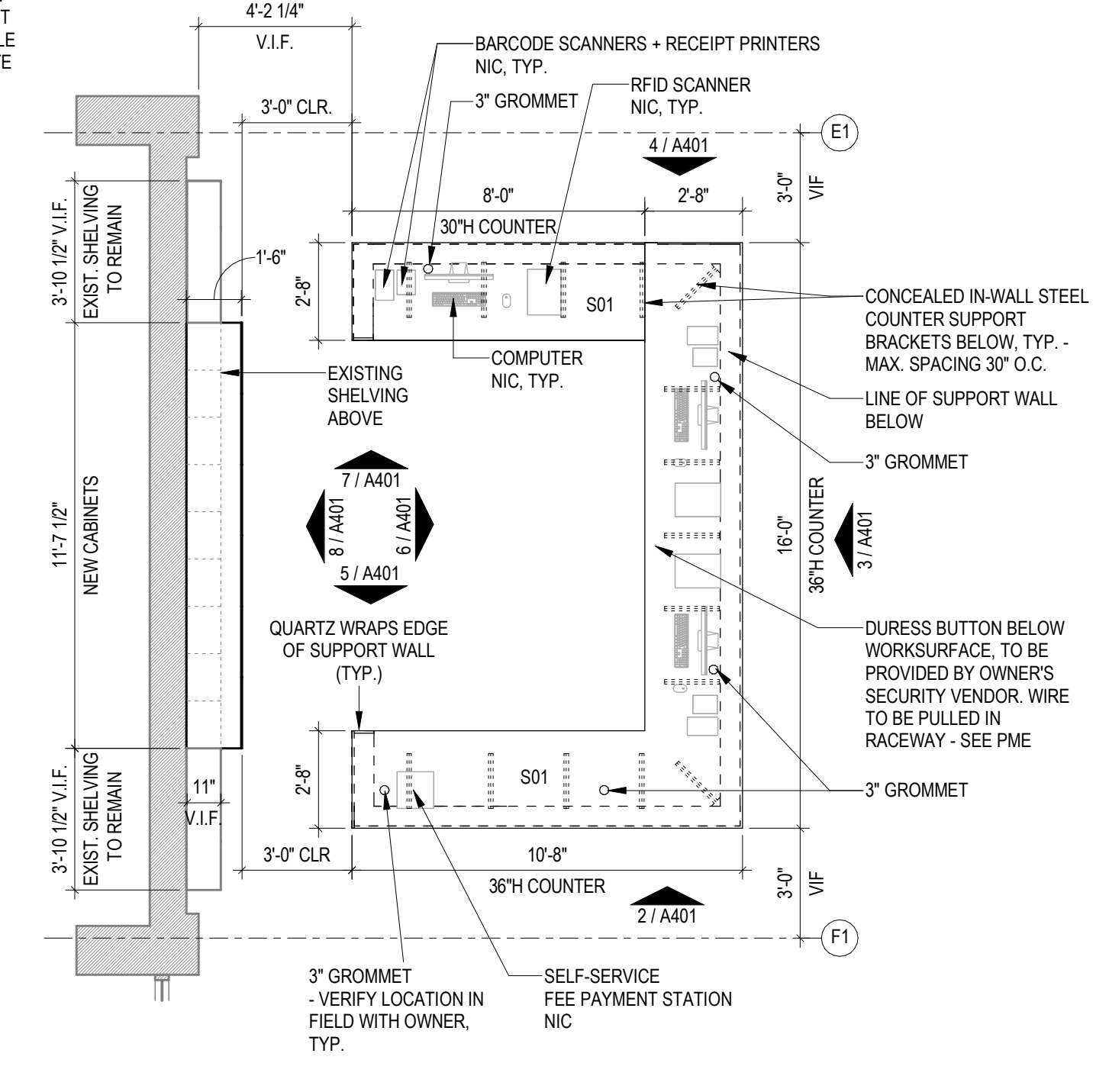
4 MAIN SERVICE DESK - SIDE - CHANGE IN HEIGHT
3/8" = 1'-0"



3 MAIN SERVICE DESK - FRONT
3/8" = 1'-0"



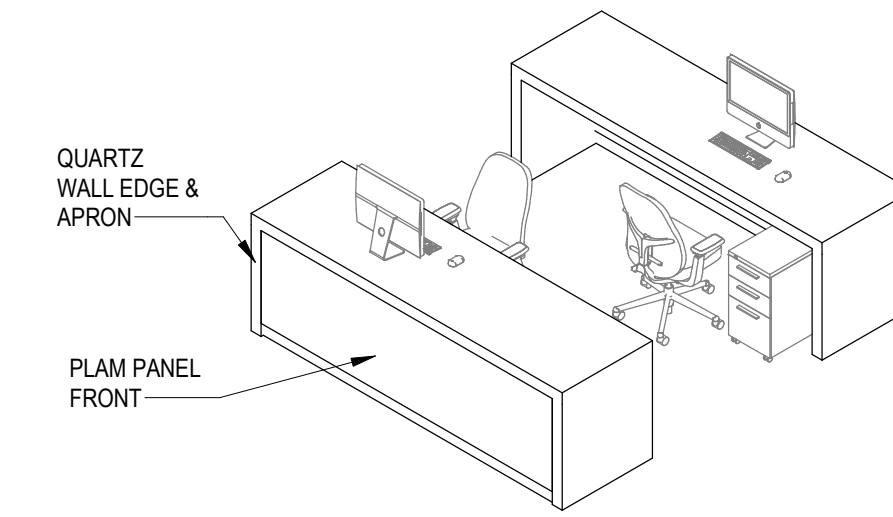
2 MAIN SERVICE DESK - SIDE - SINGLE HEIGHT
3/8" = 1'-0"



1 ENLARGED PLAN - MAIN SERVICE DESK
1/4" = 1'-0"

MILLWORK NOTES

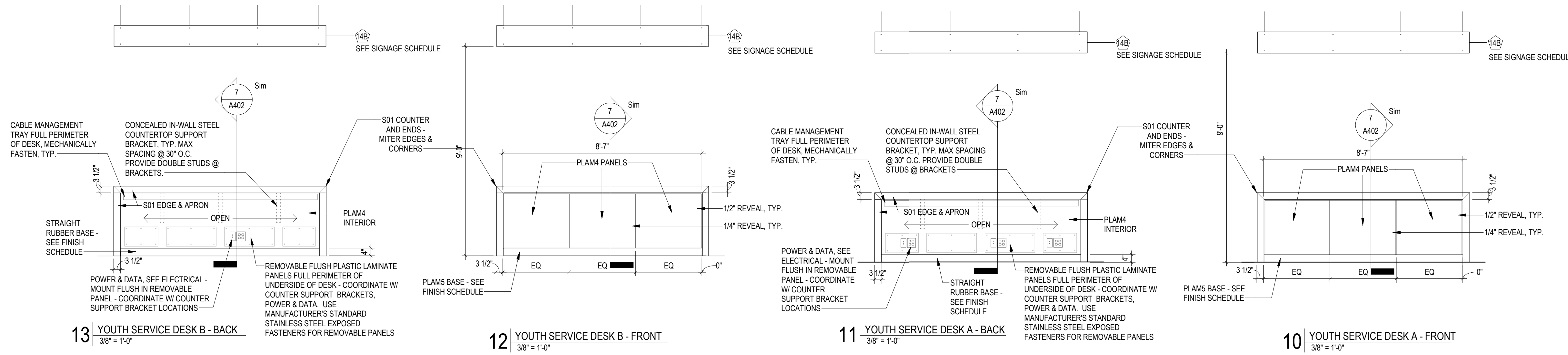
- ELEVATIONS DEMONSTRATE TYPICAL DESIGN FOR ALL 3 CIRCULATION DESKS. DIMENSIONS VARY AND ARE INDICATED IN PLAN AND ELEVATION.
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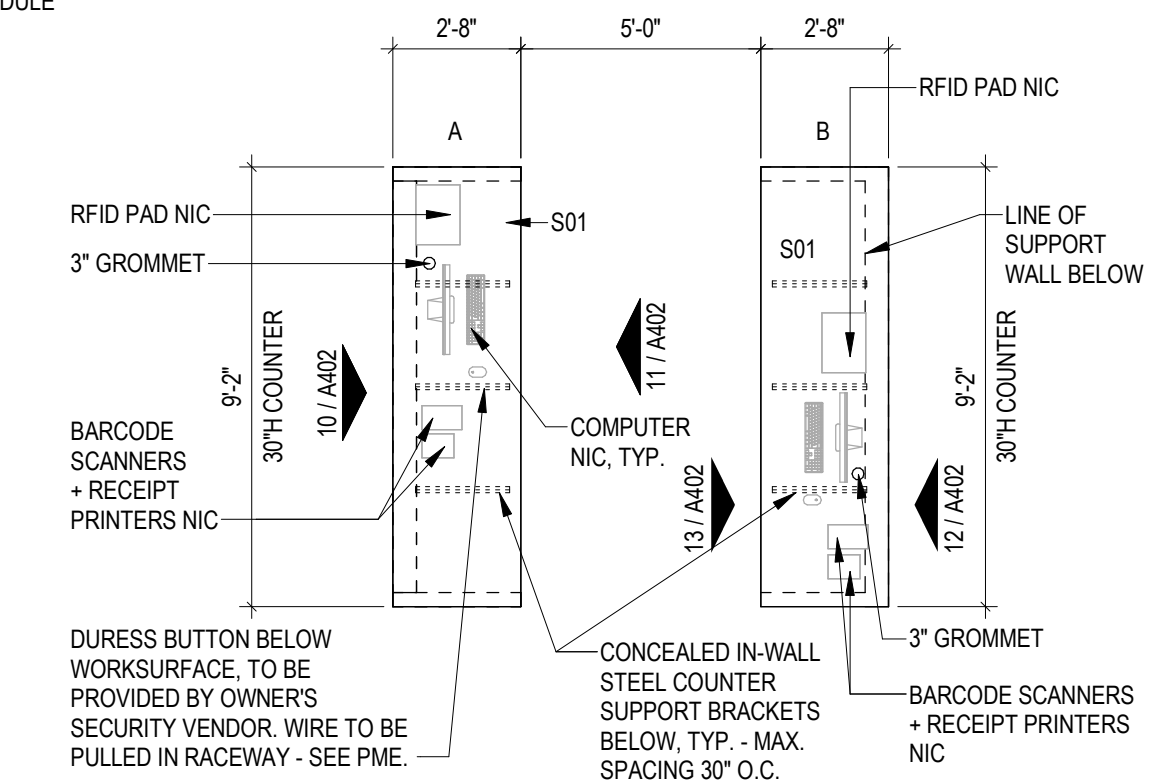
CONSULTANTS

MEP Engineer

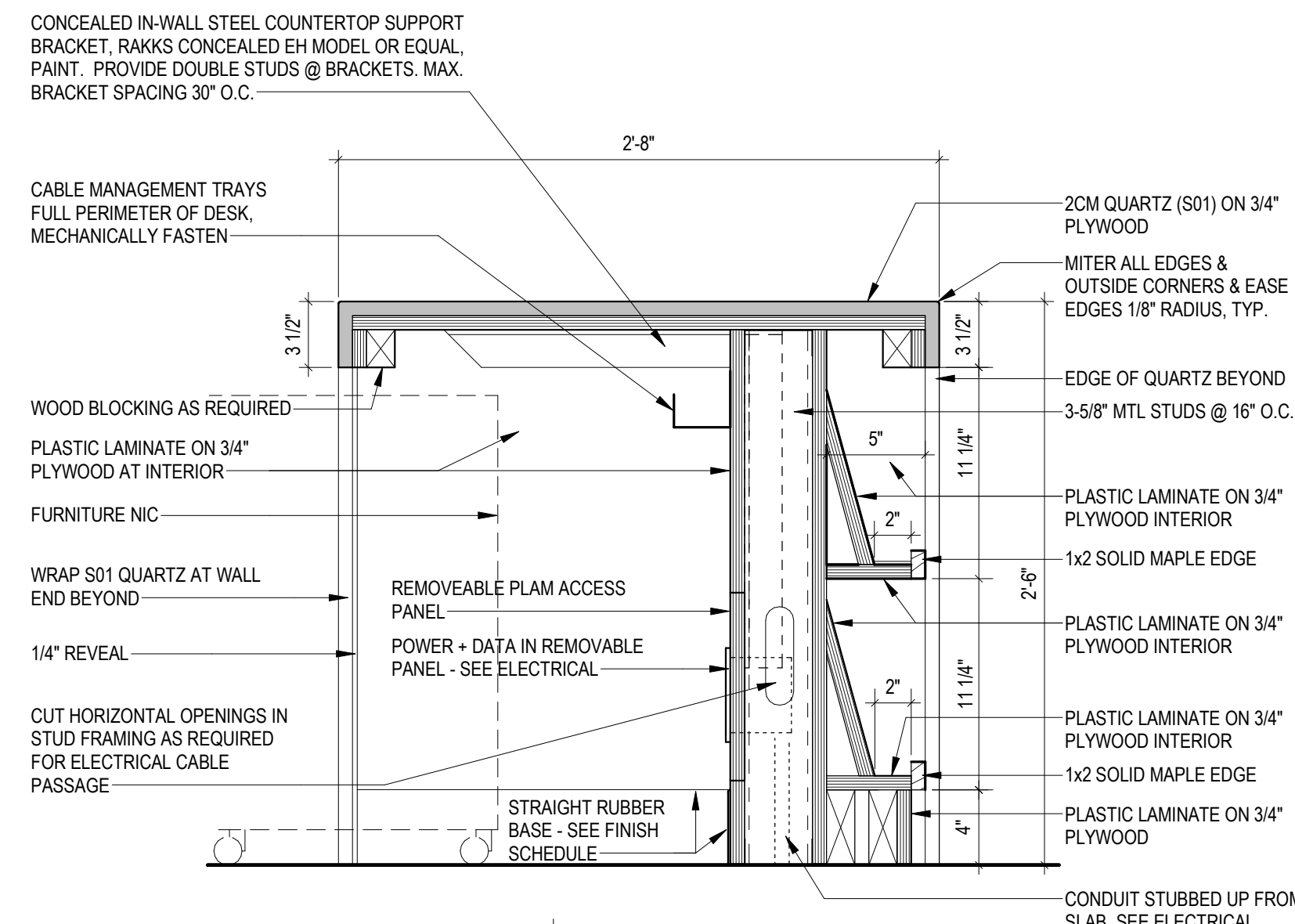
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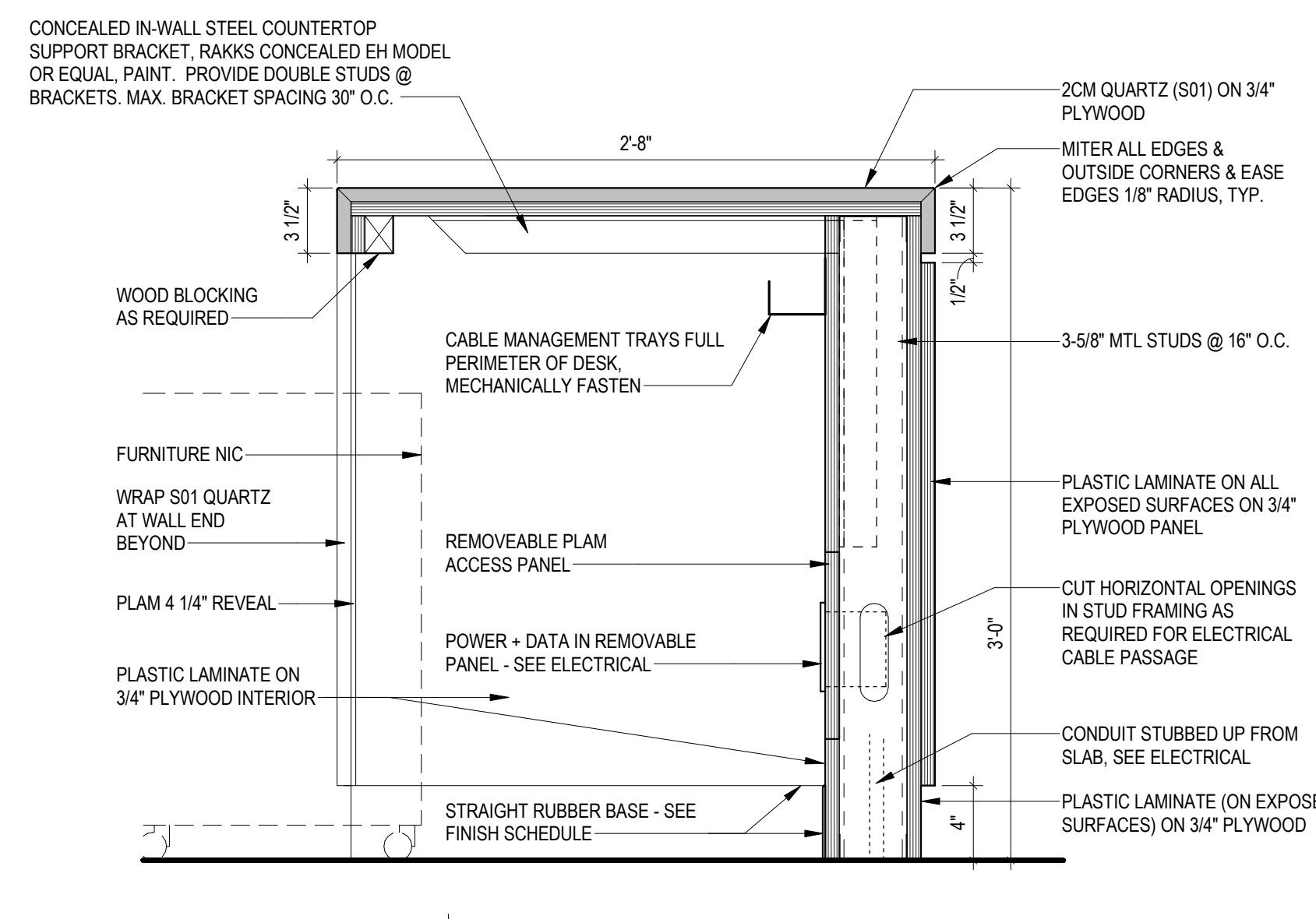
14 YOUTH SERVICES DESK - AXONOMETRIC



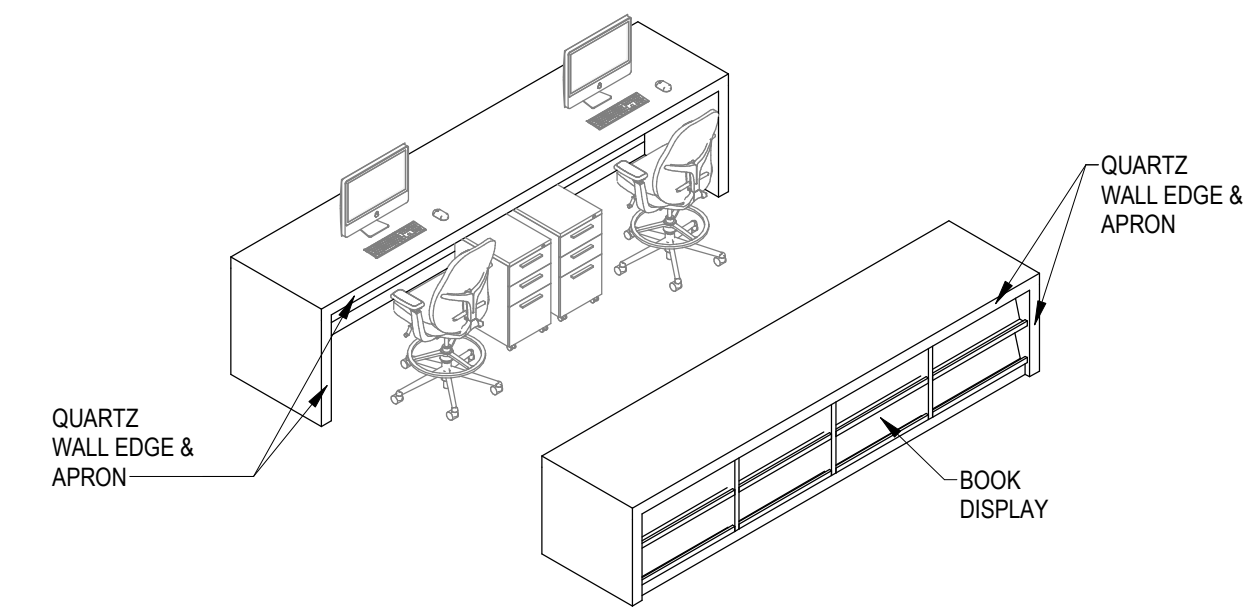
9 ENLARGED PLAN - YOUTH SERVICE DESK
1/4\"/>



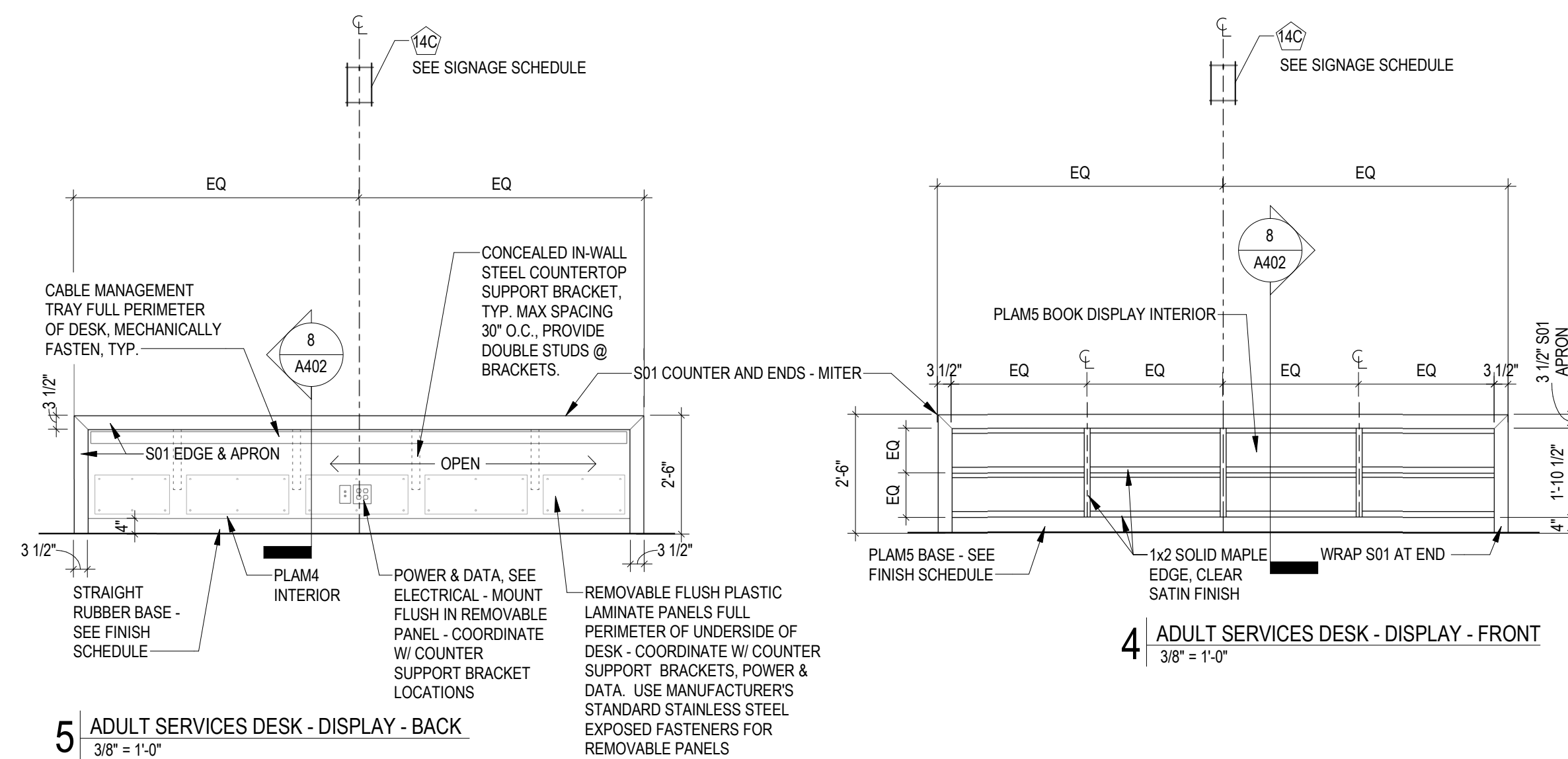
8 DETAIL AT AS DESK DISPLAY
1 1/2\"/>



7 DETAIL AT ADULT SERVICES DESK
1 1/2\"/>

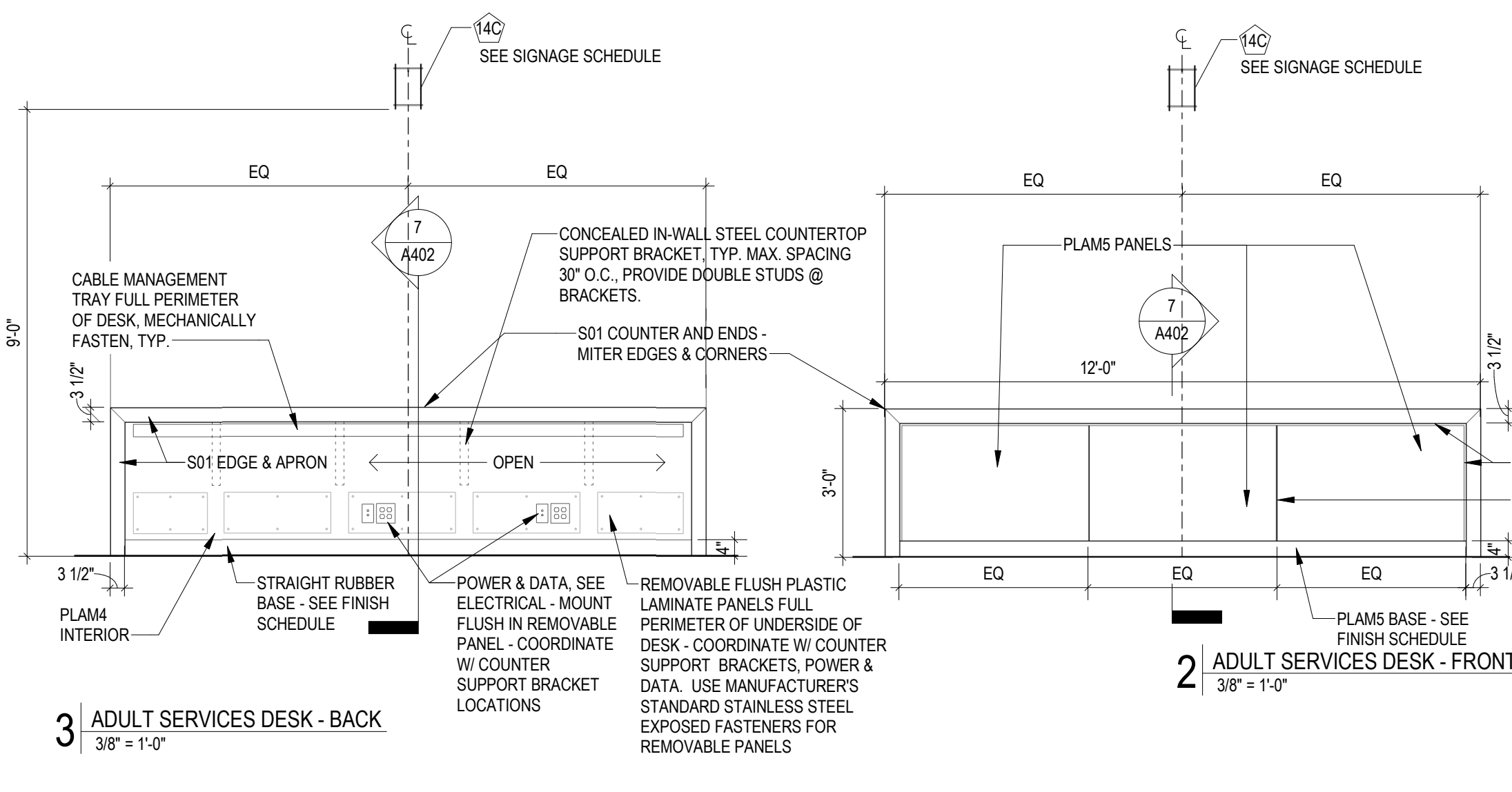


6 ADULT SERVICES DESK - AXONOMETRIC



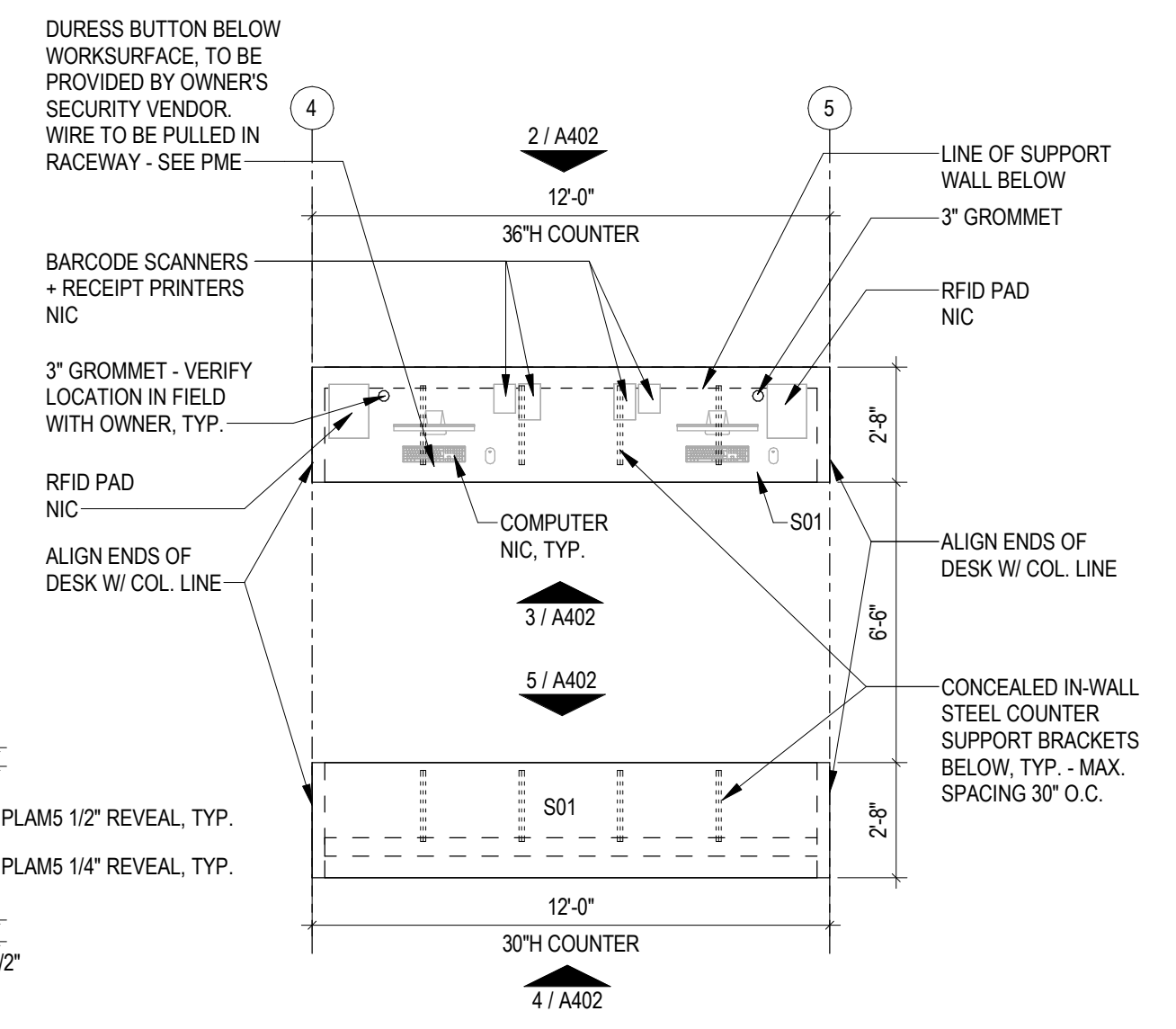
5 ADULT SERVICES DESK - DISPLAY - BACK
3/8\"/>

4 ADULT SERVICES DESK - DISPLAY - FRONT
3/8\"/>



2 ADULT SERVICES DESK - FRONT
3/8\"/>

3 ADULT SERVICES DESK - BACK
3/8\"/>



1 ENLARGED PLAN - ADULT SERVICE DESK
1/4\"/>

SEALS



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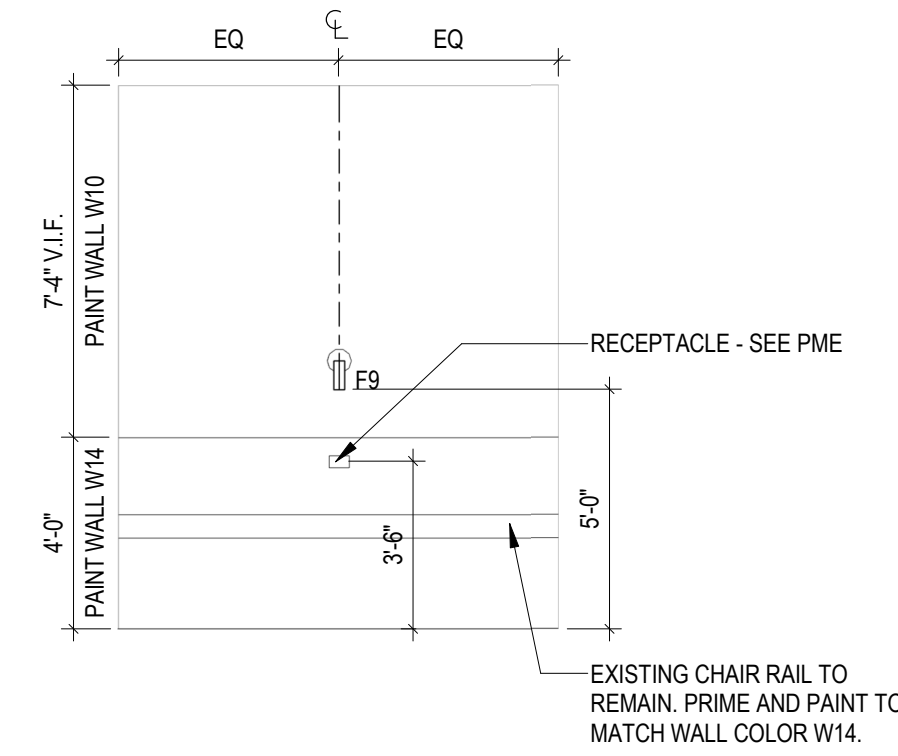
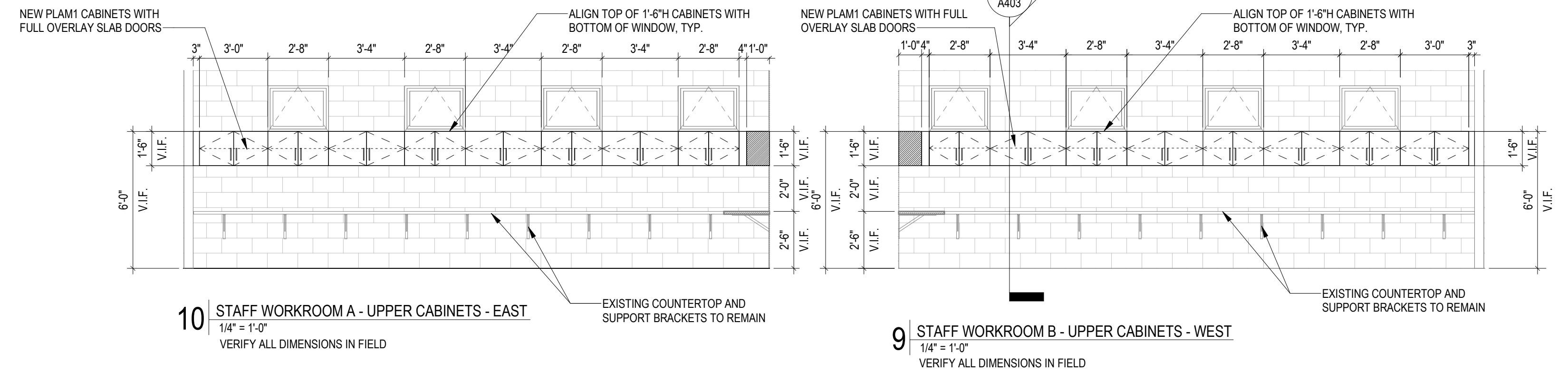
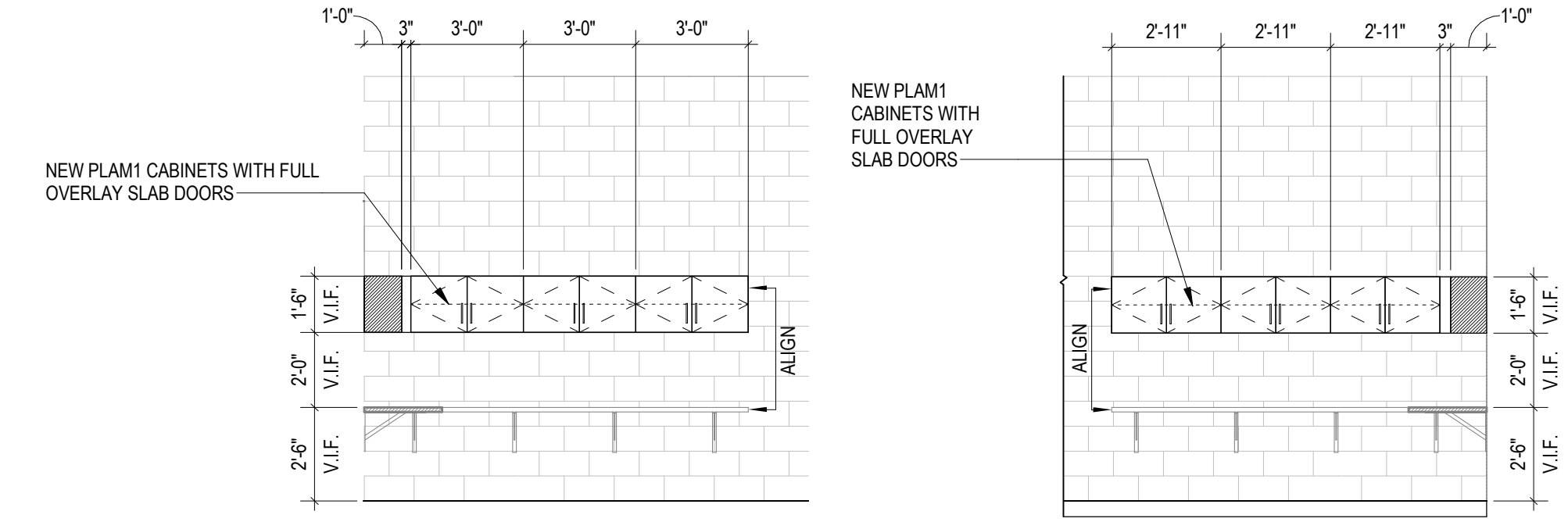
PROJECT DATA
DATE: 01.29.2024
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PROJECT NO: 2023_0030
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SHEET DATA
ENLARGED PLANS, INT. ELEVS. & DETAILS
SHEET NO.

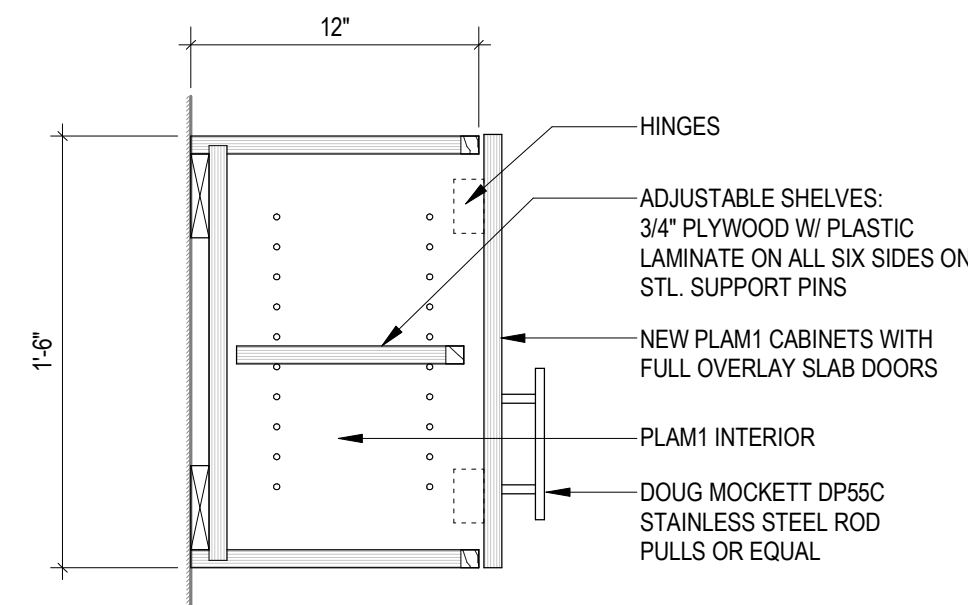
A402

MILLWORK NOTES

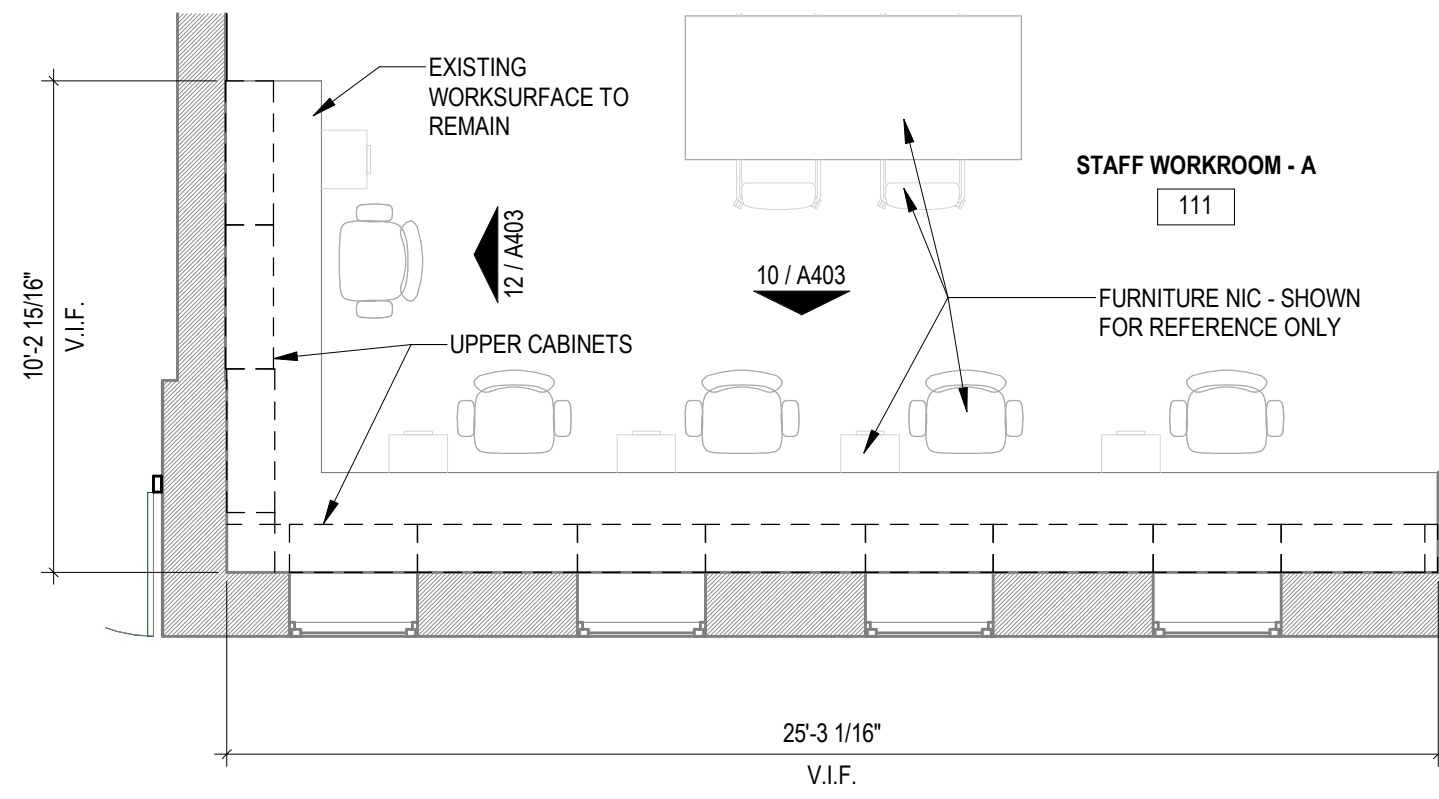
- ELEVATIONS DEMONSTRATE TYPICAL DESIGN FOR ALL 3 CIRCULATION DESKS. DIMENSIONS VARY AND ARE INDICATED IN PLAN AND ELEVATION.
- COORDINATE INSTALLATION OF DURESS BUTTONS WITH SECURITY CONTRACTOR AND OWNER - ALL DESKS.
- COORDINATE GROMMET LOCATIONS ON SITE WITH THE OWNER AHEAD OF INSTALLATION.
- ALL FURNITURE, FIXTURES, AND EQUIPMENT SHOWN ARE FOR REFERENCE ONLY U.N.O.



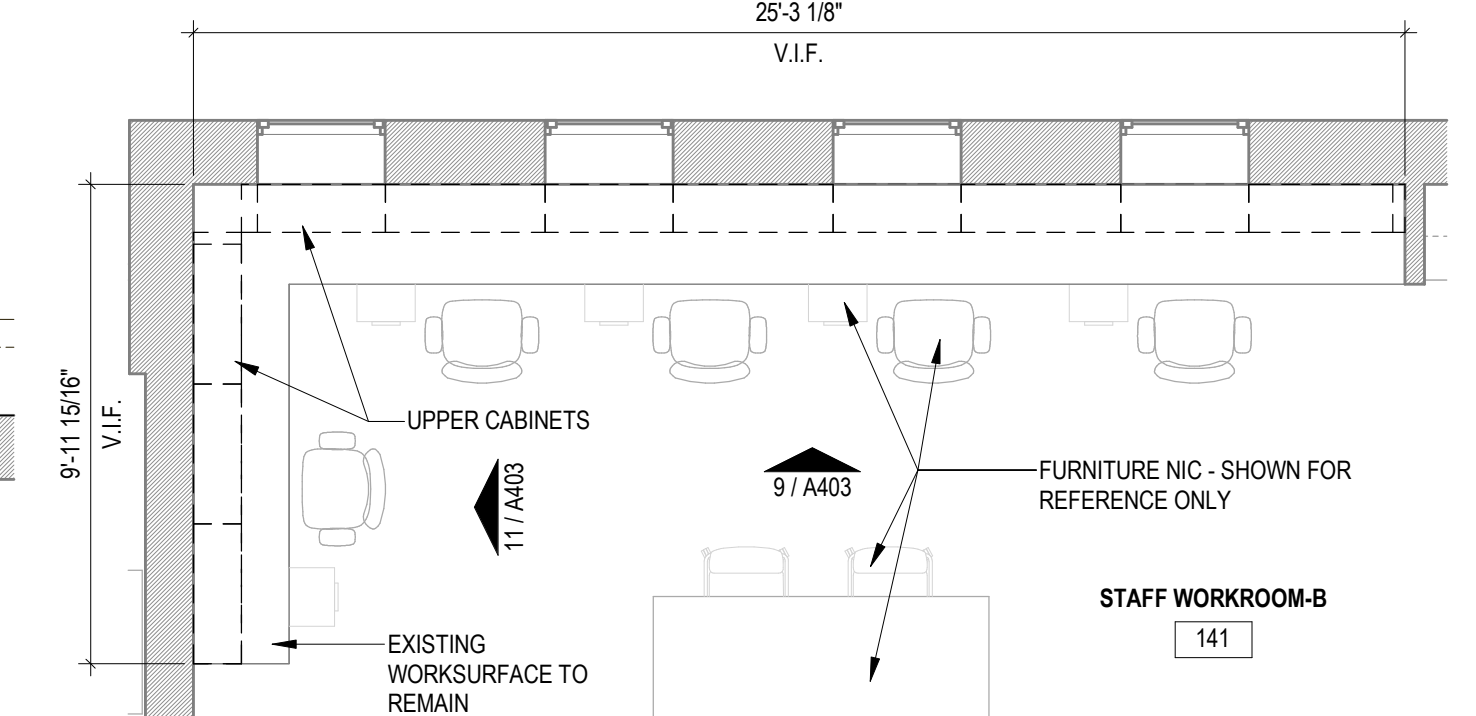
8 GROUP STUDY ELEVATION
1/4" = 1'-0"



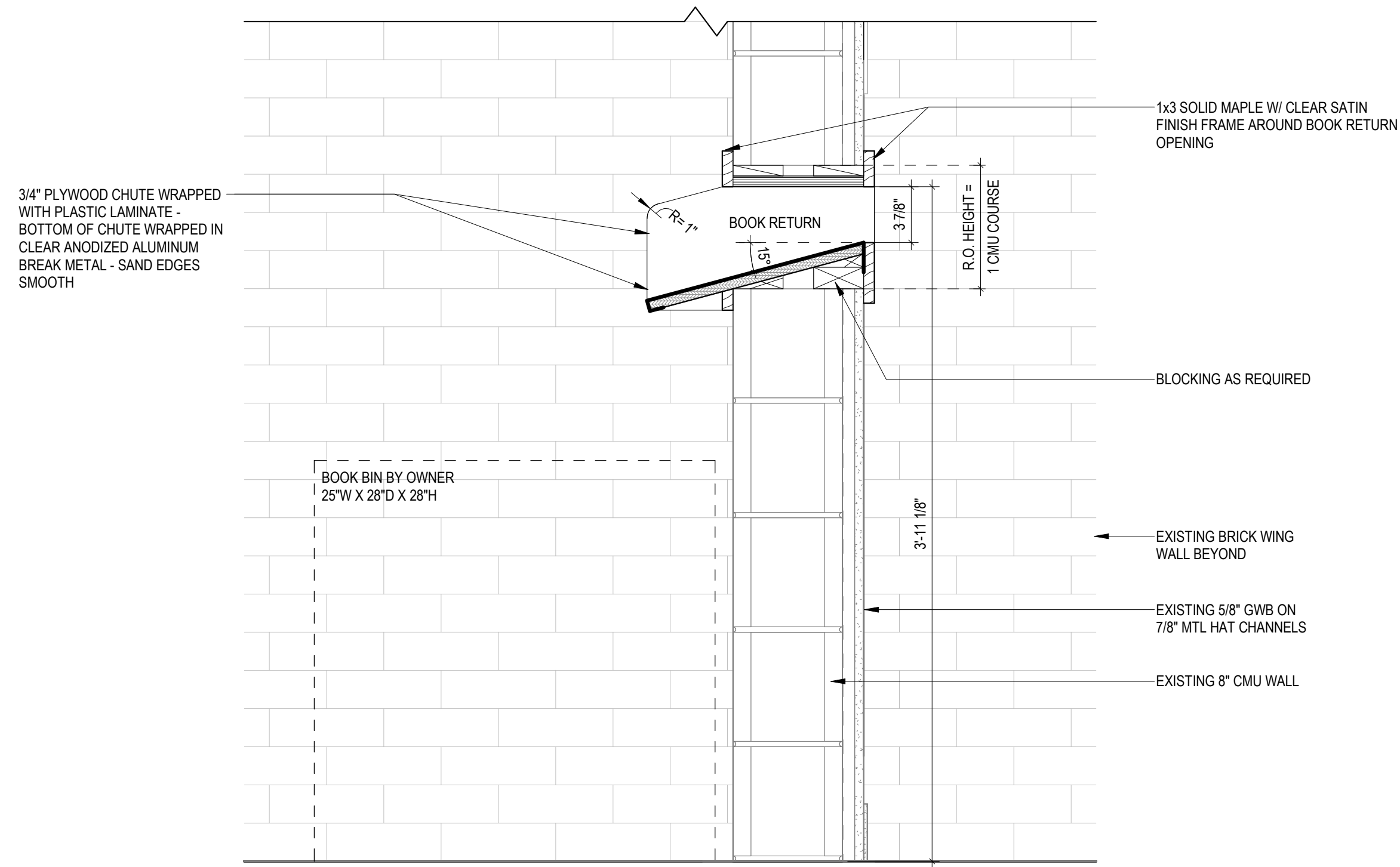
7 TYP. DETAIL AT STAFF WORKROOM UPPER CABINETS
1 1/2" = 1'-0"



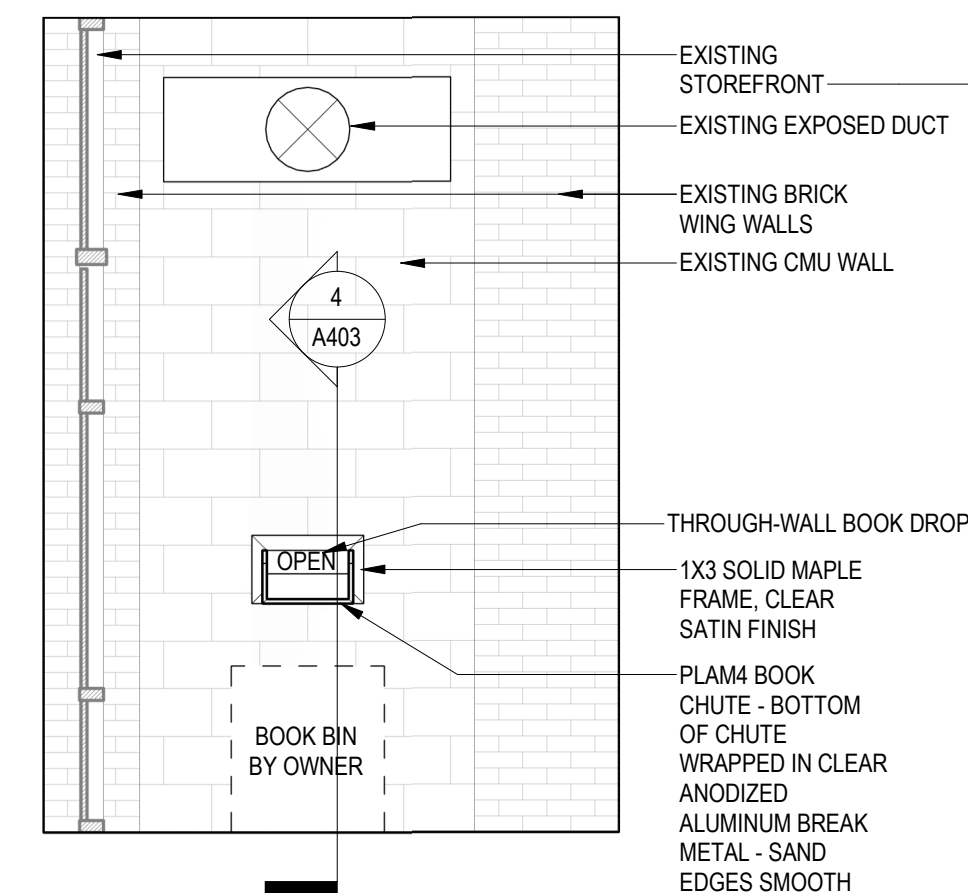
6 ENLARGED PLAN - STAFF WORKROOM A UPPER CABINETS
1/4" = 1'-0"



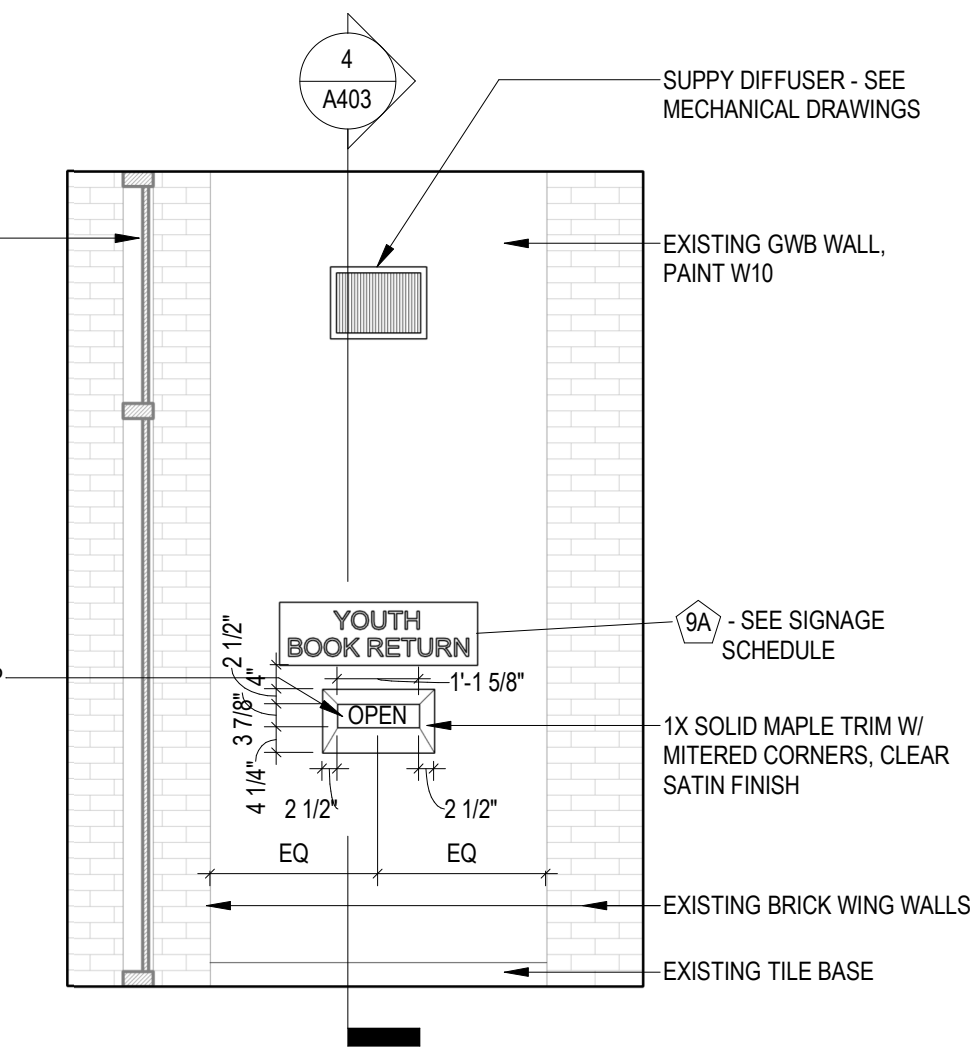
5 ENLARGED PLAN - STAFF WORKROOM B UPPER CABINETS
1/4" = 1'-0"



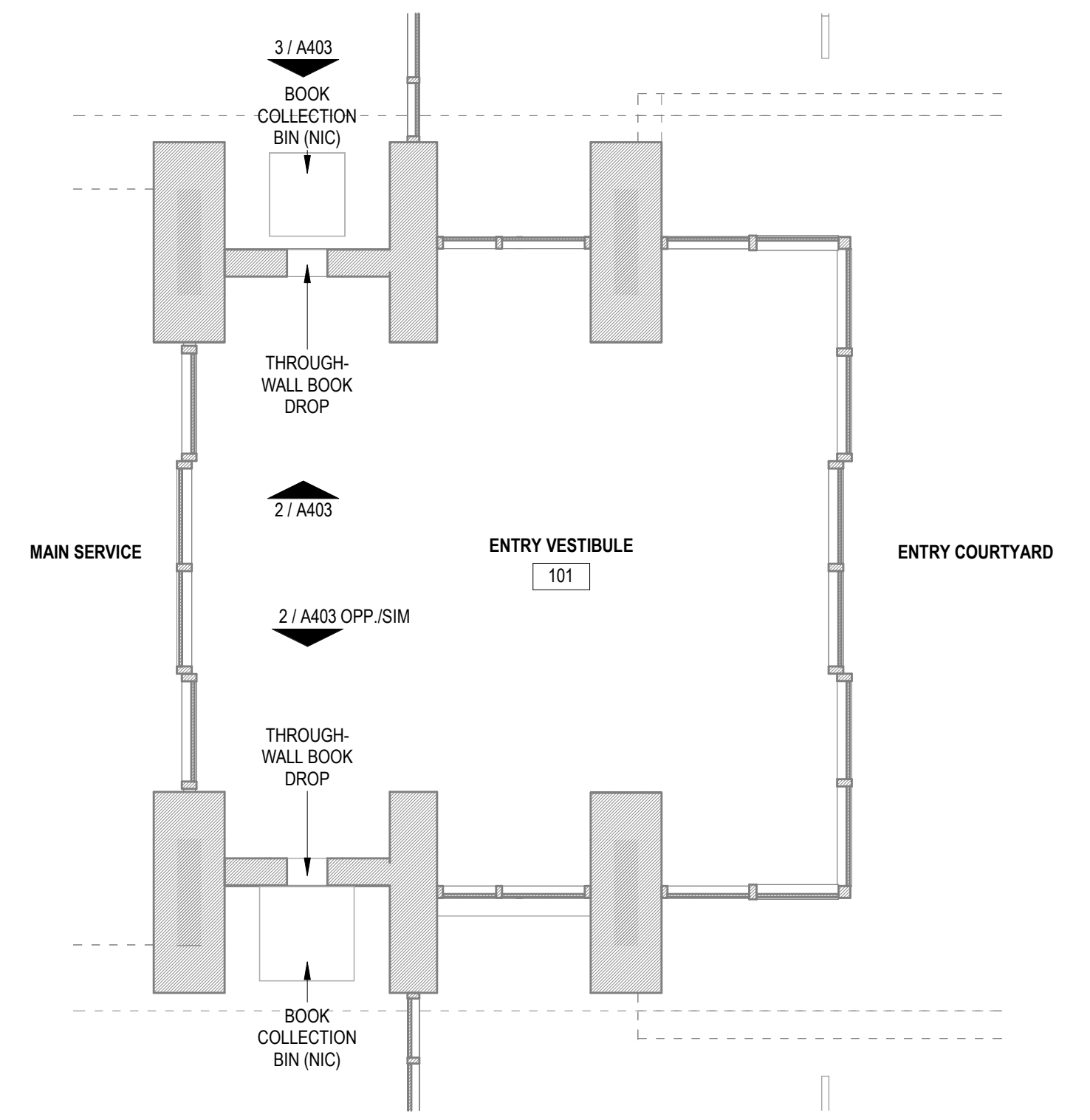
4 DETAIL AT ENTRY VESTIBULE DISPLAY CABINET
1 1/2" = 1'-0"



3 ENTRY VESTIBULE BOOK DROP INTERIOR SIDE, TYPICAL
3/8" = 1'-0"



2 ENTRY VESTIBULE BOOK DROP, TYPICAL
3/8" = 1'-0"



1 ENLARGED PLAN - ENTRY VESTIBULE
1/4" = 1'-0"



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WEST REGIONAL LIBRARY RENOVATION
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CARY, NC 27519

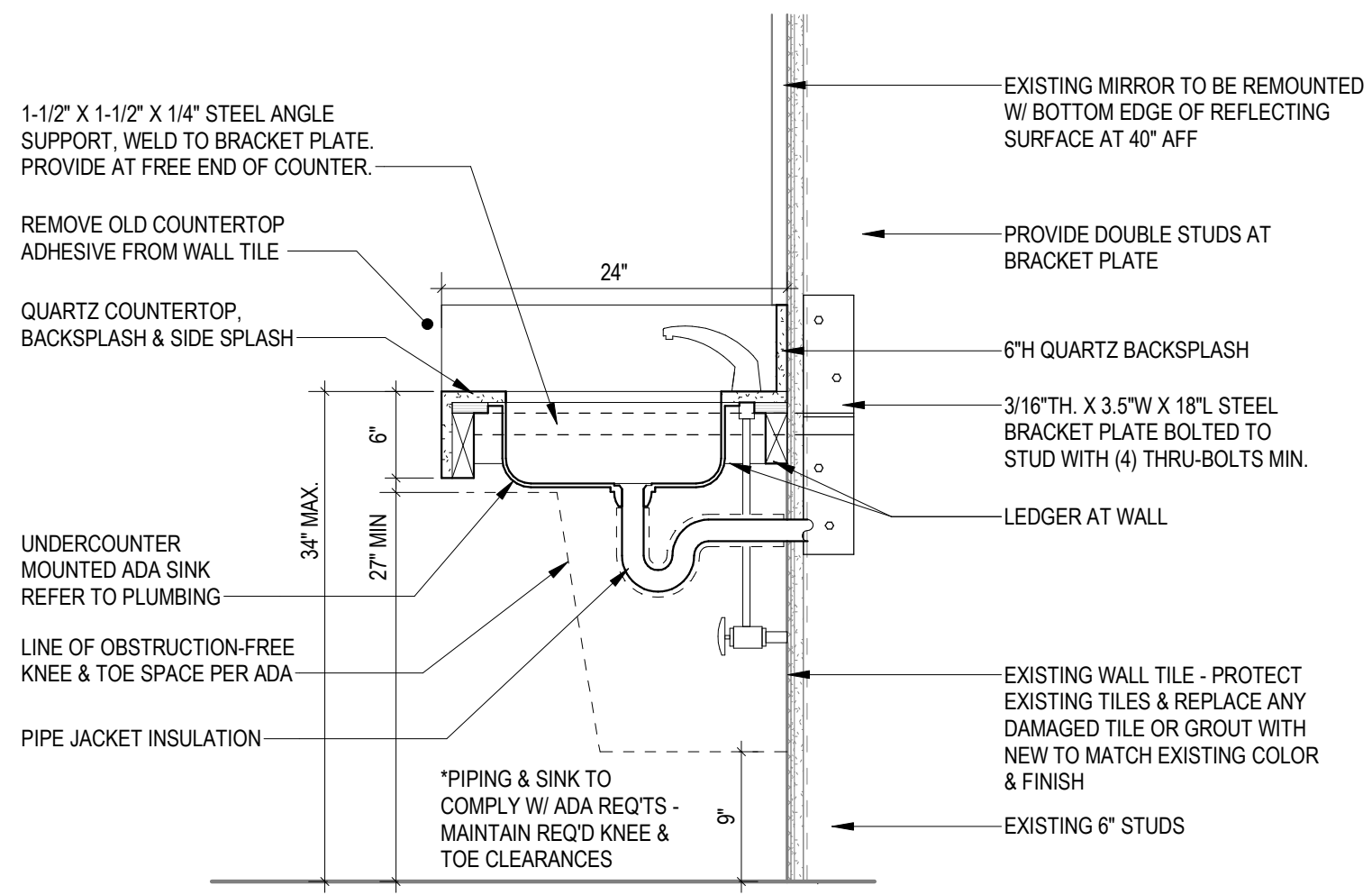
REVISIONS

No.	Description	Date

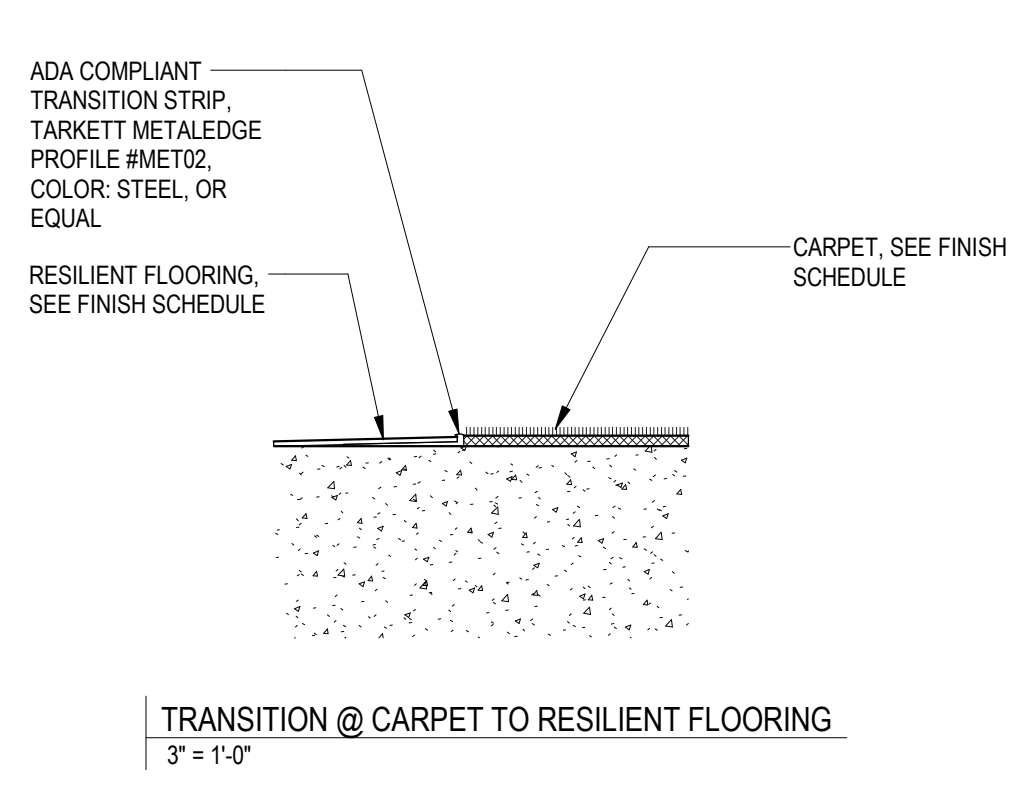
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DATE: 01.29.2024
DRAWN: LP
CHECKED: EMBT
PROJECT NO: 2023_0030
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SHEET DATA
ENLARGED PLANS, INT. ELEV. & DETAILS
SHEET NO.

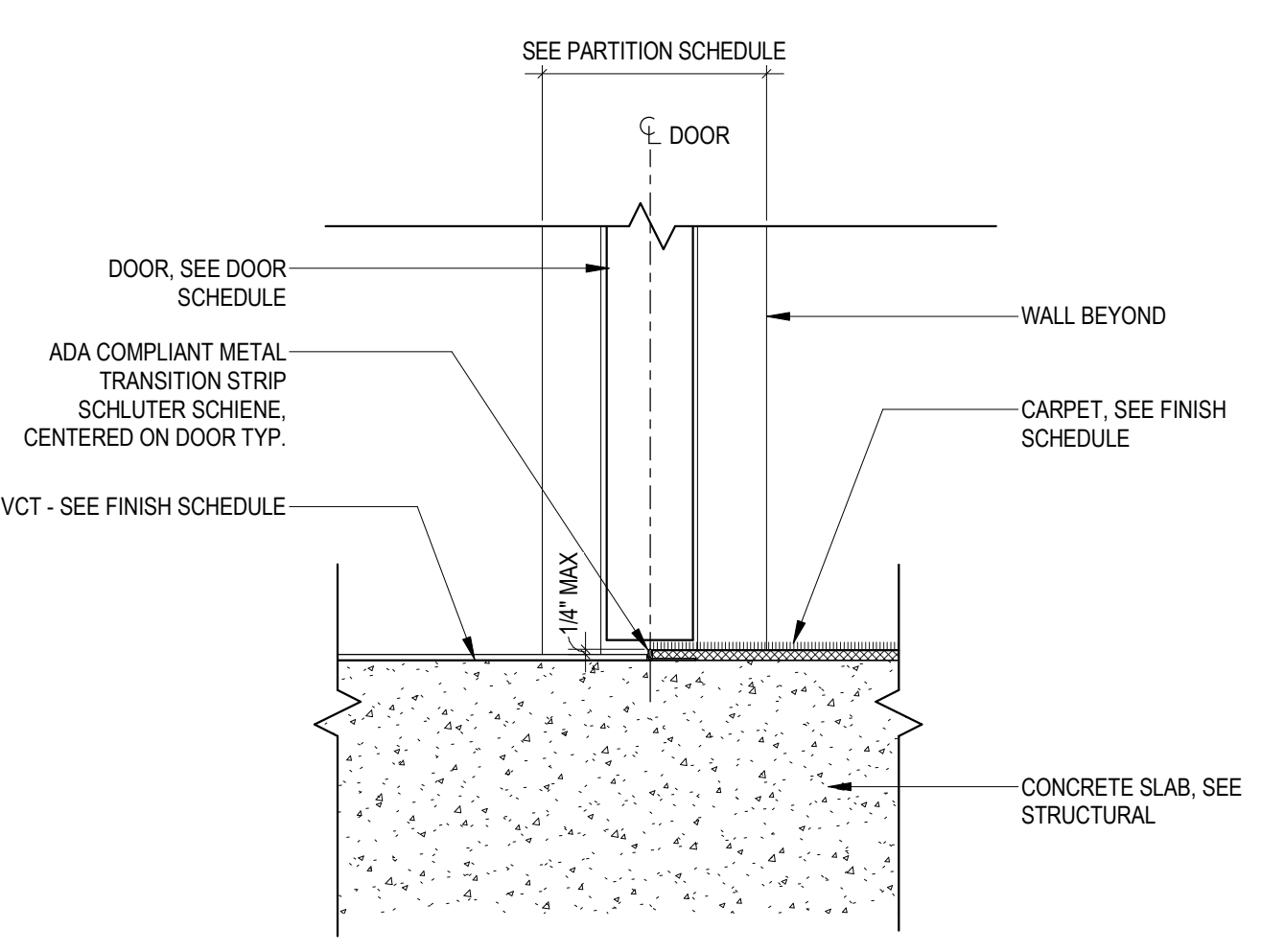
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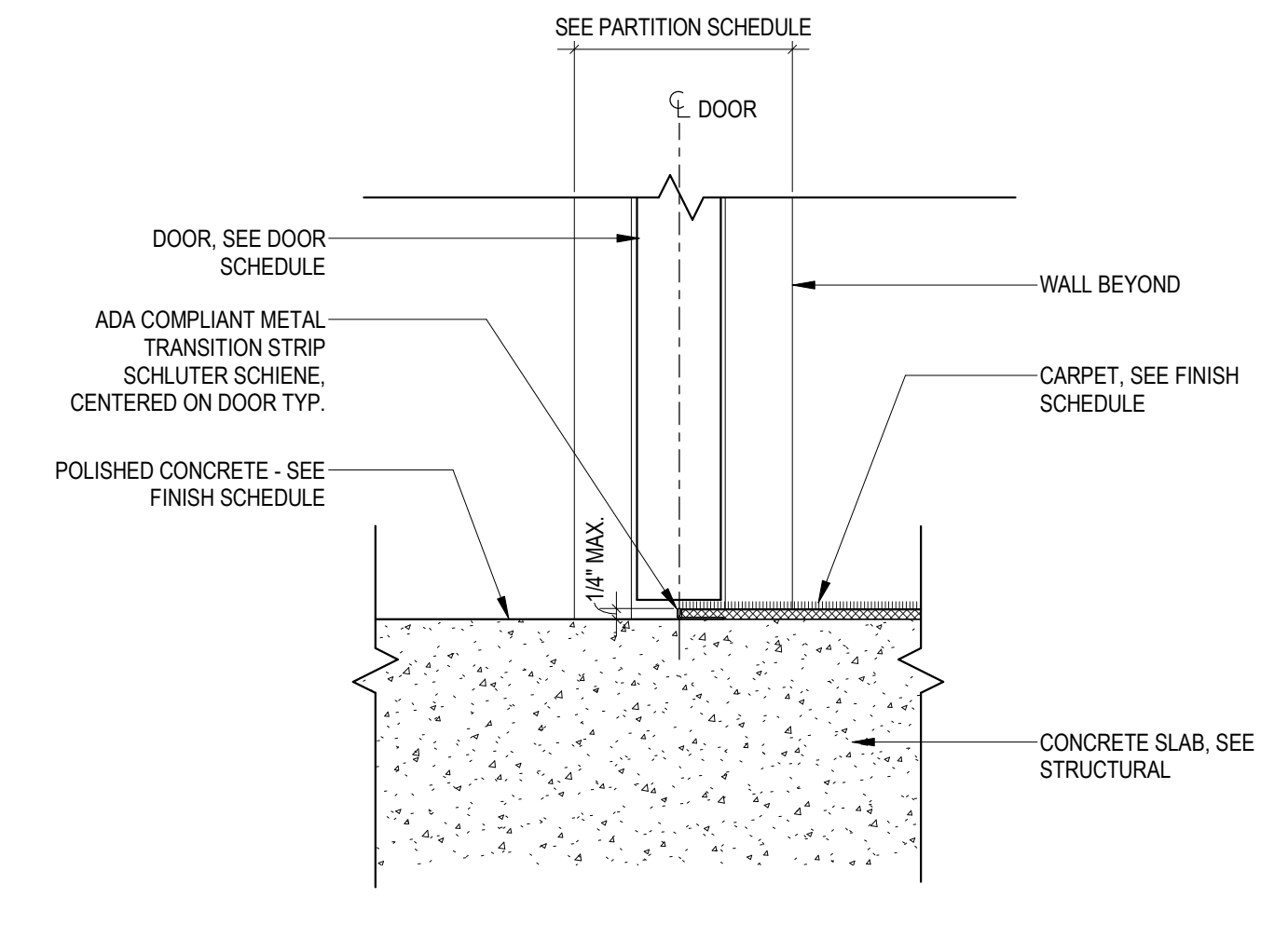
10 SECTION - FAMILY RESTROOM SINK COUNTER
1/4\"/>



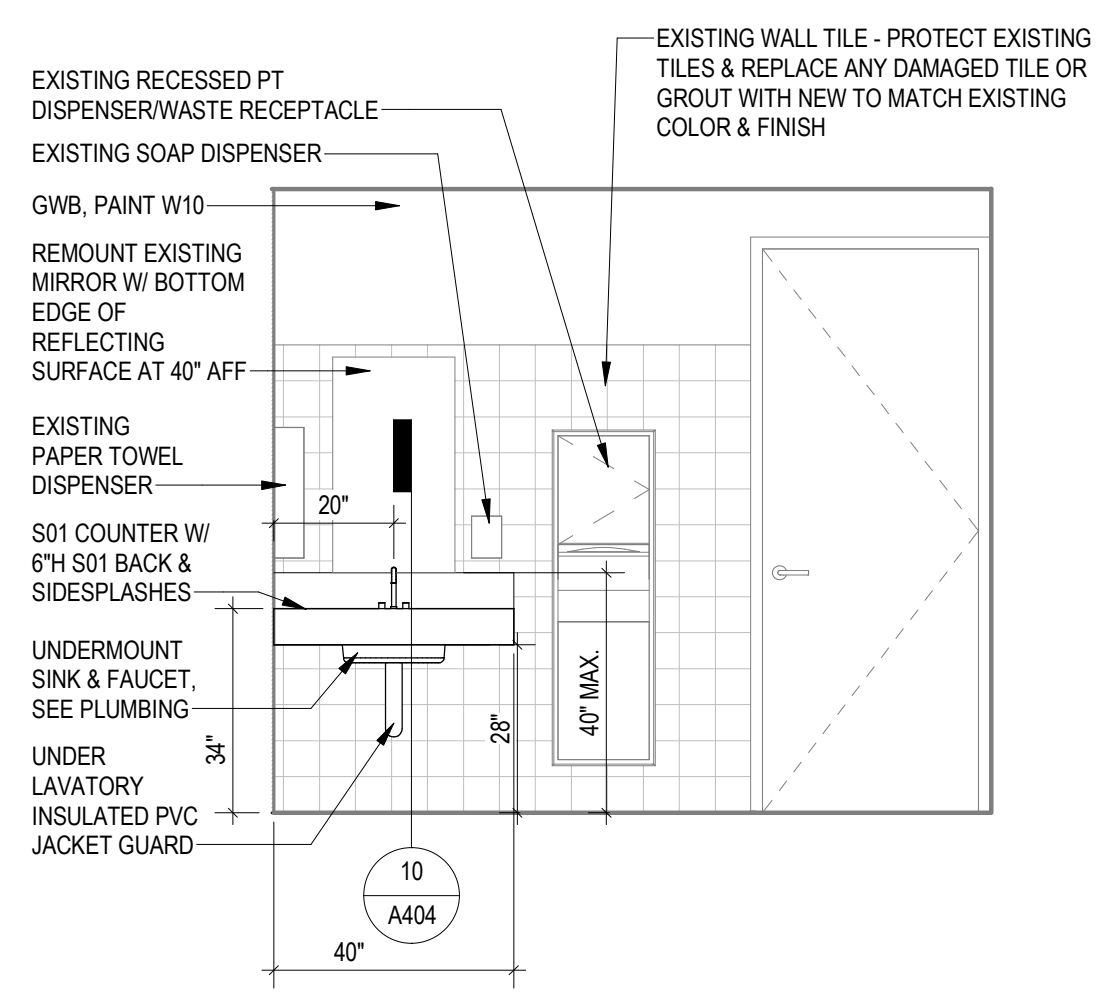
TRANSITION @ CARPET TO RESILIENT FLOORING
3\"/>



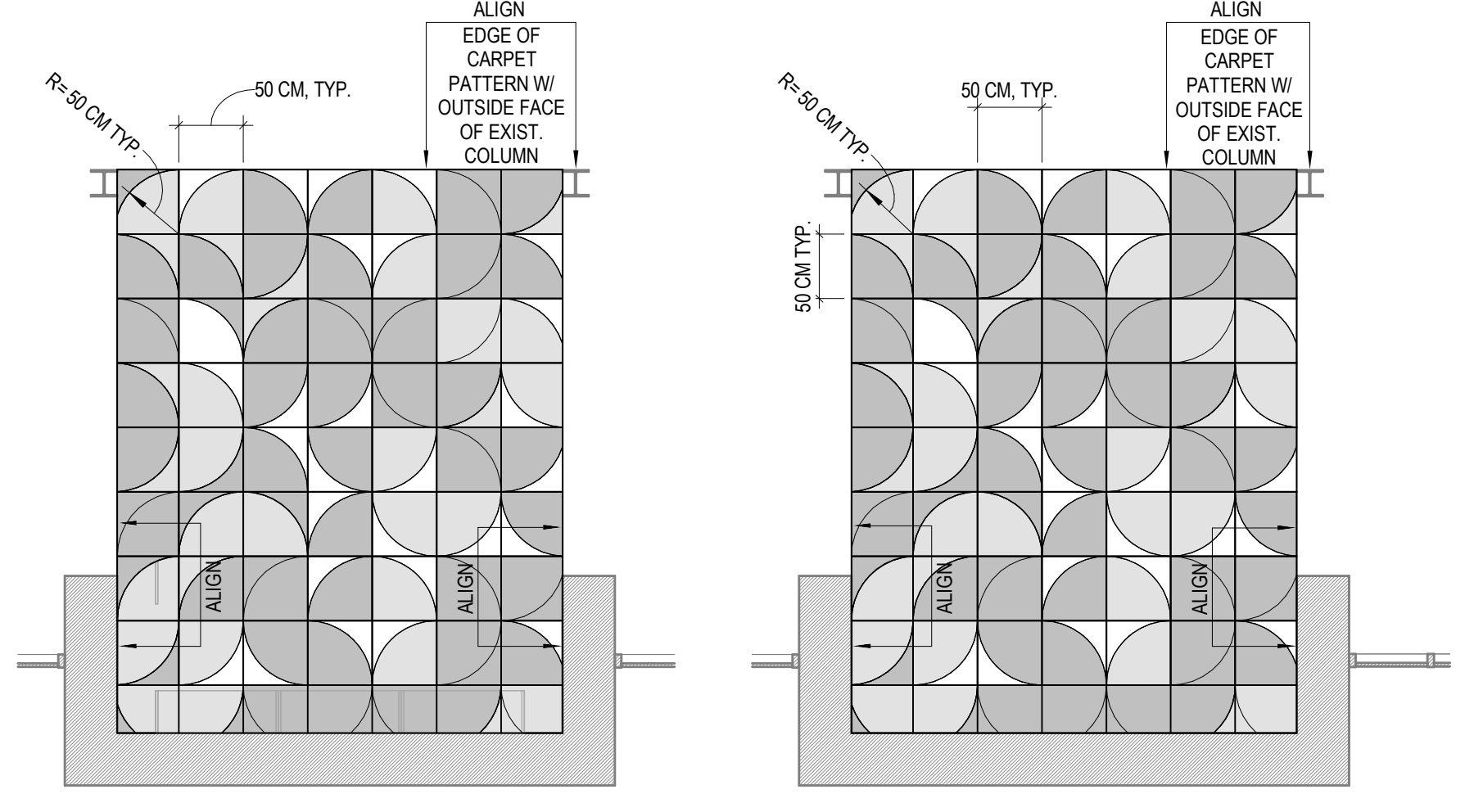
THRESHOLD @ CARPET TO VCT
3\"/>



THRESHOLD @ CARPET TO CONCRETE
3\"/>



9 FAMILY RESTROOM 114 - SINK WALL
3/8\"/>

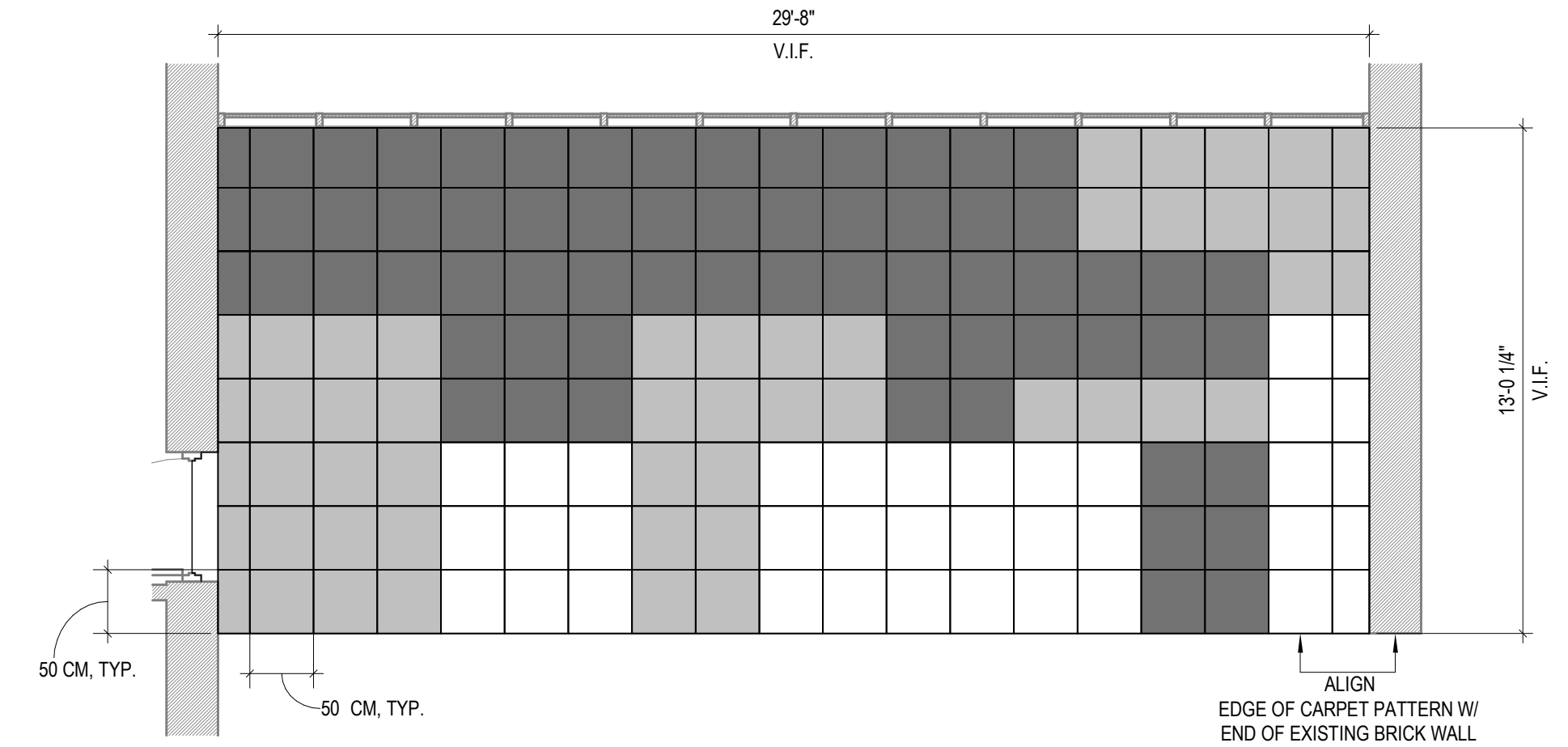


8 ENLARGED PLAN - YS NOOK A F13 FLOORING DIAGRAM
1/4\"/>

7 ENLARGED PLAN - YS NOOK B F13 FLOORING DIAGRAM
1/4\"/>

F13 COLOR LEGEND

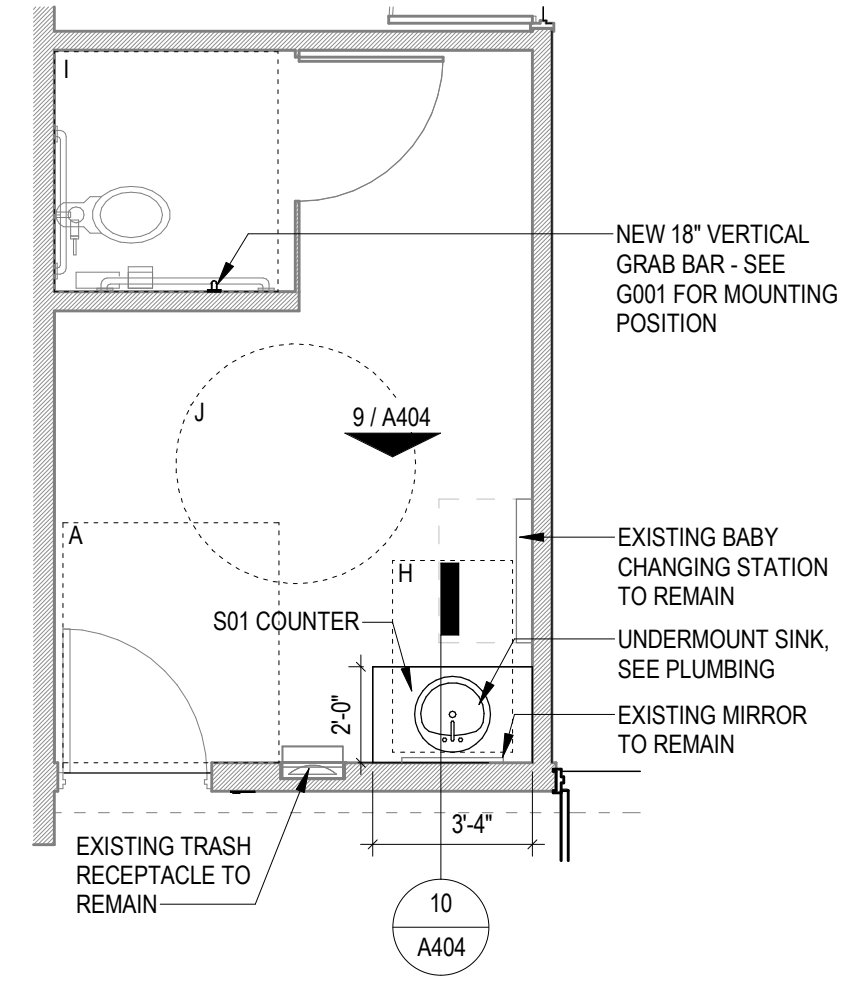
[Color 1 swatch]	COLOR 1 - SEE FINISH SCHEDULE
[Color 2 swatch]	COLOR 2 - SEE FINISH SCHEDULE
[Color 3 swatch]	COLOR 3 - SEE FINISH SCHEDULE



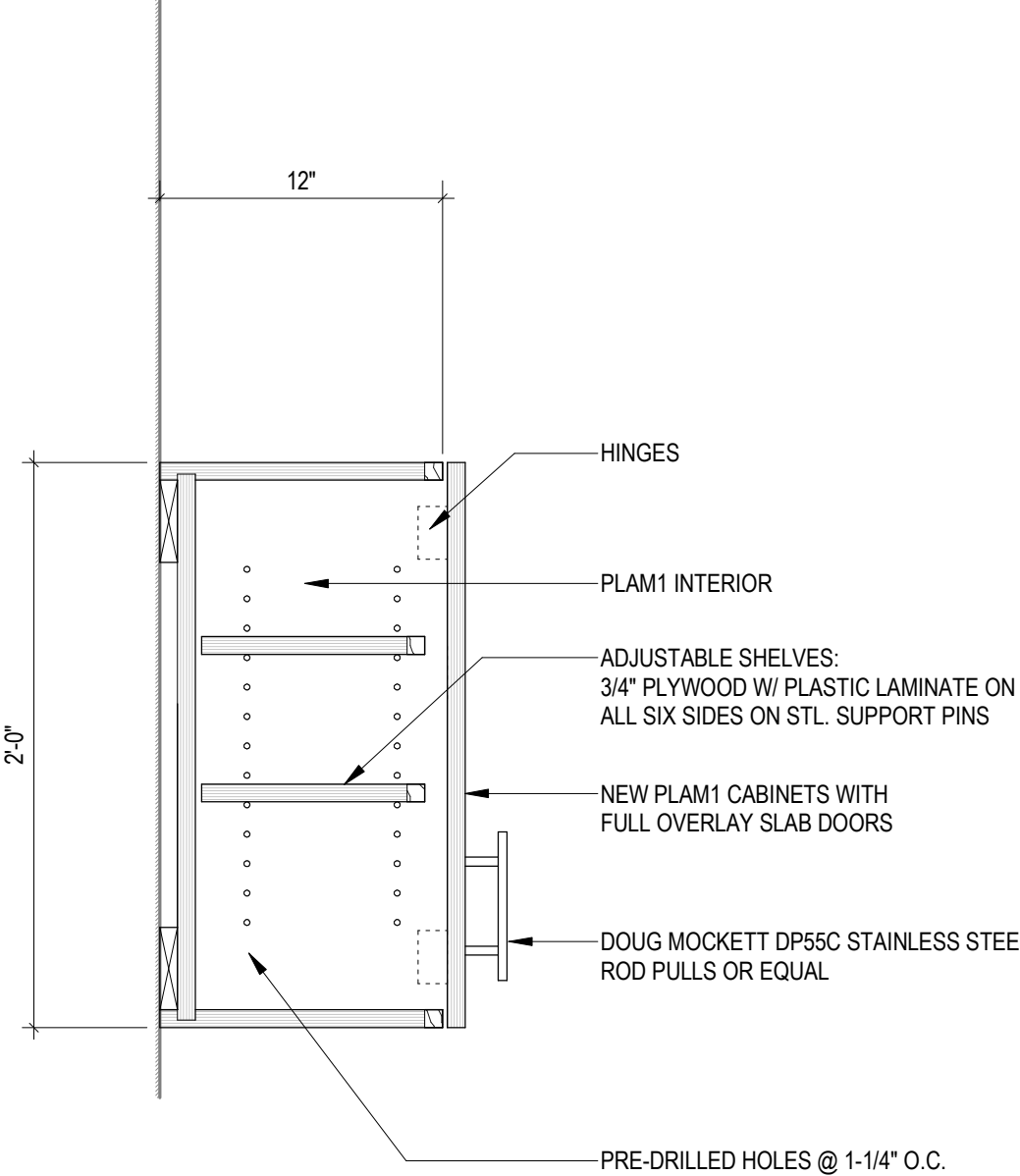
6 ENLARGED PLAN - YOUNG ADULT F14 FLOORING DIAGRAM
1/4\"/>

F12 COLOR LEGEND

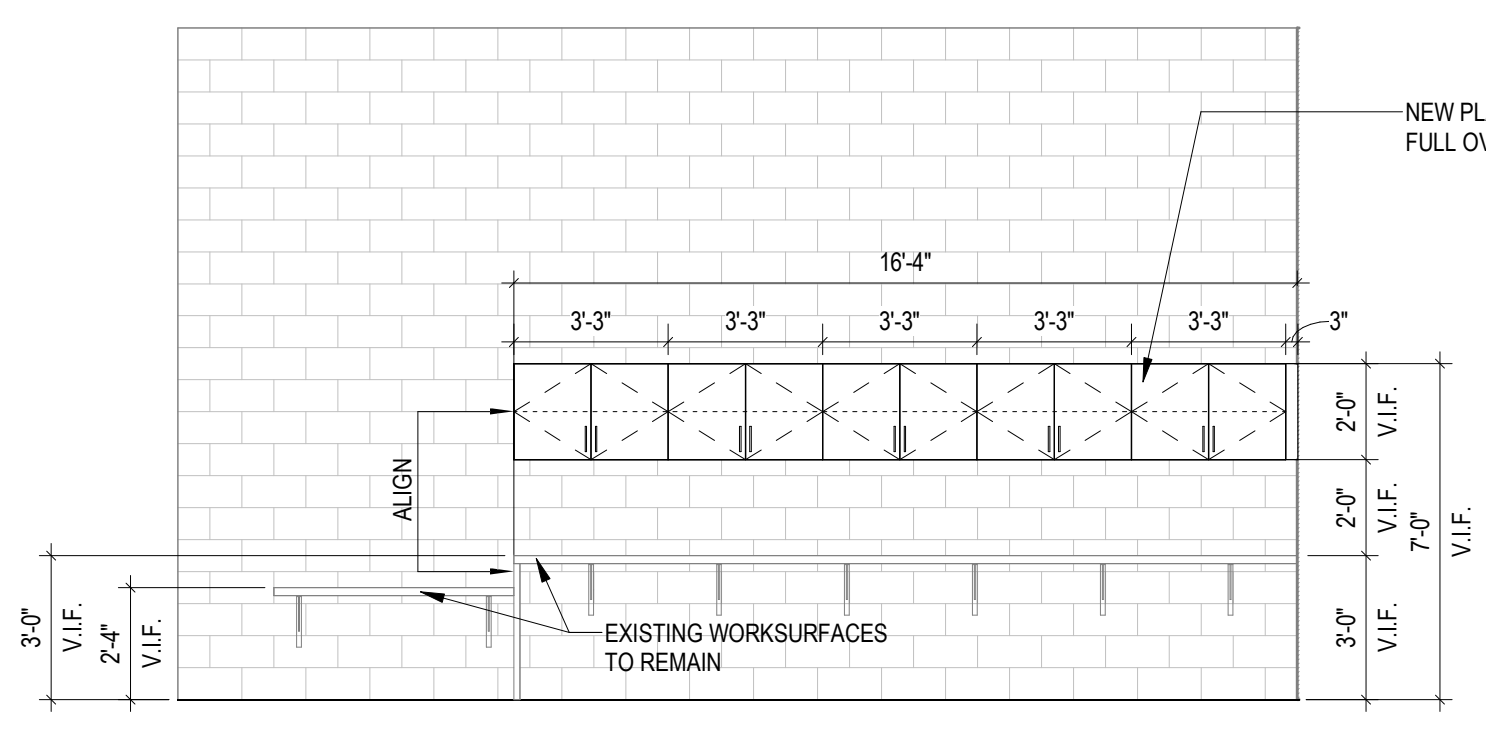
[Color 1 swatch]	COLOR 1 - SEE FINISH SCHEDULE
[Color 2 swatch]	COLOR 2 - SEE FINISH SCHEDULE
[Color 3 swatch]	COLOR 3 - SEE FINISH SCHEDULE



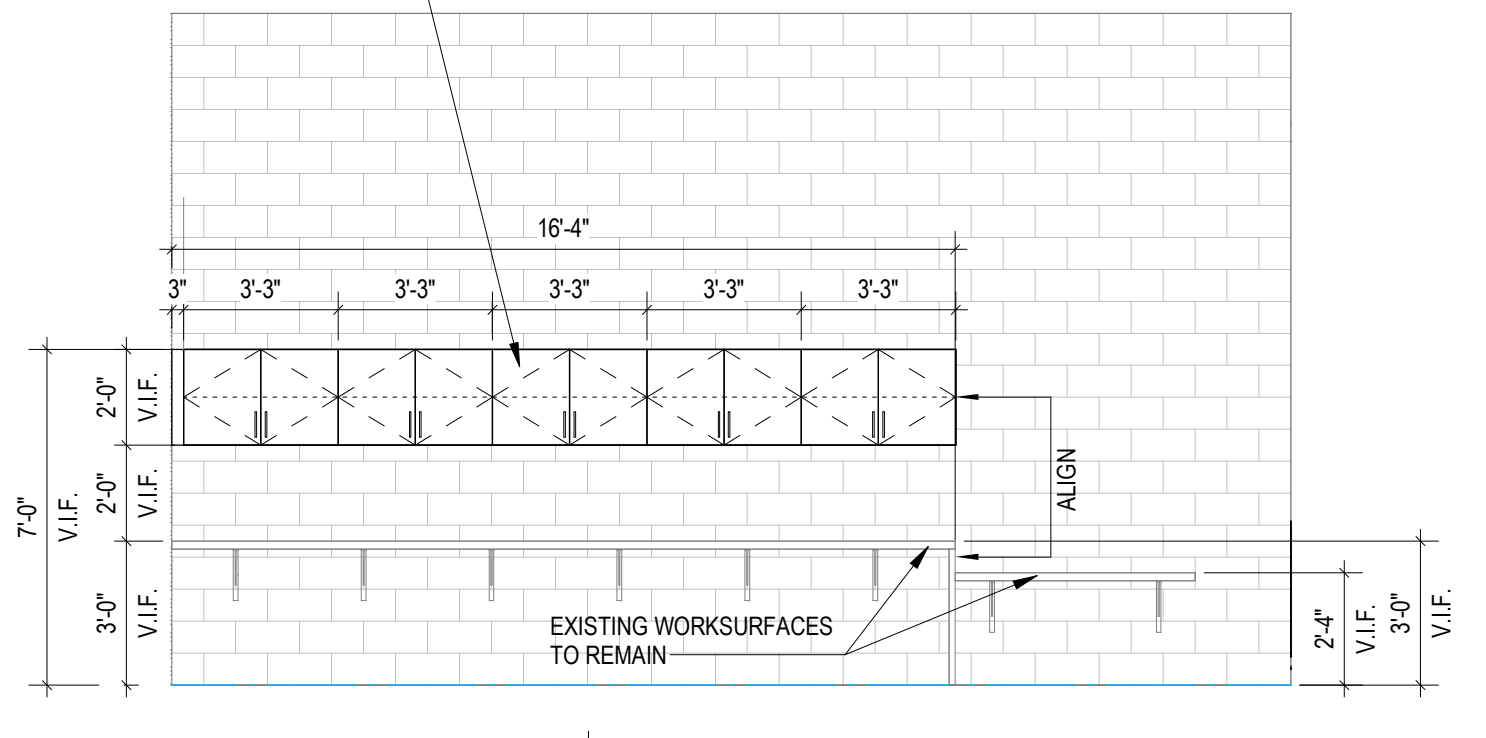
5 ENLARGED PLAN - FAMILY RESTROOM
1/4\"/>



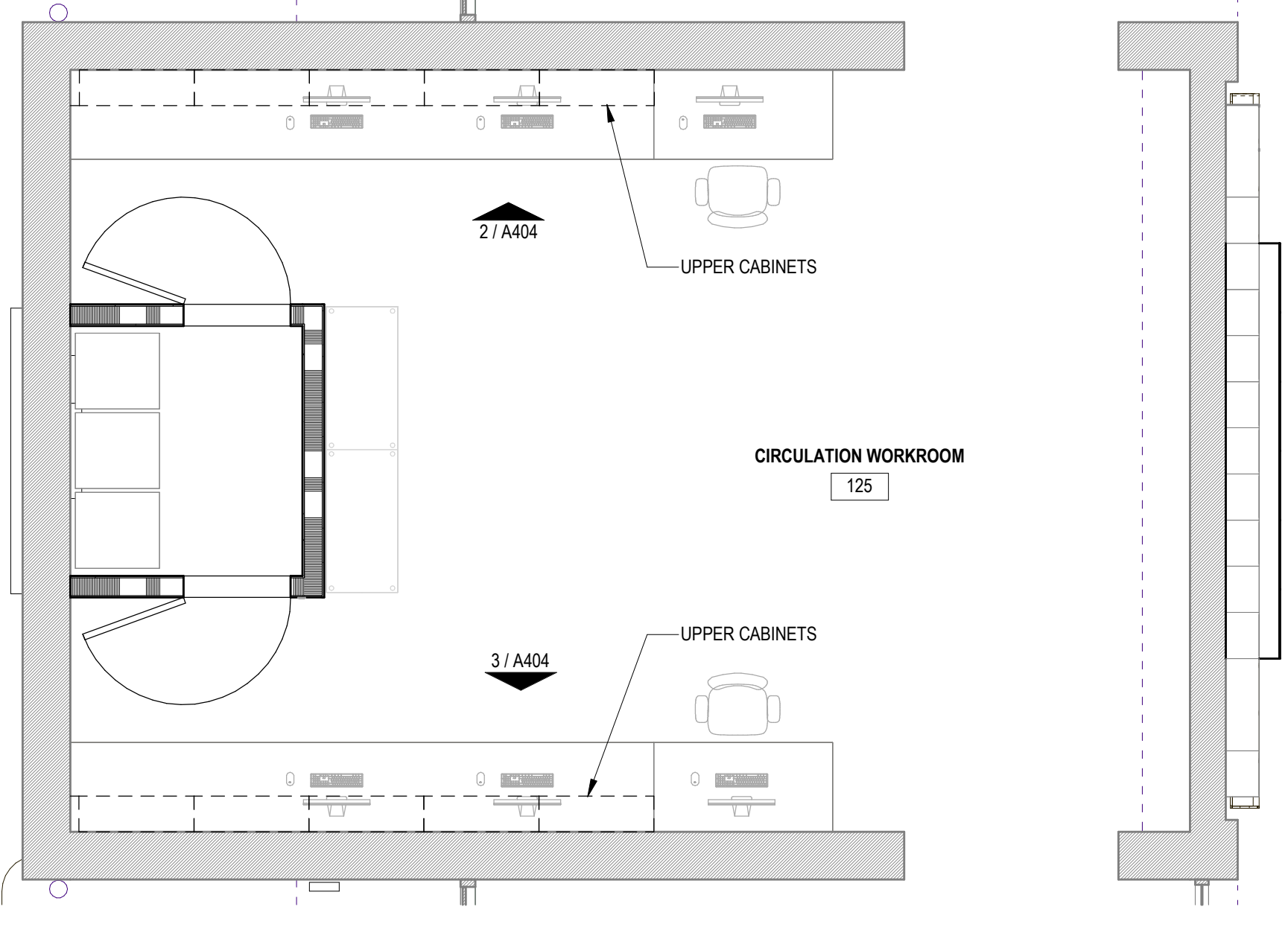
4 TYP. DETAIL AT CIRC. WORKROOM UPPER CABINETS
1 1/2\"/>



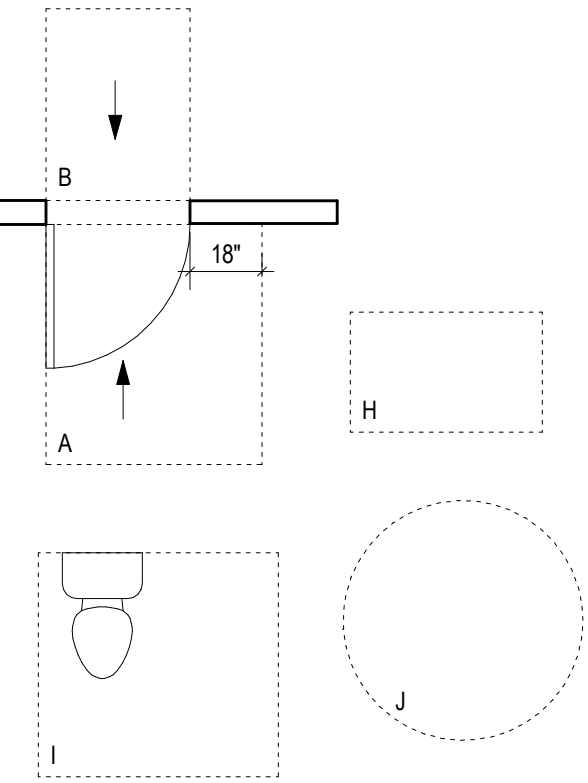
3 CIRCULATION WORKROOM - UPPER CABINETS EAST
1/4\"/>



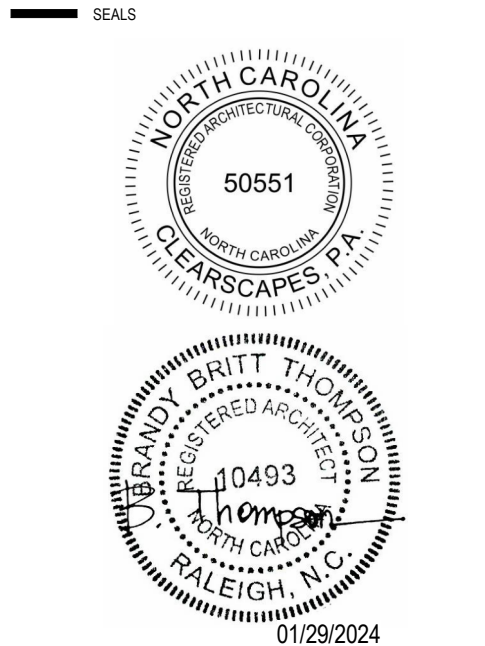
2 CIRCULATION WORKROOM - UPPER CABINETS WEST
1/4\"/>



1 ENLARGED PLAN - CIRCULATION WORKROOM
1/4\"/>



- CLEAR FLOOR SPACE LEGEND**
- A. DOOR - 60" X 54" FRONT APPROACH - PULL SIDE
 - B. DOOR - 48" X 36" FRONT APPROACH - PUSH SIDE
 - H. 30" X 48" CLEAR FLOOR SPACE (CENTER ON FIXTURES U.N.O.)
 - I. TOILET - 56" X 60" CLEAR SPACE
 - J. 60" DIAMETER TURNING CIRCLE



PERMIT SET
01.29.2024
PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

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SHEET DATA
ENLARGED PLANS, INT. ELEV. & DETAILS
SHEET NO.

A404

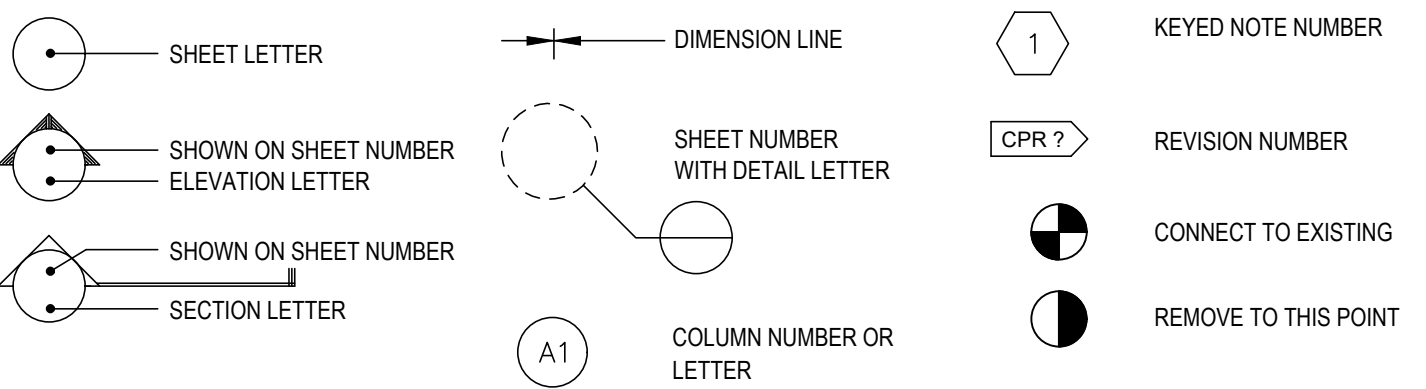
FIRE PROTECTION SYMBOLS AND ABBREVIATIONS

Table listing fire protection symbols and abbreviations, including items like PIPE TURNING UP/DOWN, Tee Down, Tee Up, 45° OFFSET, and various valves and fittings.

FIRE PROTECTION GENERAL NOTES

- 1. DIVISION 21 SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE WORKING SYSTEM WHICH SHALL COMPLY FULLY WITH NFPA #13, 2013 EDITION, STANDARD FOR INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS. THE NORTH CAROLINA STATE BUILDING CODE, 2018 EDITION, AND THE REQUIREMENTS OF ALL LOCAL FIRE MARSHALL AUTHORITIES... 2. DIVISION 21 SHALL PROVIDE ENGINEERED SHOP DRAWINGS FOR THE PROPOSED BUILDING...

GENERAL SYMBOLS



FIRE PROTECTION DESIGN DATA

Table containing project information: Project Name: WESTERN REGIONAL LIBRARY, Project Location: CARY, NORTH CAROLINA, System: WET, Sys. Sq. Ft.: ~30,000 SQ. FT., Ceiling Hgt.: VARIES, Total Bldg. Hgt.: ~20 FT., etc.

FIRE PROTECTION WATER SUPPLY INFORMATION

Table for water supply information: TESTED BY: -, PRESSURE HYDRANT: - PSI, FLOW HYDRANT: - PSI, HYDRANT ELEV. - +/-, DATE/TIME: -, WATER MAIN SIZE: -

SPRINKLER HEAD LEGEND

- DRY SPRINKLER HEAD, QR, SS SIDEWALL CHROME BODY, 1", 155", K=5.6. UPRIGHT SPRINKLER HEAD, QR, SSU BRASS BODY, 1/2", 155", K=5.6. RECESSED PENDENT SPRINKLER HEAD: QR, SSP BRASS BODY, 1/2", 155", K=5.6.

NOTE: ALL SPRINKLER HEAD SPECIFICATION INFORMATION LISTED ABOVE IS TYPICAL UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND/OR AS OTHERWISE REQ'D. BY CODE (ORIFICE SIZES, TEMP. RATINGS, ETC.).

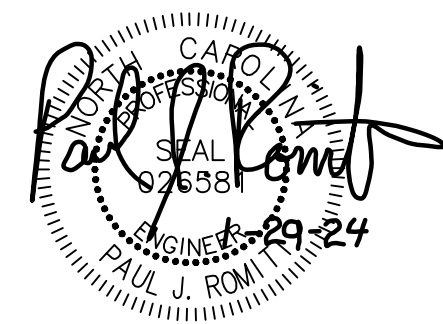


Table with columns: No., Description, Date. Includes a header row and several empty rows for revisions.

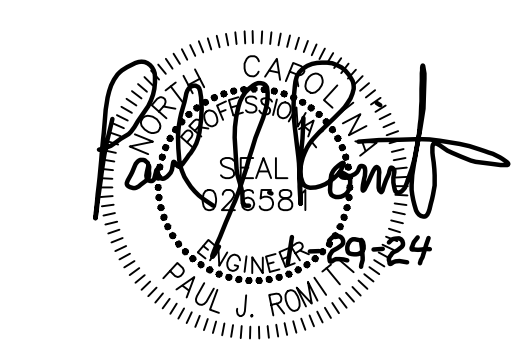


2 ENLARGED BOOK DROP PLAN
1/2" = 1'-0"

KEYED NOTES
1 INSTALL NEW PENDANT HEAD IN THIS LOCATION. CONNECT TO MAIN SPRINKLER PIPE RUNNING THROUGH EXISTING WORKROOM.

RATED PARTITION WALL LEGEND
1-HR RATED WALL

1 FIRE PROTECTION NEW WORK PLAN
3/32" = 1'-0"



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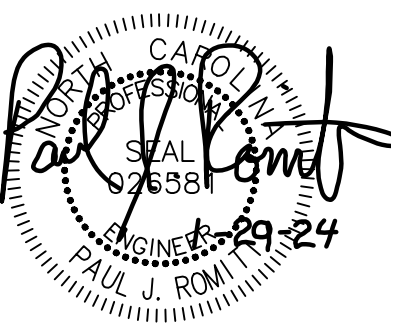
REVISIONS

No.	Description	Date

PROJECT DATA
DATE: 01.29.2024
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CHECKED: PJR
PROJECT NO: 2023_0030
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FIRE PROTECTION NEW WORK PLAN

FP200



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SET
01.29.2024

PROJECT
**WEST REGIONAL
LIBRARY
RENOVATION**
4000 LOUIS STEPHENS DR.
CARY, NC 27519

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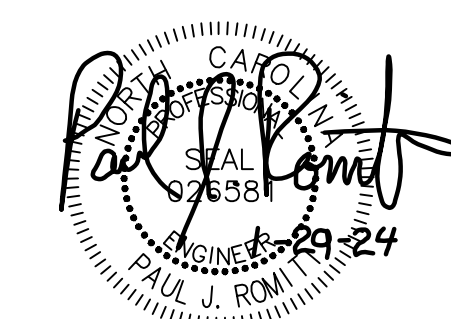
**PLUMBING
LEGENDS, NOTES
AND SCHEDULE**

PLUMBING LEGEND						
LEGEND			ADDITIONAL ABBREVIATIONS			
	CW	DOMESTIC COLD WATER	(EX)	EXISTING	LAV	LAVATORY
	HW	DOMESTIC HOT WATER SUPPLY	AAV	AIR ADMITTANCE VALVE	M	METER
	HWR	DOMESTIC HOT WATER RETURN	ABV	ABOVE	MAX	MAXIMUM
	THWS	65° TEMPERED WATER	AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
	G	NATURAL GAS	AFG	ABOVE FINISHED GRADE	MFR	MANUFACTURER
	W	SANITARY WASTE	ARCH	ARCHITECTURAL	MH	MAN HOLE
	GW	GREASE WASTE	BFP	BACKFLOW PREVENTER	MIN	MINIMUM
	V	SANITARY VENT	BLW	BELOW	MS	MOP SINK
	RDL	ROOF DRAIN LEADER	BT	BATH TUB	NC	NORMALLY CLOSED
	DN, UP	PIPE ELBOW TURNS DOWN, UP	BTU	BRITISH THERMAL UNIT	NPCW	NON-POTABLE COLD WATER
	DN, UP	PIPE TEES DOWN, UP	CD	CONDENSATE	NO	NORMALLY OPEN
	CAP	PIPE CAP	CLG	CEILING	NTS	NOT TO SCALE
	BV	BALL VALVE	COL	COLUMN	OD	OUTSIDE DIAMETER
	U	UNION	CONT	CONTINUED	OSD	OPEN SITE DRAIN
	CV	CHECK VALVE	DF	DRINKING FOUNTAIN	P&T	PRESSURE AND TEMPERATURE
	GV	GAS COCK	DFU	DRAINAGE FIXTURE UNITS	PD	PUMP DISCHARGED
	DCV	DOUBLE CHECK VALVE	DWG(S)	DRAWING(S)	PSI	POUNDS PER SQUARE INCH
	RPZ	REDUCED PRESSURE ZONE	EA	EACH	PRES	PRESSURE
	YCO	YARD CLEANOUT	EL	ELEVATION	RL	RAIN LEADER
	FCO	FLOOR CLEANOUT	ELEC	ELECTRICAL	RTU	ROOF TOP UNIT
	CO	IN-LINE CLEANOUT	ELEV	ELEVATION	SH	SHOWER
	WCO	CLEANOUT AT FINISH WALL	EWC	ELECTRIC WATER COOLER	SPEC	SPECIFICATIONS
	TR	TRAP	EWH	ELECTRIC WATER HEATER	SS	SERVICE SINK
	FD	FLOOR DRAIN	F	FIRE	STD	STANDARD
	HB/NFHB	(NON-FREEZE) HOSE BIBB	FDC	FIRE DEPARTMENT CONNECTION	TBD	TO BE DETERMINED
			FF	FINISHED FLOOR	TOS	TOP OF SLAB
			FG	FINISHED GRADE	TP	TRAP PRIMER
			FLR	FLOOR	TUB	BATHTUB
			FM	FORCED MAIN	TYP	TYPICAL
			FS	FLOW SWITCH	UNO	UNLESS NOTED OTHERWISE
			FU	FIXTURE UNIT	UR	URINAL
			GPM	GALLONS PER MINUTE	U/S	UNDER SLAB
			GM	GAS METER	V	VENT
			GWH	GAS WATER HEATER	VTR	VENT THROUGH ROOF
			HB(NFHB)	HOSE BIBB(NON FREEZE)	W	WASTE
			ID	INSIDE DIAMETER	WC	WATER CLOSET
			IND	INDIRECT	WH	WATER HEATER
			INT	INTERIOR	WHA	WATER HAMMER ARRESTOR
			I.E.	INVERT ELEVATION	w/	WITH
			IWH	INSTANT WATER HEATER		

GENERAL PLUMBING NOTES
1. NOT ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS DRAWING MAY BE USED ON THIS PROJECT.
2. ALL PLUMBING WORK SHALL BE FURNISHED AND INSTALLED PER THE STATE OF NORTH CAROLINA BUILDING CODE: PLUMBING CODE 2018.
3. UNLESS OTHERWISE NOTED ON DRAWINGS, ALL 1/2"-2 1/2" SANITARY WASTE AND VENT PIPING SHALL BE RUN AT 1/4" PER FT SLOPE. ALL 3"-6" SANITARY WASTE AND VENT PIPING SHALL BE RUN AT 1/4" PER FT SLOPE. ALL WASTE AND VENT PIPING 8" OR LARGER SHALL BE RUN AT 1/4" PER FT SLOPE. ALL STORM DRAINAGE PIPING SHALL BE RUN AT 1/8" PER FT SLOPE.
4. THE DESIGN/DETAIL/SCHEDULE SHOWN IS BASED ON (MANUFACTURER, MODEL) EQUIPMENT AND IS INTENDED ONLY TO SHOW THE GENERAL SIZE, CONFIGURATION, LOCATION, CONNECTIONS, AND/OR SUPPORT FOR EQUIPMENT OR SYSTEMS SPECIFIED WITH RELATION TO THE OTHER BUILDING SYSTEMS.
5. INSTALL ALL PIPING AT THE MAXIMUM ELEVATION POSSIBLE. PROVIDE ALL FITTINGS, TRANSITIONS AND MATERIALS REQUIRED TO ACHIEVE MAXIMUM ELEVATION. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO THE START OF WORK TO AVOID CONFLICTS.
6. CONTRACTOR SHALL FURNISH ALL DISCONNECTS REQUIRED FOR PLUMBING EQUIPMENT.
7. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL MANUFACTURER SUBSTITUTIONS OF PLUMBING EQUIPMENT. SUBMIT A DESCRIPTION OF ANY/ALL CHANGES REQUIRED BY THE SUBSTITUTION, INCLUDING ELECTRICAL AND MECHANICAL CONNECTIONS, SIZES, WEIGHTS, AND CLEARANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COST ASSOCIATED WITH THE SUBSTITUTION.
8. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS. THE CONTRACTOR SHALL INFORM THE ARCHITECT AND/OR ENGINEER OF ANY CONFLICTS AS SOON AS THEY ARE DETECTED.
9. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EX", "EXISTING", OR "EXIST".
10. VERIFY LOCATIONS AND DIMENSIONS OF ALL EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.
11. THESE DRAWINGS ARE NECESSARILY DIAGRAMMATIC IN NATURE. NOT ALL FITTINGS, OFFSETS, VENTS, OR DRAINS ARE SHOWN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND INCLUDE ALL FITTINGS, OFFSETS, VENTS, AND DRAINS AS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.

PLUMBING FIXTURE SCHEDULE												
MARK	FIXTURE	FIXTURE			FAUCET				REMARKS	COMPLIES WITH ADA		
		SPECIFICATION/DESCRIPTION	SAN	VENT	PICTURE	DESCRIPTION	COLD WATER	HOT WATER			FLOW RATE	PICTURE
LAV-1	WALL HUNG SINK	EXISTING	-	-		T&S "CHECKPOINT" EC-3103 (OR EQUAL) THREE-HOLE ELECTRONIC BATTERY-POWERED SENSOR FAUCET. PROVIDE 0.5 GPM VANDAL RESISTANT AERATOR, MATCHING STRAINER.	1/2"	1/2"	0.5GPM		INSTALL ON EXISTING FIXTURE. CONNECT TO EXISTING ROUGH-INS. PROVIDE WITH AMERICAN STANDARD THERMOSTATIC MIXING VALVE MODEL#605XTM.V. SET TEMPERATURE TO 110° MAX.	
LAV-2	LAY-IN SINK	ELKAY ELUH1511 OR EQUAL 18X14X6 OVAL UNDERCOUNTER MOUNT 18GA STAINLESS STEEL SINK. PROVIDE WITH OFFSET DRAIN. INSULATE TRAP FOR ADA COMPLIANCE.	1/2"	1/4"		T&S "CHECKPOINT" EC-3103 (OR EQUAL) THREE-HOLE ELECTRONIC SENSOR FAUCET. PROVIDE 0.5 GPM VANDAL RESISTANT AERATOR, MATCHING STRAINER, AND BELOW DECK THERMOSTATIC MIXING VALVE.	1/2"	1/2"	0.5GPM		PROVIDE WITH KEYED 1/2" STOPS, AND P-TRAP w/ CLEANOUT. PROVIDE WITH AMERICAN STANDARD THERMOSTATIC MIXING VALVE MODEL#605XTM.V. SET TEMPERATURE TO 110° MAX.	
KS-1	KITCHEN SINK	EXISTING	-	-		DELTA RP70714 CORONA SINGLE-HANDLE PULL DOWN FAUCET, CHROME. PROVIDE WITH OPTIONAL ESCUTCHEON.	1/2"	1/2"	1.8GPM		INSTALL ON EXISTING FIXTURE. CONNECT TO EXISTING ROUGH-INS. VERIFY THAT MIXING VALVE AND SPRAYER HOSE OPERATE CORRECTLY IN EXISTING CASEWORK.	
EW-1	DRINKING FOUNTAIN	ELKAY LZWS-LRPBM28K WATER REFILLING STATION, BI-LEVEL REVERSIBLE, WITH FILTER. TOUCHLESS SENSOR ACTIVATION.	1/2"	1/4"		SINGLE-POINT WASTE AND WATER CONNECTIONS.	1/2"	-	-	-	MOUNT IN COMPLIANCE WITH ADA REQUIREMENTS.	

NOTES:
 1. PLUMBING FIXTURES SPECIFIED ARE GENERALLY AMERICAN STANDARD. FIXTURES AS MANUFACTURED BY KOHLER, ELKAY OR TOTO MAY BE SUBMITTED FOR APPROVAL PROVIDED THE SELECTION IS STRICTLY APPROVED EQUIVALENT.
 2. PLUMBING FAUCETS SPECIFIED ARE GENERALLY DELTA. FAUCETS AS MANUFACTURED BY T&S BRASS OR CHICAGO MAY BE SUBMITTED FOR APPROVAL PROVIDED THE SELECTION IS STRICTLY APPROVED EQUIVALENT.
 3. PLUMBING FLUSH VALVES SPECIFIED ARE GENERALLY AMERICAN STANDARD. FLUSH VALVES AS MANUFACTURED BY SLOAN OR DELANEY MAY BE SUBMITTED FOR APPROVAL PROVIDED THE SELECTION IS STRICTLY APPROVED EQUIVALENT.
 4. FLOOR DRAINS AND FLOOR SINKS ARE GENERALLY ZURN. DRAINS AS MANUFACTURED BY JAY R. SMITH, JOSAM OR WATTS MAY BE SUBMITTED FOR APPROVAL PROVIDED THE SELECTION IS STRICTLY APPROVED EQUIVALENT.



PERMIT
SET
01.29.2024

PROJECT
**WEST REGIONAL
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REVISIONS

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PROJECT DATA

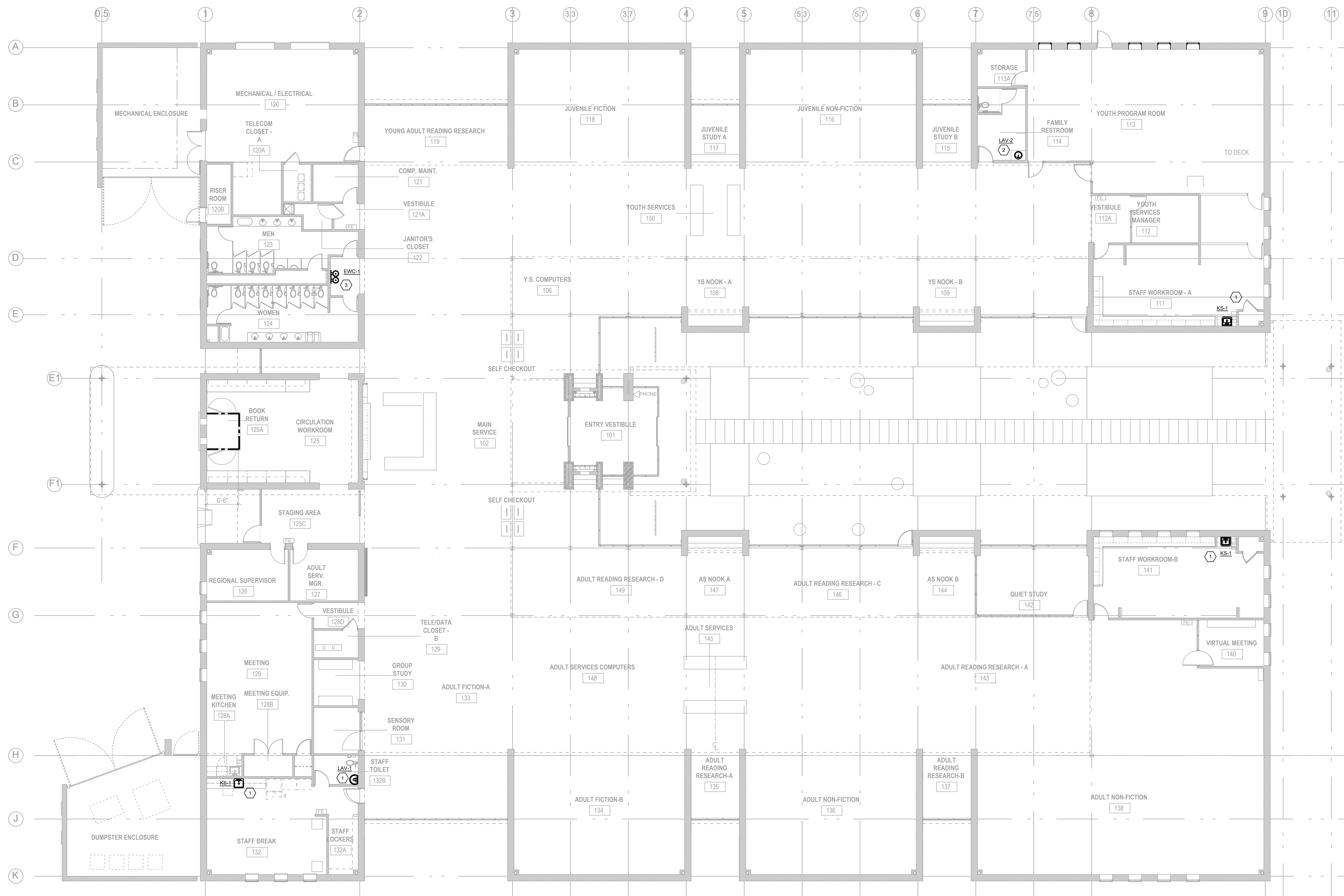
DATE: 01.29.2024
DRAWN: PJR
CHECKED: PJR
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PRINTING: PERMIT SET

SHEET DATA

**PLUMBING
NEW WORK PLAN**

SHEET NO.

P200



DATE
PLUMBING NEW WORK PLAN
3/32" = 1'-0"

- KEYED NOTES:**
- REPLACE EXISTING FAUCET ON THIS FIXTURE, REFER TO PLUMBING FIXTURE SCHEDULE FOR DETAILS
 - REPLACE EXISTING LAVATORY AND FAUCET INCLUDING WASTE AND WATER ROUGH-INS REFER TO PLUMBING SCHEDULE FOR DETAILS.
 - INSTALL NEW ELECTRIC WATER COOLER WITH BOTTLE FILLER IN THIS LOCATION. REUSE EXISTING ROUGH-INS.

RATED PARTITION/WALL LEGEND
----- 1-HR RATED WALL

MECHANICAL SYSTEMS
ENERGY CODE COMPLIANCE

PRESCRIPTIVE: ENERGY COST BUDGET:

THERMAL ZONE: 4A

EXTERIOR DESIGN CONDITIONS:

WINTER DRY BULB: 14°F
SUMMER DRY BULB: 94°F
SUMMER WET BULB: 78°F

INTERIOR DESIGN CONDITIONS:

WINTER DRY BULB: 70°F
SUMMER DRY BULB: 75°F

AREA HEAT LOAD: 2047 MBH

AREA COOLING LOAD: 92 TONS

MECHANICAL CONDITIONING SYSTEM:

DESCRIPTION OF UNIT: CONDENSING BOILER (EX)

HEATING EFFICIENCY: EXISTING
COOLING EFFICIENCY: 10.4/EEER IPLV: 16.23 EER
HEATING OUTPUT: EXISTING
COOLING OUTPUT: 89.36 TONS

BOILER OUTPUT: EXISTING

CHILLER TOTAL CAPACITY: 90 TONS

DESIGNER STATEMENT:

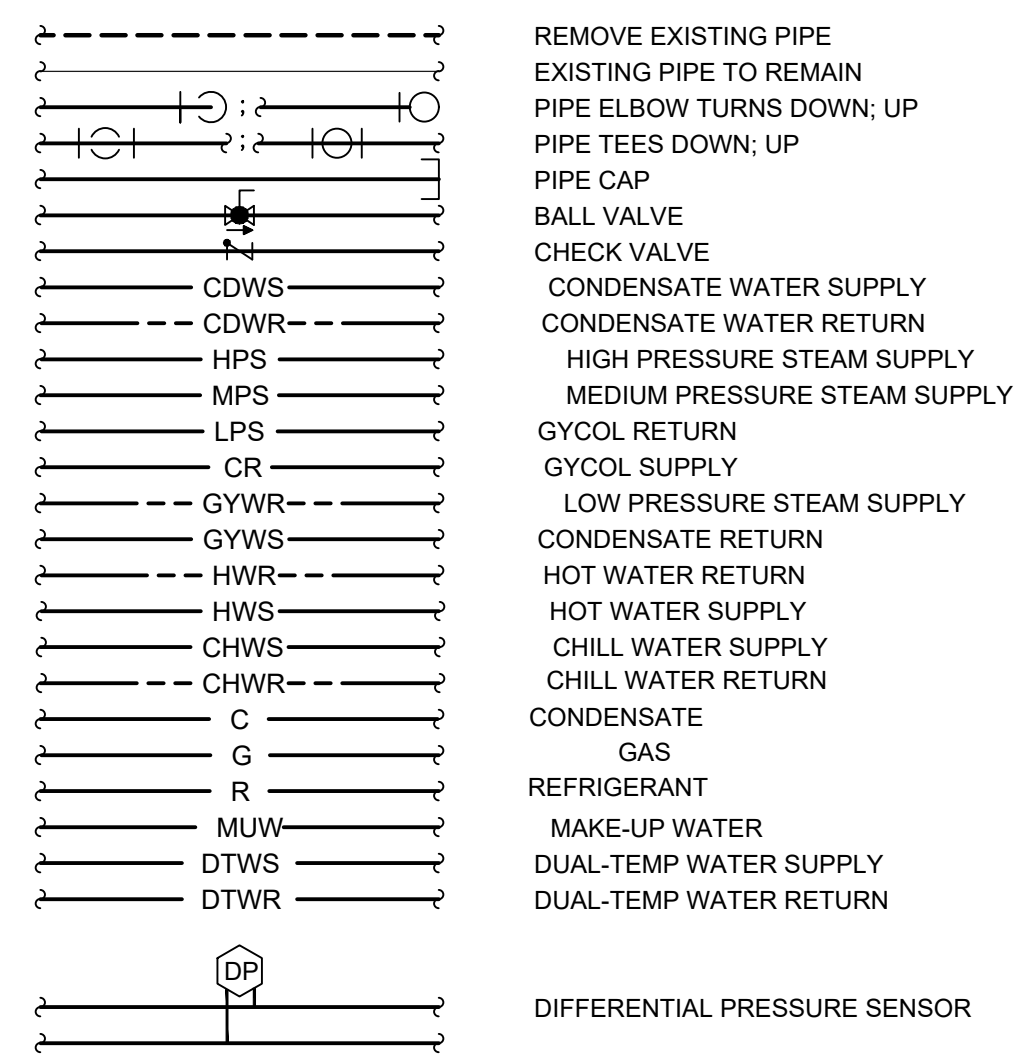
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018 ENERGY CONSERVATION CODE.

SIGNED: 

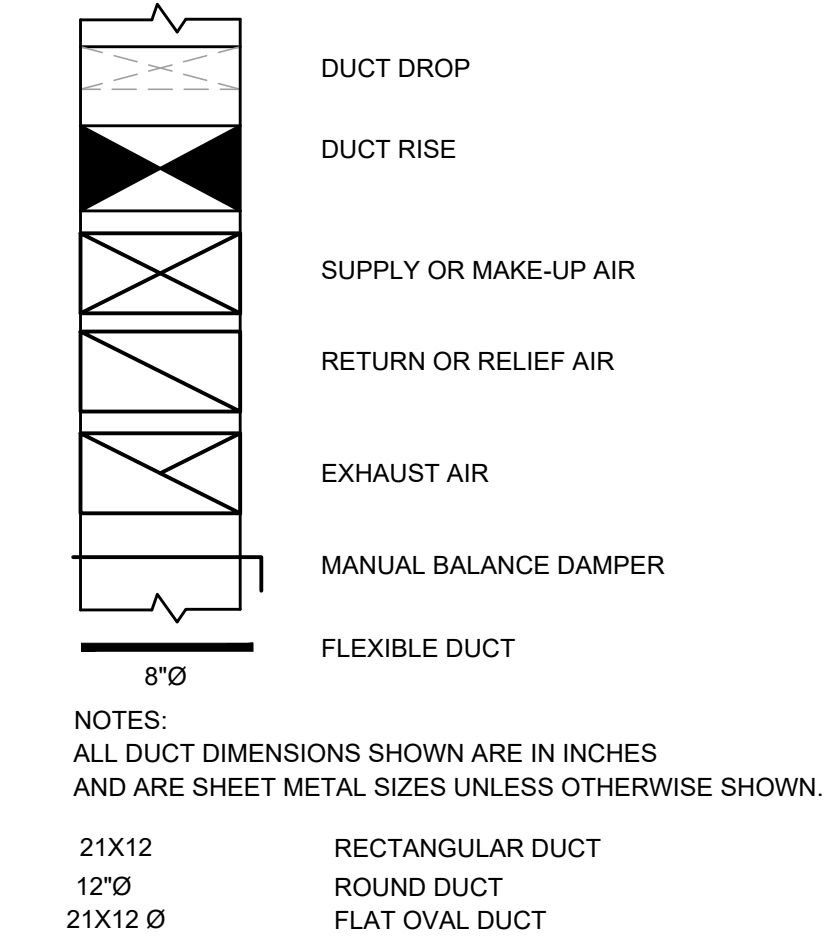
NAME: PAUL J. ROMITI, PE
TITLE: MECHANICAL ENGINEER

MECHANICAL LEGEND

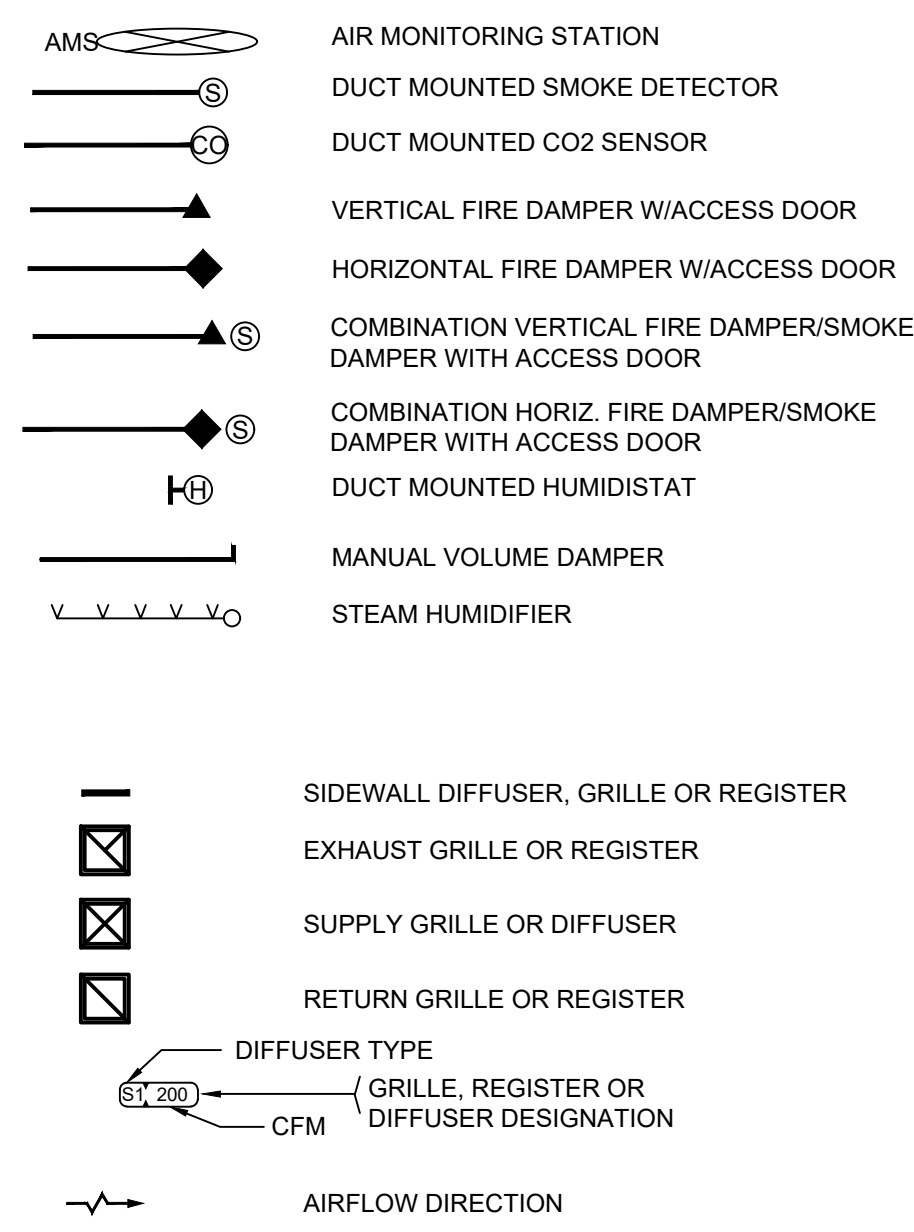
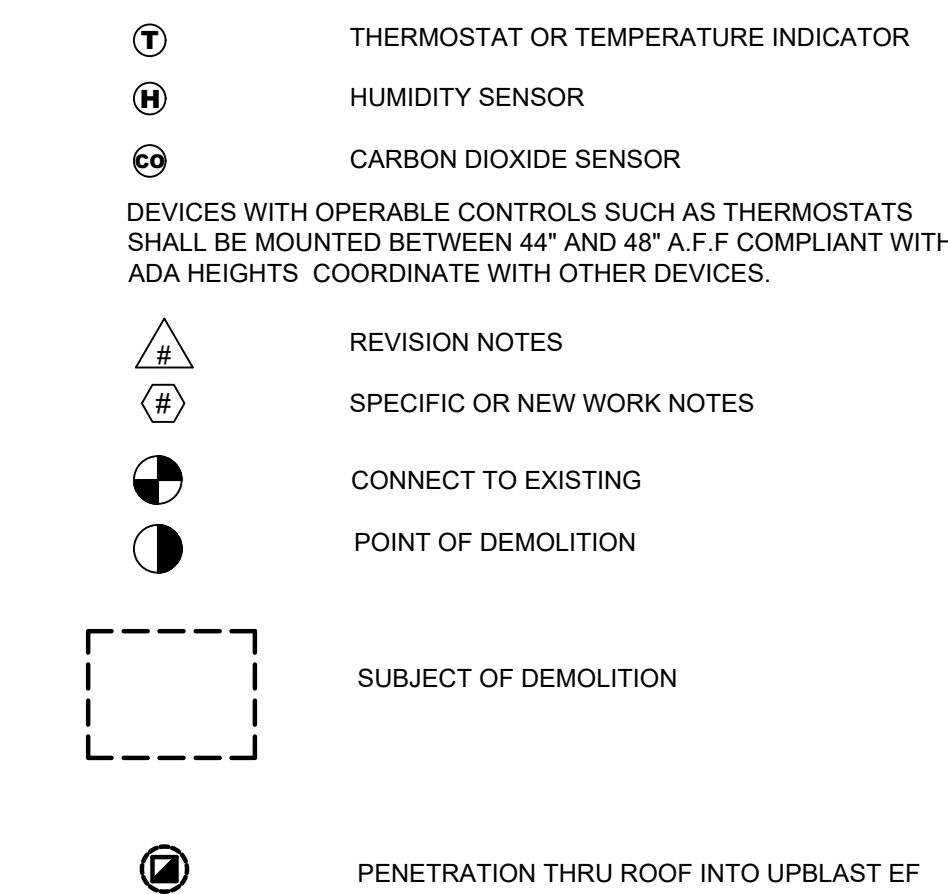
PIPING SYMBOLS



DUCTWORK SYMBOLS



MISCELLANEOUS SYMBOLS AND ABBREVIATIONS



MECHANICAL ABBREVIATIONS

AC	Air Conditioning
ACH	Air Changes per Hour
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFUE	Annual Fuel Efficiency Ratio
AHU	Air Handling Unit
Bi	Backward Incline
BTU	British Thermal Unit
BTUH	British Thermal Units / Hour
CAV	Constant Air Volume
CFC	ChloroFluoroCarbon
CFM	Cubic Feet per Minute
COP	Coefficient Of Performance
CRAC	Computer Room Air Conditioner
CV	Constant Volume
DA	Discharge Air
DB	Dry Bulb
DH	Duct Heater
DN	Down
DP	Dew Point
DX	Direct Expansion
EAT	Entering Air Temperature
EC	Electrical Contrator (Div 26, 27 or 28)
ECM	Electronically Commutated Motor
EDH	Electric Duct Heater
EER	Energy Efficiency Ratio
EF	Exhaust Fan
Eh	Electric Heater
EHC	Electric Heating Coil
ESP	External Static Pressure
ETR	Existing to Remove
EUH	Electric Unit Heater
EX	Existing
FC	Forward Curve
FCU	Fan Coil Unit
FLA	Full Load Amps
FPM	Feet Per Minute
FW	Feed Water
GC	General Contractor
GPM	Gallons Per Minute
GUI	Graphical User Interface
HCFC	HydrochloroFluoroCarbon
HEPA	High Efficiency Particulate Arresting
HFC	HydroFluroCarbon
HL	High Limit
HP	Horsepower
HR	Heat Recovery
HRU	Heat Recovery Unit
HRV	Heat Recovery Ventilator
HSPF	Heating Seasonal Performance Factor
HVAC	Heating Ventilation and Air Conditioning
HX	Heat Exchanger
I/O	Input Output
IAQ	Indoor Air Quality
IR	Infra-Red
LAT	Leaving Air Temperature
LL	Low Limit
LON	Local Operating Network
LP	Low Pressure
LRA	Locked Rotor Amps
LWBT	Leaving Wet Bulb Temperature
LWT	Leaving Water Temperature
M&V	Measurement and Verification
MA	Mixed Air
MAT	Mixed Air Temperature
MC	Mechanical Contrator (Div 23)
MCC	Motor Control Center
MUA	Make-up Air Unit
MVD	Manual Volume Damper
MZ	Multi-Zone
N/A	Not Applicable
NEMA	National Electrical Manufacturers Association
OA	Outside Air
OAT	Outside Air Temperature
OC	On Center
ODP	Open Drip Proof
PC	Plumbing Contrator (Div 22)
PH	Pre-Heat
PHC	Pre-heat Coil
PTAC	Packaged Terminal Air Conditioner
QTY	Quantity
RA	Return Air
REF	Refrigerant
RF	Return Fan
RH	Reheat
RH	Relative Humidity
RHC	Re-heat Coil
RPM	Revolutions Per Minute
RTD	Resistance Temperature Detector
RTU	Roof Top Unit
SA	Supply Air
SAT	Supply Air Temperature
SC	Shading Coefficient
SEER	Seasonal Energy Efficiency Ratio
SF	Supply Fan
SHFG	Solar Heat Gain Factor
TEV	Thermostatic Expansion Valve
TSP	Total Static Pressure
TXV	Thermostatic Expansion Valve
UC	Undercut
UH	Unit Heater
UV	UltraViolet
UV	Unit Ventilator
VAV	Variable Air Volume
VFD	Variable Frequency Drive
VSD	Variable Speed Drive
WB	Wet Bulb
WC	Water Column
XFER	Transfer

CONTROLS ABBREVIATIONS

AI	Analog Input
AO	Analog Output
BACnet	Building Automation and Control Network Protocol
BAS	Building Automation System
DCV	Demand Controlled Ventilation
DDC	Direct Digital Control
DI	Digital Input
DO	Digital Output
DP	Differential Pressure
dP	Pressure Differential
dT	Temperature Differential
EMS	Energy Management System
NC	Normally Closed
NO	Normally Open
OVS	Operator Work Station
PID	Proportional Integral Derivative
SP	Set Point
SP	Static Pressure
T	Thermostat

HYDRONIC SYSTEM ABBREVIATIONS

B	Boiler
CC	Cooling Coil
CH	Chiller
CHW	Chilled Water
CHWP	Chilled Water Pump
CHWR	Chilled Water Return
CHWS	Chilled Water Supply
CT	Cooling Tower
CWP	Condenser Water Pump
CWR	Condenser Water Return
CWS	Condenser Water Supply
EWT	Entering Water Temperature
HPS	High Pressure Steam
HPS	High Pressure Steam
HWP	Hot Water Pump
HWR	Hot Water Return
HWS	Hot Water Supply
LPS	Low Pressure Steam
LPS	Low Pressure Steam
MPS	Medium Pressure Steam
NPSH	Net Positive Suction Head
PRV	Pressure Relief Valve
PRV	Pressure Reducing Valve

OUTSIDE AIR CALCULATIONS

TABLE M2: OUTSIDE AIR CALCULATIONS SUMMARY-AHU-2

REF	OCCUPANCY TYPE	AREA	PEOPLE	REQUIRED VENTILATION AIR
1	Offices :Office spaces	134 sf	1	12 CFM
2	Public spaces :Libraries	8705 sf	88	1481 CFM
PEOPLE TOTAL			89	
DIVERSITY				1.00
UNCORRECTED TOTAL				1493 CFM
CRITICAL ZONE NAME & VENTILATION EFFICIENCY		116 Juvenile Non Fiction		0.772
CORRECTED TOTAL				1933 CFM

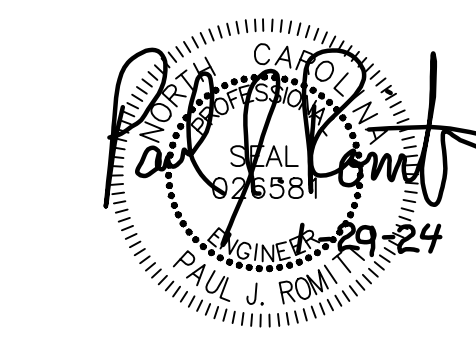
OUTSIDE AIR CALCULATIONS (ALTERNATE M1)

TABLE M1 : OUTSIDE AIR CALCULATIONS SUMMARY - AHU-1

REF	OCCUPANCY TYPE	AREA	PEOPLE	REQUIRED VENTILATION AIR
1	Offices :Conference rooms	851 sf	43	265 CFM
2	Offices :Office spaces	317 sf	2	28 CFM
3	Offices :Reception areas	500 sf	15	105 CFM
4	Public spaces :Libraries	13845 sf	139	2354 CFM
PEOPLE TOTAL			199	
DIVERSITY				0.51
UNCORRECTED TOTAL				1404 CFM
CRITICAL ZONE NAME & VENTILATION EFFICIENCY		128 Meeting		0.404
CORRECTED TOTAL				3474 CFM

GENERAL NOTES

- THE DRAWINGS SHOW THE GENERAL ARRANGEMENT AND LOCATION OF EQUIPMENT, DUCTWORK, PIPING, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL INSTALLATION WITH THE STRUCTURE AND OTHER TRADES AND SHALL PROVIDE ADDITIONAL OFFSETS AND FITTINGS AS NECESSARY.
- PRIOR TO BIDDING, THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND SHALL INCLUDE IN THE BID ALL WORK REQUIRED FOR A COMPLETE JOB. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING FIELD CONDITIONS A MINIMUM OF FIVE DAYS PRIOR TO BID.
- THE HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS SHALL COMPLY WITH THE 2018 NORTH CAROLINA MECHANICAL CODE AND NFPA 90A.
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL CLEARANCES PRIOR TO FABRICATION OR INSTALLATION OF EQUIPMENT, DUCTWORK, AND PIPING SYSTEMS. WHERE CONDITIONS REQUIRE A CHANGE IN DUCT OR PIPE ROUTING, NOTIFY THE ENGINEER FOR AN ACCEPTABLE ALTERNATIVE METHOD. AVOID ROUTING DUCTWORK DIRECTLY OVER LIGHT FIXTURES, DIFFUSERS, AND OTHER CEILING MTD. DEVICES. LOCATE ALL MECHANICAL EQUIPMENT SO THAT FILTERS AND COMPONENTS REQUIRING ACCESS (SERVICE AND MAINTENANCE) ARE FULLY ACCESSIBLE.
- ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH PRESCRIBED CLEARANCES FOR SERVICE AND MAINTENANCE. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IF RECOMMENDED CLEARANCES ARE NOT POSSIBLE BEFORE INSTALLING EQUIPMENT.
- ALL ROTATING MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATION. PROVIDE FLEXIBLE NEOPRENE DUCT CONNECTORS BETWEEN DUCTWORK AND ISOLATED MECHANICAL EQUIPMENT.
- THE CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS OF FIRE RATED WALLS/FLOORS/CEILINGS BY DUCTWORK PIPING, ETC., WITH U.L. LISTED FIRE STOPPING MATERIAL TO MAINTAIN FIRE RATING OF THE BARRIER.
- WHERE PIPING CONTAINING FLAMMABLE AND COMBUSTIBLE GAS IS TO BE REMOVED, PROCEDURE OF NCGC 406.7.1.1 ALONG WITH NFPA 54 7.2.7 AND 8.3.1 SHALL BE OBSERVED. THE LINE SHALL BE FIRST DISCONNECTED FROM ALL SOURCES OF GAS PRESSURE, VENTED TO THE OUTDOORS, AND THEN THOROUGHLY PURGED WITH AIR, WATER, OR INERT GAS BEFORE ANY CUTTING OR WELDING IS DONE.
- CLEAN HVAC SYSTEM FROM POINT WHERE AIR ENTERS SYSTEM TO EACH POINT WHERE AIR IS DISCHARGED FROM SYSTEM. REFER TO SPECIFICATIONS SECTION 233130 FOR ADDITIONAL REQUIREMENTS.



No.	Description	Date

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EXHAUST FAN SCHEDULE

Table with columns: TAG, SERVICE, MANUFACTURER/MODEL, MAX AIRFLOW, SP, TYPE, MOTOR, RPM, DRIVE, POWER, NOTES. Includes fans EF-1 to EF-4.

* BASIS OF DESIGN ALTERNATIVES: GREENHECK, BREIDERT, AMERICAN COILAIR AND LOREN COOK SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

- NOTES: 1. PROVIDE WITH COMPLETE WITH BACKDRAFT DAMPER. 2. PROVIDE WITH UNIT MOUNTED DISCONNECT.

PUMP SCHEDULE

Table with columns: TAG, MANUFACTURER/MODEL, FLOW RATE, HEAD, MOTOR HP, RPM, TYPE, VOLTAGE, NOTES. Includes pumps CHWP-1, SHWP-1, SHWP-2.

* BASIS OF DESIGN ALTERNATIVES: TACO, B&G, PATTERSON SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

- NOTES: 1. TRIM IMPELLER TO MAXIMUM ALLOWABLE BY MOTOR HP. PUMP SHALL BE BALANCED WITH VFD. 2. PROVIDE 5 PIPE DIAMETER STRAIGHT RUN ON INLET OF PUMP. 3. PROVIDE WITH VFD. 4. NEW HOUSEKEEPING PADS SHALL BE PROVIDED WITH ALL NEW PUMPS.

EXPANSION TANK SCHEDULE

Table with columns: TAG, MANUFACTURER/MODEL, SYSTEM VOLUME, MIN TEMP, MAX TEMP, MIN PRES, MAX PRES, SYSTEM EXPANSION, VOLUME, ACCEPTANCE, TYPE, SERVICE. Includes tank ET-2.

* BASIS OF DESIGN ALTERNATIVES: TACO, B&G, SPIROTHERM SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

AIR COOLED CHILLER SCHEDULE

Table with columns: TAG, NOMINAL TONS, FLUID, WATER TEMP, GPM, Δ P, MCA, MOCP, VOLT/PHASE, MANUFACTURER/MODEL, EER, NOTES. Includes chiller CH-1.

* BASIS OF DESIGN ALTERNATIVES: TRANE, CARRIER, YORK, AND DAIKEN SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

- NOTES: 1. PROVIDE WITH 65K AIC RATING ON ALL CIRCUITRY. 2. PROVIDE WITH COIL GUARDS. 3. PROVIDE WITH FLANGED CONNECTIONS. GROOVED CONNECTORS WILL NOT BE ACCEPTED. 4. PROVIDE WITH EXTERNAL PHASE PROTECTION TO DISENGAGE CHILLER UPON LOSS OF POWER ON ANY LEG. 5. PROVIDE COMPLETE WITH BACNET MS/TP AND INTEGRATE WITH BAS.

AIR DISTRIBUTION SCHEDULE

Table with columns: TAG, MANUFACTURER/MODEL, FACE SIZE, MOUNT, MATERIAL, FINISH, DAMPER, TYPE, NC, NOTES. Lists various diffusers (S1-S8, R1-R2, E1-E1).

* BASIS OF DESIGN ALTERNATIVES: PRICE, TITUS, METALAIR SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

- NOTES: 1. SEE PLANS FOR NECK SIZE. 2. BALANCE DAMPER TO BE INSTALLED IN THE BRANCH TAKE-OFF. 3. PROVIDE WITH PAINTABLE FINISH, COLOR TO MATCH EXISTING DUCTWORK. 4. MEASUREMENT INCLUDES 1" FRAME.. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIFFUSERS DIMENSIONS BEFORE ORDERING.

AIR/DIRT SEPARATOR SCHEDULE

Table with columns: TAG, MANUFACTURER/MODEL, SERVICE, SIZE. Includes separator AS-2.

* BASIS OF DESIGN ALTERNATIVES: TACO, B&G, SPIROTHERM SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

NEW AIR HANDLER SCHEDULE

Table with columns: TAG, SERVICE, MANUFACTURER, MODEL, SIZE, SUPPLY AIRFLOW, MINIMUM OUTSIDE AIR, REDUCED OUTSIDE AIR, ESP, MOTOR QTYxSIZE, V/P/Hz, ENTERING AIR, LEAVING AIR, COIL CAPACITIES, FACE VELOCITY, CHILLED WATER, HEAD LOSS, MINIMUM FLOW, EAT, LAT, COIL CAPACITY, FACE VELOCITY, HOT WATER, RUNOUT, POSITION, NOTES. Includes unit AHU-2.

* BASIS OF DESIGN ALTERNATIVES: CARRIER, TRANE, AND YORK SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

- NOTES: 1. PROVIDE ALL UNITS WITH UNIT MOUNTED SUPPLY FAN VFD'S. FAN WALL FANS SHALL CONTROL FROM SINGLE VFD. 2. ROUTE COPPER, INSULATED CONDENSATE TO EXISTING FLOOR DRAIN. 3. ALL MAINTENANCE FOR COILS, DAMPERS, FANS, MOTORS, AND ALL CONTROLS SHALL BE ON THE SAME SIDE OF UNIT. 4. UNITS SHALL RELIEVE AIR FROM EXISTING BAROMETRIC RELIEVE DAMPERS IN BUILDING. 5. AHU FANS SHALL STOP UPON ACTIVATION OF BUILDING FIRE ALARM SYSTEM. 6. EXISTING PADS MAY BE MODIFIED AND RE-USED BUT MUST BE 6" TALL AND MUST EXTEND 4" IN ALL DIRECTIONS AROUND THE FOOTPRINT OF THE UNIT. 7. EACH FAN IN THE ARRAY SHALL BE CAPABLE OF INDEPENDENT DISCONNECTION, SPEED CONTROL AND BYPASS WHEN ANY OTHER FAN IS IN OUT OF SERVICE.

NEW AIR HANDLER SCHEDULE (ADD ALTERNATE 1)

Table with columns: TAG, SERVICE, MANUFACTURER, MODEL, SIZE, SUPPLY AIRFLOW, MINIMUM OUTSIDE AIR, REDUCED OUTSIDE AIR, ESP, MOTOR QTYxSIZE, V/P/Hz, ENTERING AIR, LEAVING AIR, COIL CAPACITIES, FACE VELOCITY, CHILLED WATER, HEAD LOSS, MINIMUM FLOW, EAT, LAT, COIL CAPACITY, FACE VELOCITY, HOT WATER, RUNOUT, POSITION, NOTES. Includes unit AHU-1.

* BASIS OF DESIGN ALTERNATIVES: CARRIER, TRANE, AND YORK SHALL BE CONSIDERED EQUALS PROVIDED THAT ALL PERFORMANCE SPECIFICATIONS ARE MET

- NOTES: 1. PROVIDE ALL UNITS WITH UNIT MOUNTED SUPPLY FAN VFD'S. FAN WALL FANS SHALL CONTROL FROM SINGLE VFD. 2. ROUTE COPPER, INSULATED CONDENSATE TO EXISTING FLOOR DRAIN. 3. ALL MAINTENANCE FOR COILS, DAMPERS, FANS, MOTORS, AND ALL CONTROLS SHALL BE ON THE SAME SIDE OF UNIT. 4. UNITS SHALL RELIEVE AIR FROM EXISTING BAROMETRIC RELIEVE DAMPERS IN BUILDING. 5. AHU FANS SHALL STOP UPON ACTIVATION OF BUILDING FIRE ALARM SYSTEM. 6. EXISTING PADS MAY BE MODIFIED AND RE-USED BUT MUST BE 6" TALL AND MUST EXTEND 4" IN ALL DIRECTIONS AROUND THE FOOTPRINT OF THE UNIT. 7. EACH FAN IN THE ARRAY SHALL BE CAPABLE OF INDEPENDENT DISCONNECTION, SPEED CONTROL AND BYPASS WHEN ANY OTHER FAN IS IN OUT OF SERVICE.

EXISTING TERMINAL UNIT SCHEDULE

Large table with columns: MARK, SA MAX, SA MIN, INLET SP, INLET DIA, TC, EAT, LAT, EWT, LWT, H2O FLOW, PIPE RUN OUT, MAX H2O PD, REMARKS. Lists existing VAV units from VAV-1 to VAV-32.



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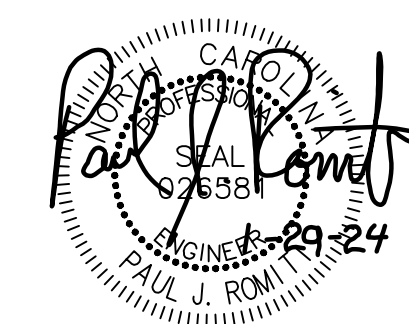
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Sigma Engineered Solutions, PC, https://www.sigmaes.com/, 5909 Falls of Neuse Rd, Suite #101, Raleigh, NC 27615, (919) 840-9300, C-2490

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PROJECT

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REVISIONS

Table with columns: No., Description, Date. For tracking project revisions.

PROJECT DATA

DATE: 01.29.2024, DRAWN: PJR, CHECKED: PJR, PROJECT NO: 2023_0030, PRINTING: PERMIT SET

SHEET DATA

MECHANICAL SCHEDULES

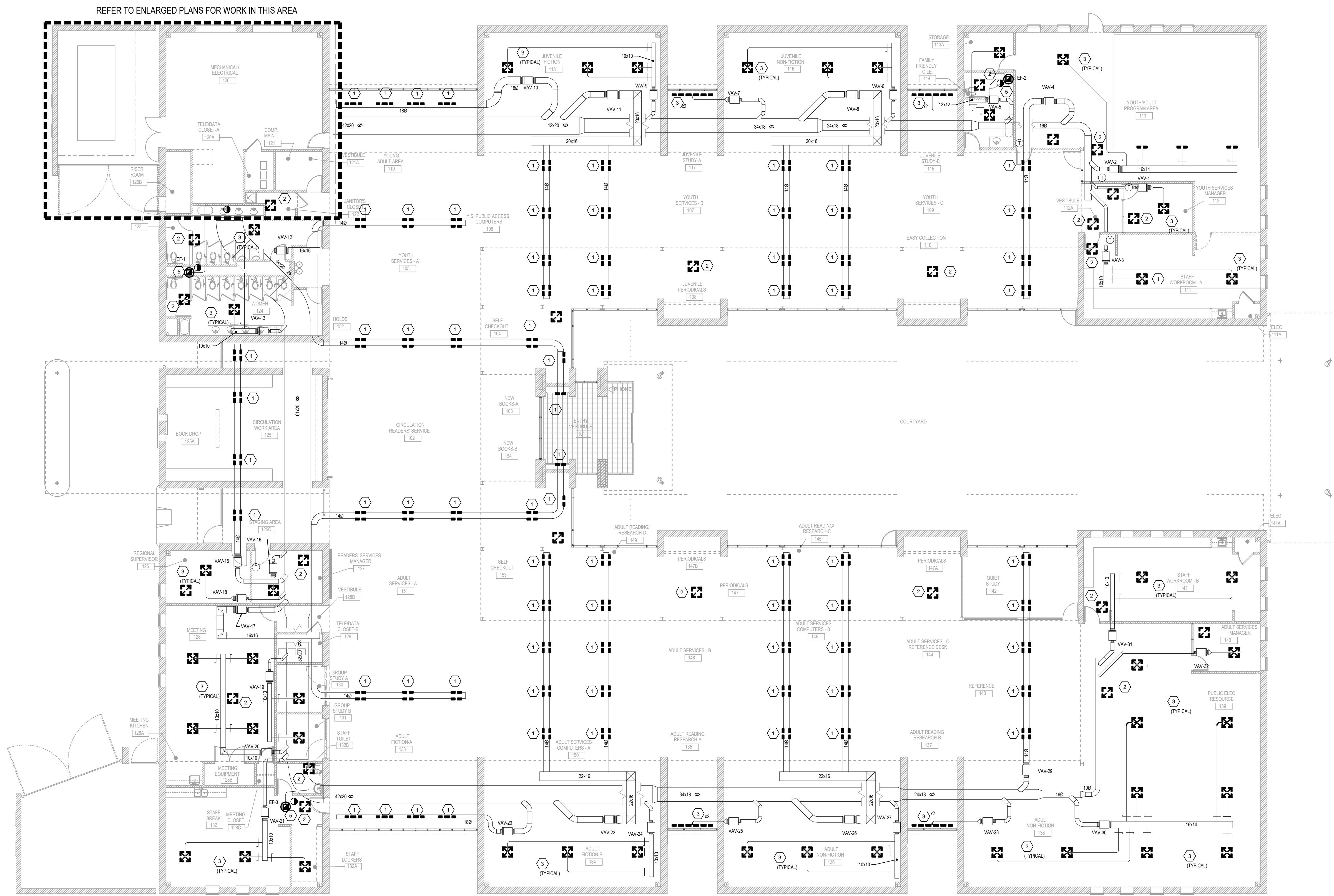
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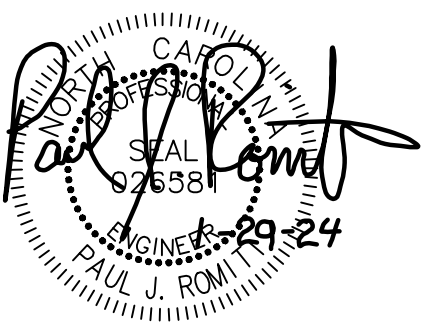
CONSULTANTS

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**MECHANICAL
DEMOLITION PLAN**

SHEET NO.

M100

M100 MECHANICAL DEMOLITION PLAN
3/32" = 1'-0"

KEYED NOTES - DETAIL 1

- 1 EXISTING DUCT MOUNTED DRUM DIFFUSER TO BE REPLACED
- 2 EXISTING REGISTER TO BE REPLACED
- 3 EXISTING CEILING DIFFUSER TO BE REPLACED
- 4 REFER TO DETAIL 21400 FOR EXTENT OF DEMOLITION AT VAV BOX
- 5 EXISTING EXHAUST FAN TO BE REPLACED

GENERAL NOTES

CONTRACTOR SHALL PROTECT EXISTING LAY IN CEILING INCLUDING TILES, RUNNERS, AND SUPPORTS WHILE WORKING ABOVE CEILING. DAMAGE TO EXISTING AS A RESULT OF THIS WORK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

DEMOLITION LEGEND

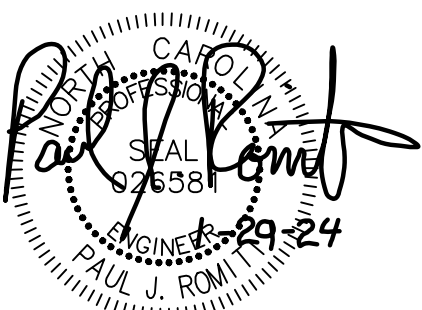
- MECHANICAL TO REMAIN
- DIFFUSER TO BE REPLACED
- EXISTING VAV BOX
- EXHAUST FAN TO BE REMOVED

CONSULTANTS

MEP Engineer

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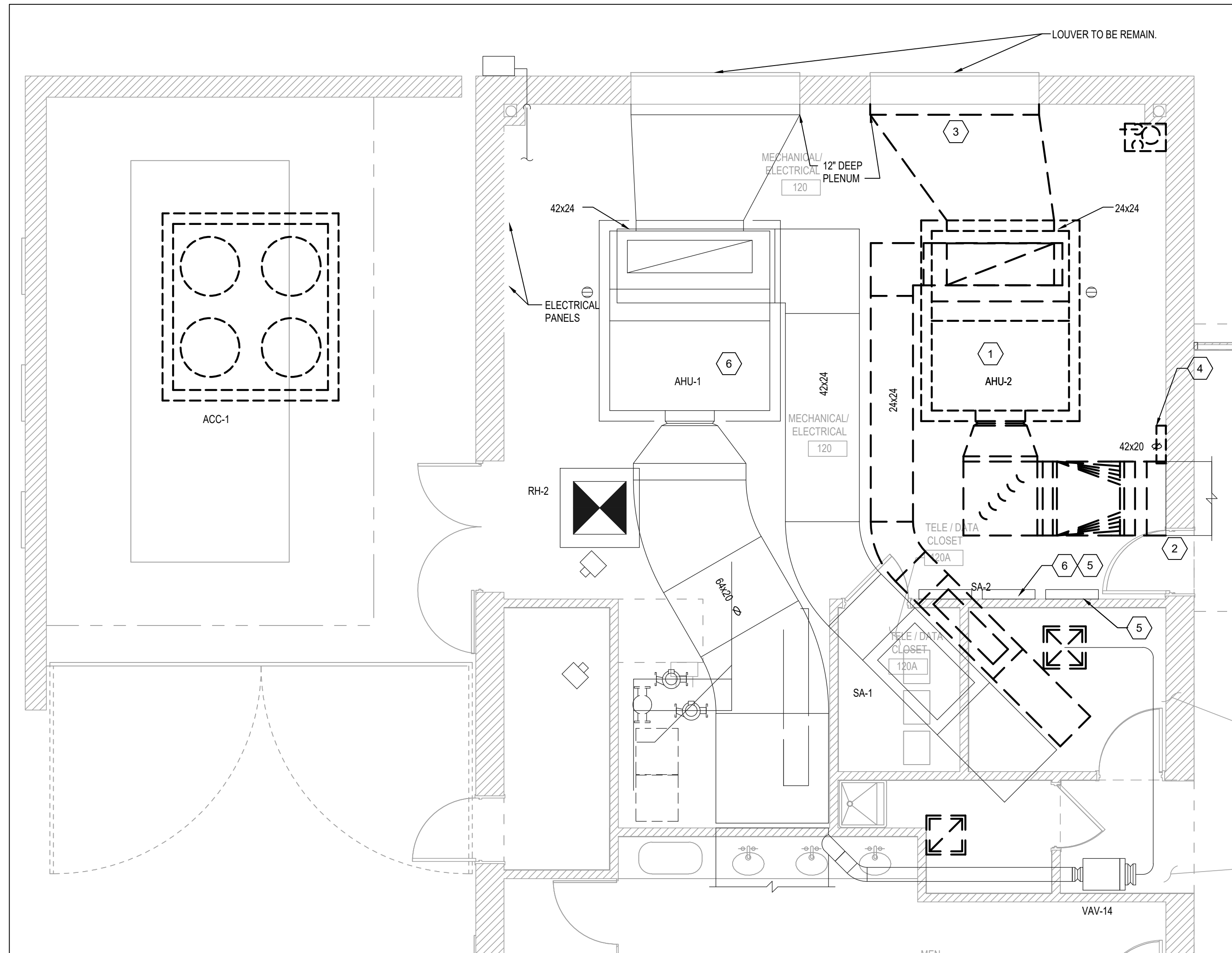
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**MECHANICAL
DEMOLITION
ENLARGED PLAN**

SHEET NO.

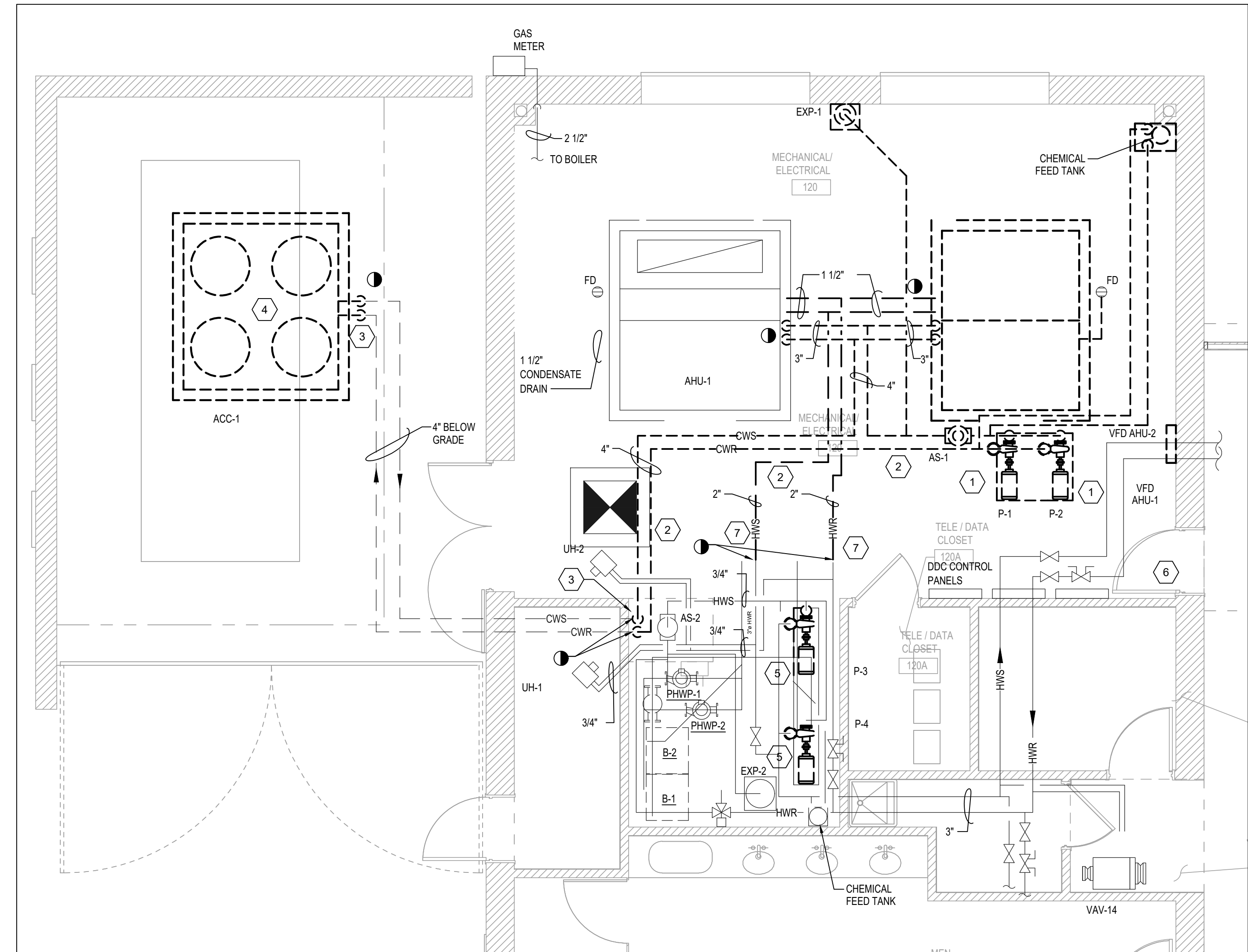
M110



1 ENLARGED DUCTWORK DEMOLITION PLAN
1/4" = 1'-0"

KEYED NOTES - DETAIL 1

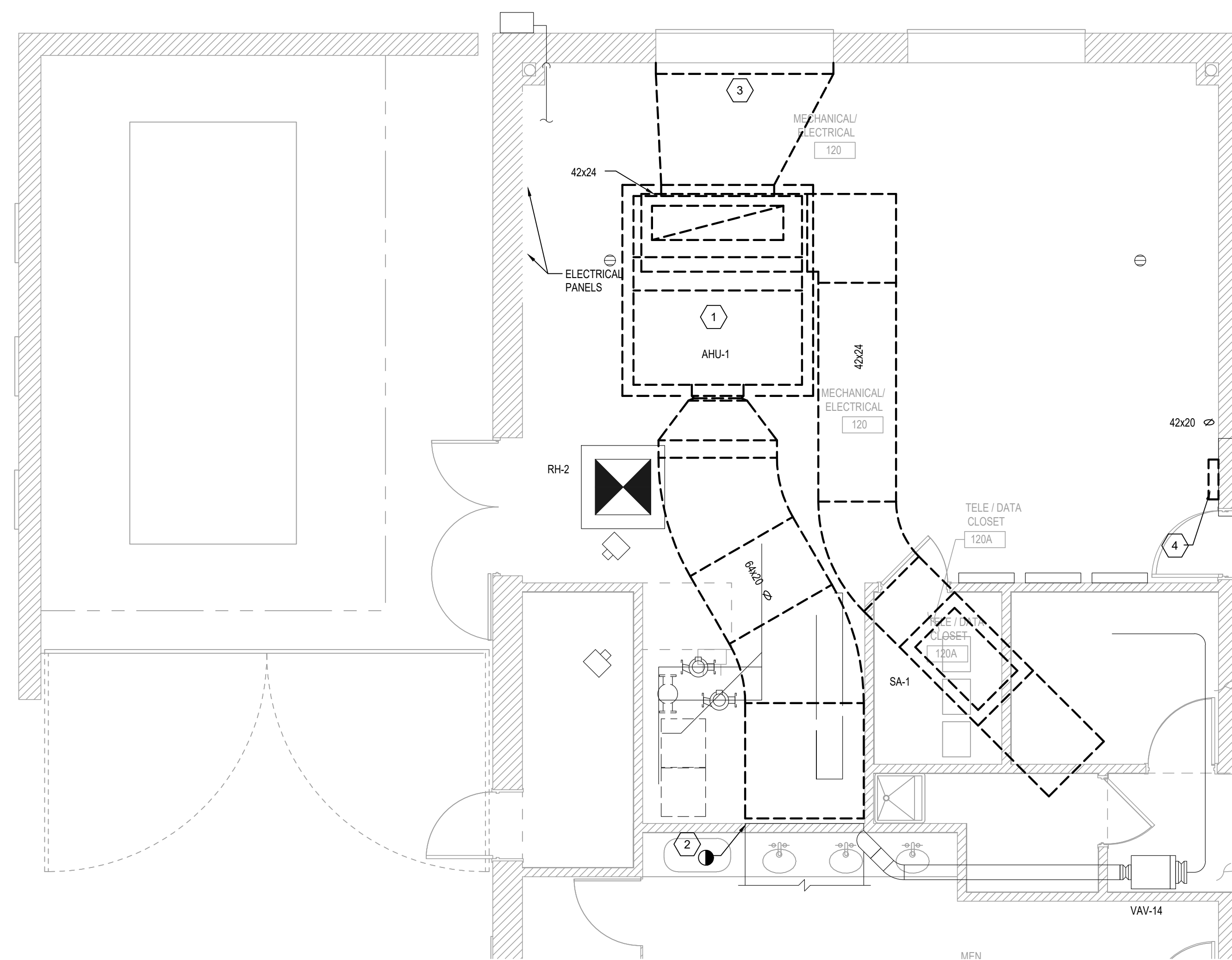
- 1 REMOVE AIR HANDLER IN ITS ENTIRETY INCLUDING ALL DUCTWORK. PRESERVE EXISTING DUCT DETECTOR AND PREPARE FOR RE-INSTALLATION IN RETURN DUCT OF NEW UNIT.
- 2 ONLY REMOVE SUPPLY DUCT BACK TO POINT INDICATED
- 3 REMOVE EXISTING OA INTAKE PLENUM BOX AND PREPARE LOUVER FOR CONNECTION TO NEW UNIT
- 4 REMOVE EXISTING SUPPLY FAN VFD.
- 5 REMOVE EXISTING CONTROLS FROM CONTROL PANEL. EXISTING PANEL AND DEVICE RACEWAYS MAY BE RE-USED FOR NEW CONTROLS. ALL WIRING MUST BE REPLACED.
- 6 REMOVE ALL AUTOMATED CONTROLS AND SENSORS ASSOCIATED WITH AHU-1 AS PART OF THE BASE BID.



2 ENLARGED PIPING DEMOLITION PLAN
1/4" = 1'-0"

KEYED NOTES - DETAIL 2

- 1 REMOVE EXISTING CHW PUMPS IN THEIR ENTIRETY INCLUDING ALL PIPING SPECIALTIES, PAD AND CONTROLS
- 2 REMOVE ALL ABOVE GROUND CHILLED WATER PIPING IN THIS AREA. UNDERGROUND PIPING SHALL BE ABANDONED IN PLACE.
- 3 CAP PIPING AT SLAB AND GROUT DOWN TO FIRST 90 DEG BED. GRIND PIPE FLUSH WITH GRADE.
- 4 REMOVE EXISTING CHILLER AND ALL ASSOCIATED WIRING AND CONTROLS.
- 5 REMOVE EXISTING SECONDARY HOT WATER PUMPS AND ALL HW PIPING BACK TO ISOLATION VALVES INCLUDING ALL PIPE SPECIALTIES.
- 6 REMOVE EXISTING PUMP VFDS
- 7 REMOVE EXISTING HOT WATER PIPING BACK TO POINT INDICATED. PRESERVE HW PIPING LEAVING ROOM TO SERVICE BOTH BRANCHES OF VAV BOX REHEAT COILS.



1 ENLARGED DUCTWORK DEMOLITION PLAN ALTERNATE
1/4" = 1'-0"

GENERAL NOTES, ALTERNATE 1

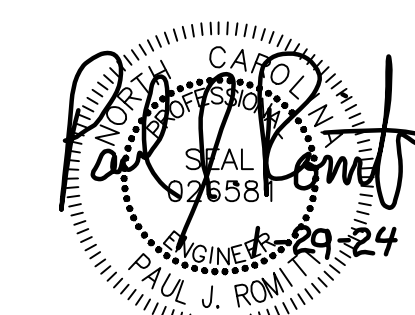
WORK INDICATED ON THIS SHEET SHALL BE BID AS ALTERNATE 1 AND SHALL BE IN ADDITION TO ALL WORK SHOWN ON PREVIOUS SHEETS TO BE DEMOLISHED UNDER BASE BID.

IN GENERAL THIS ADDITIONAL WORK SHALL INCLUDE DEMOLITION OF AHU-1, ALL RETURN AND OUTSIDE AIR DUCTWORK, AND SUPPLY DUCTWORK TO POINT OF DISCONNECT INDICATED.

NOTE: ALL PIPING AND CONTROLS ASSOCIATED WITH AHU-1 SHALL BE REPLACED AS PART OF THE BASE BID.

KEYED NOTES - DETAIL 1

- 1 REMOVE AIR HANDLER IN ITS ENTIRETY INCLUDING ALL DUCTWORK. PRESERVE EXISTING DUCT DETECTOR AND PREPARE FOR RE-INSTALLATION IN RETURN DUCT OF NEW UNIT.
- 2 ONLY REMOVE SUPPLY DUCT BACK TO POINT INDICATED
- 3 REMOVE EXISTING OA INTAKE PLENUM BOX AND PREPARE LOUVER FOR CONNECTION TO NEW UNIT
- 4 REMOVE EXISTING SUPPLY FAN VFD.



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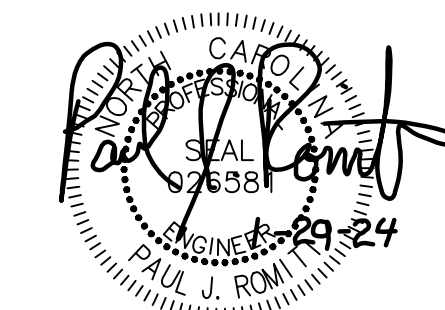
**MECHANICAL
DEMOLITION
ENLARGED PLAN
ALTERNATE**

CONSULTANTS

MEP Engineer

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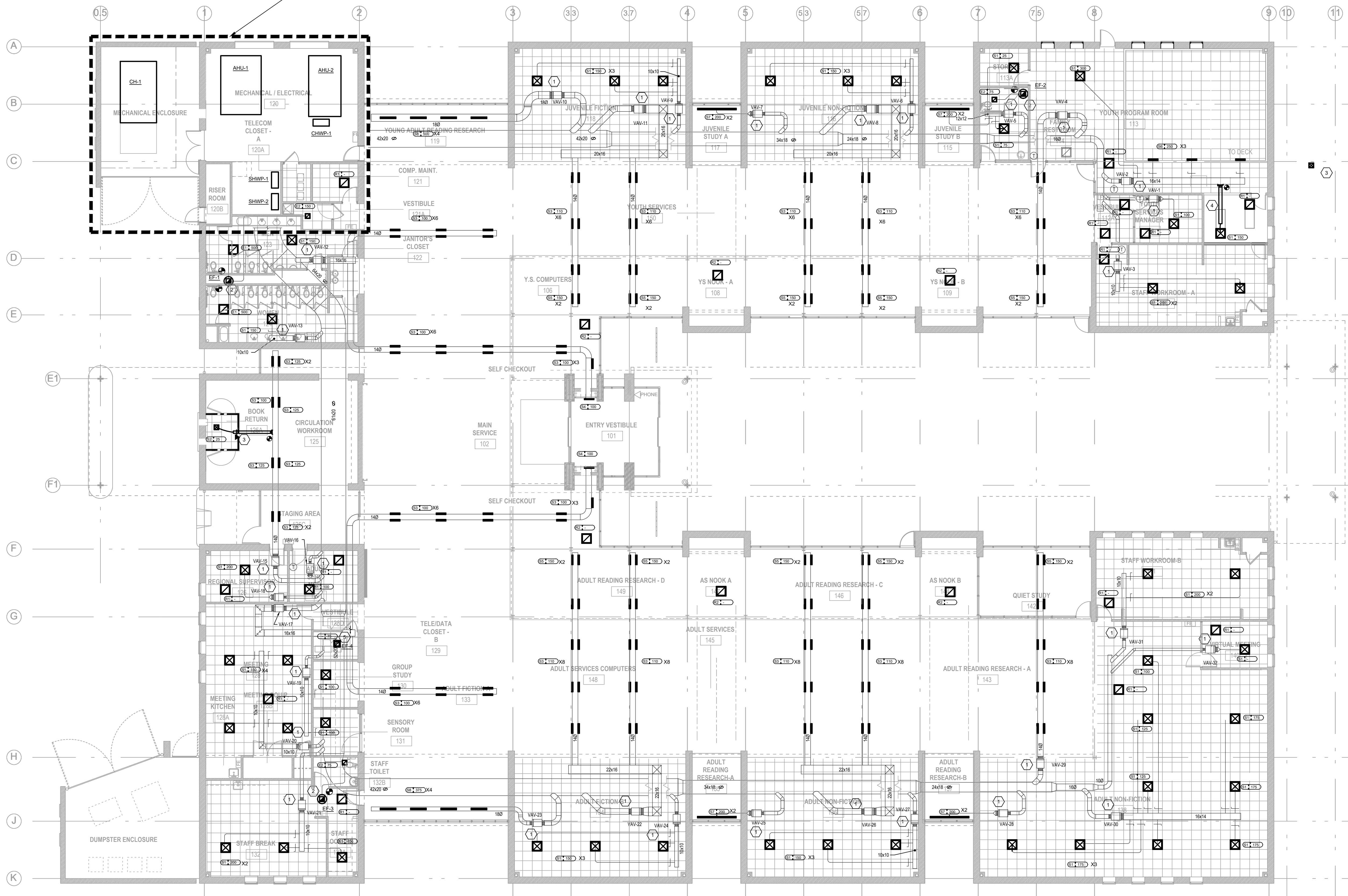
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**MECHANICAL
NEW WORK PLAN**

SHEET NO.

M200

REFER TO ENLARGED PLANS FOR WORK
IN THIS AREA

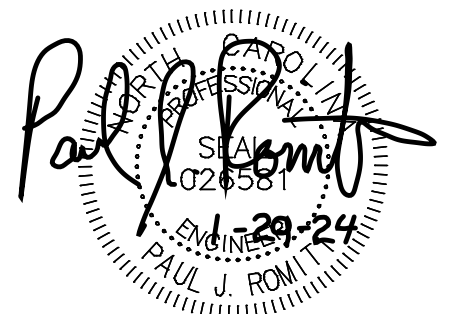


DATE
MECHANICAL NEW WORK PLAN
3/32" = 1'-0"

KEYED NOTES

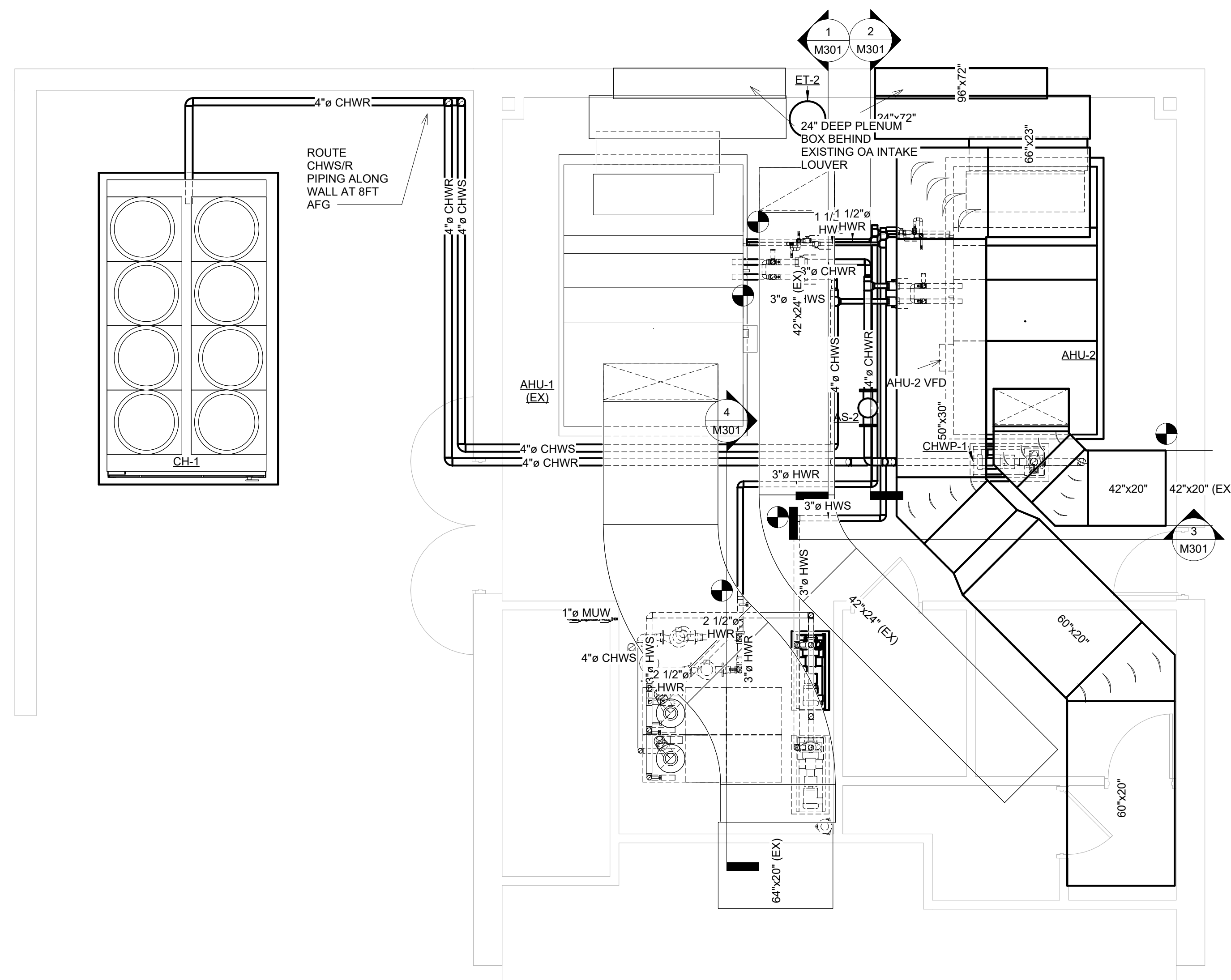
- 1 REPLACE CONTROL VALVE AND HOT WATER PIPING BETWEEN STRAINER AND COIL AND FROM COIL TO BALL ISOLATION VALVE. REFER TO DETAIL 1 SHEET M400 FOR EXTENT OF WORK. INSTALL NEW CONTROLLER AND FLOW RING TO OPERATE VAV BOX AND NEW CONTROL VALVE. TIE INTO NEW BAS NETWORK CONTROLLER
- 2 REPLACE EXISTING EXHAUST FAN ON ROOF AND TIE INTO NEW CONTROL SYSTEM. DIV 23 CONTRACTOR SHALL PROVIDE ALL ADaptors AND FLASHING REQUIRED TO RE-USE EXISTING CURBS. ALL ROOF WORK SHALL BE COMPLIANT WITH EXISTING ROOF WARRANTY. DIV23 CONTRACTOR SHALL BE RESPONSIBLE FOR RECONNECTING NEW EQUIPMENT TO EXISTING DUCTWORK AND ELECTRICAL SERVICE.
- 3 NEW 6" SUPPLY DUCT AND 50 CFM DELIVERED TO BOOK DROP ROOM. PROTECT PENETRATION WITH FIRE DAMPER.
- 4 NEW 8" SUPPLY DUCT AND 125 CFM CONNECT TO VAV-02 WHERE INDICATED.
- 5 INSTALL NEW EF-4 IN TELEDATA ROOM AND DISCHARGE DIRECTLY INTO RETURN PLENUM. UNDERCUT DOOR 1'5" TO ALLOW FOR MAKE-UP AIR FROM CORRIDOR. FAN SHALL OPERATE CONTINUOUSLY

RATED PARTITION/WALL LEGEND
1-HR RATED WALL

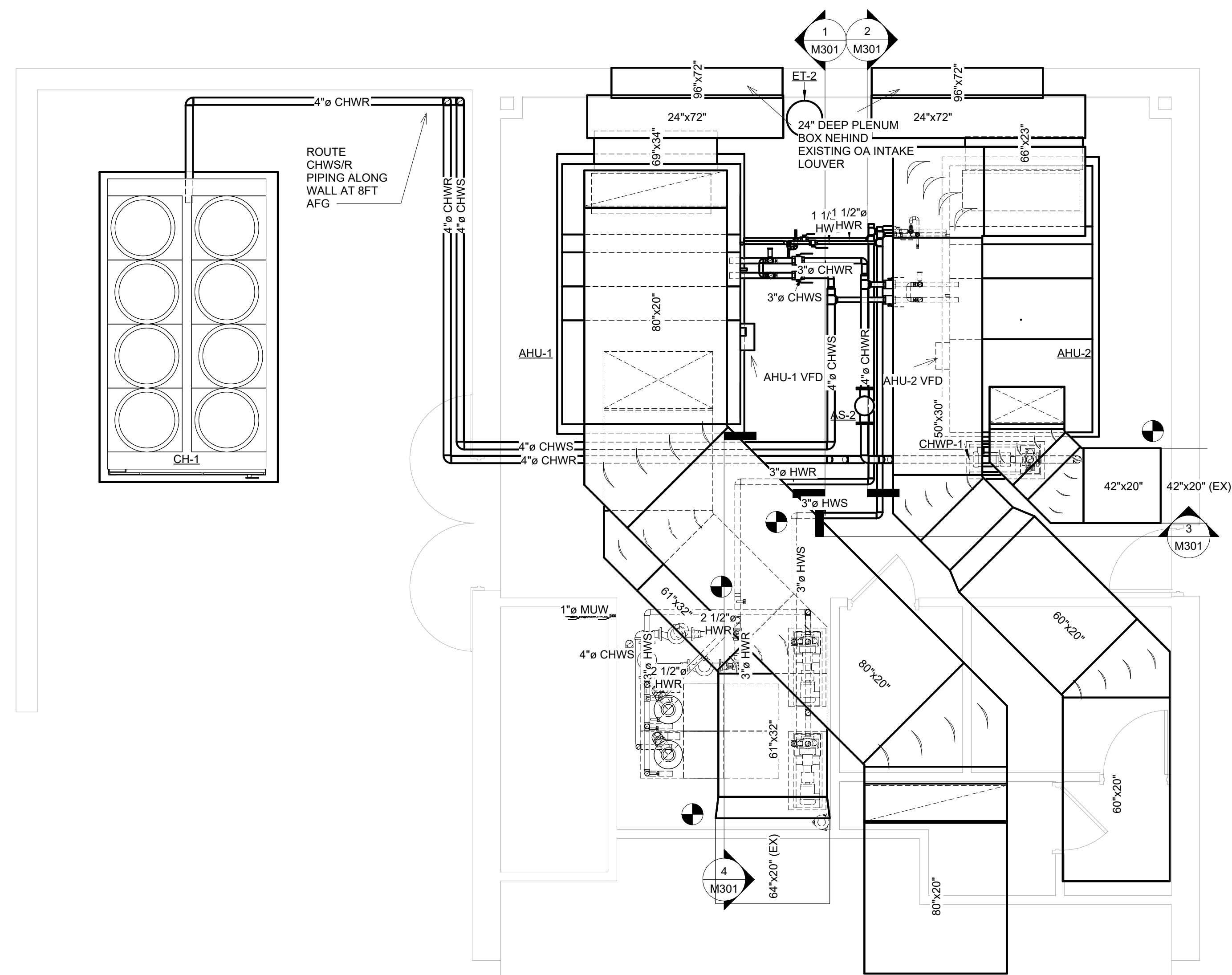


No.	Description	Date

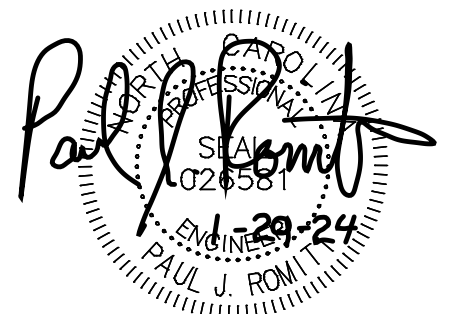
DATE: 12.01.2023
DRAWN: PJR
CHECKED: PJR
PROJECT NO: 2023_0030
PRINTING: 100% CONSTRUCTION DOCUMENTS



1 Enlarged Mechanical Room Plan (Base Bid)
1/4" = 1'-0"

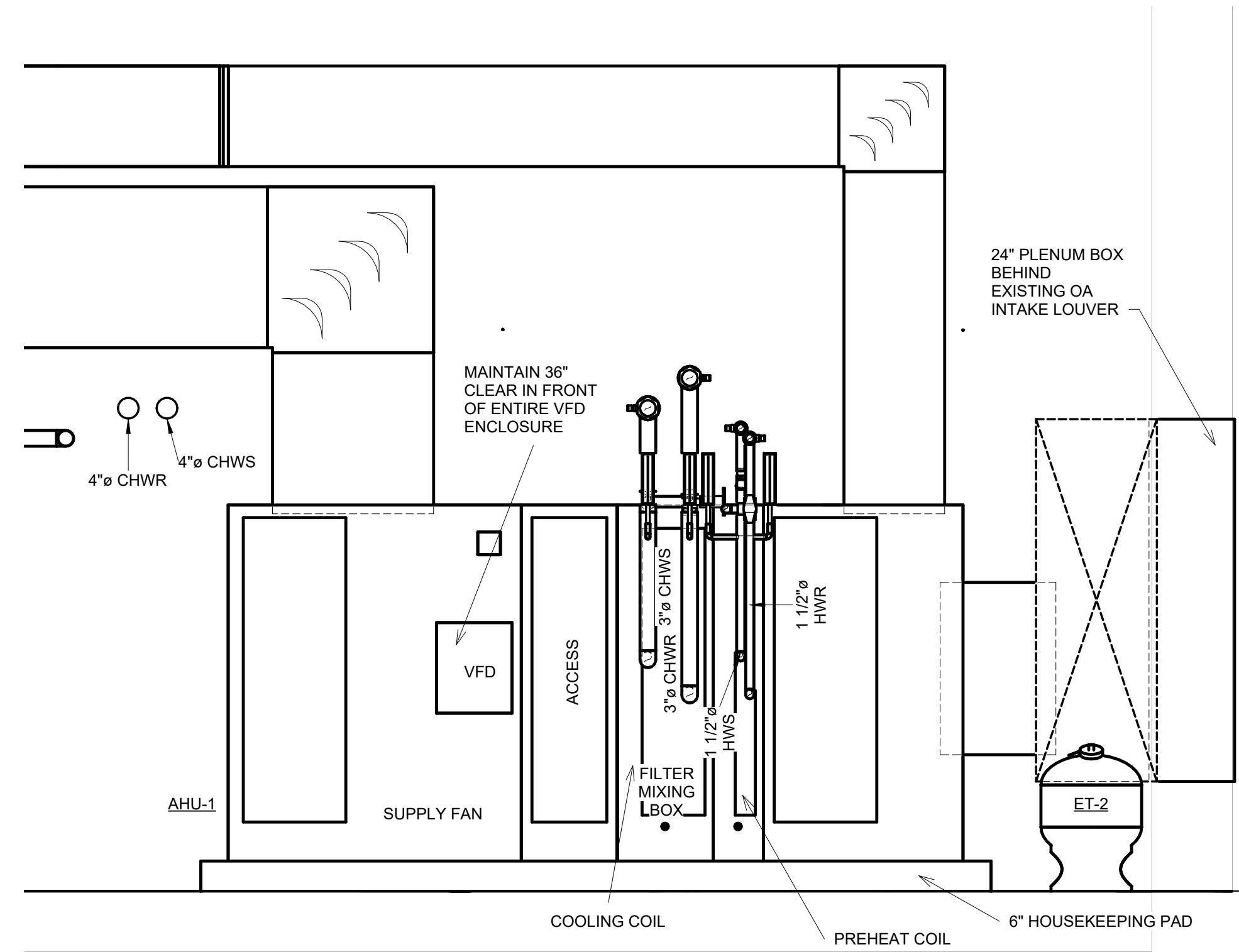


2 Enlarged Mechanical Room Plan (Alternate)
1/4" = 1'-0"

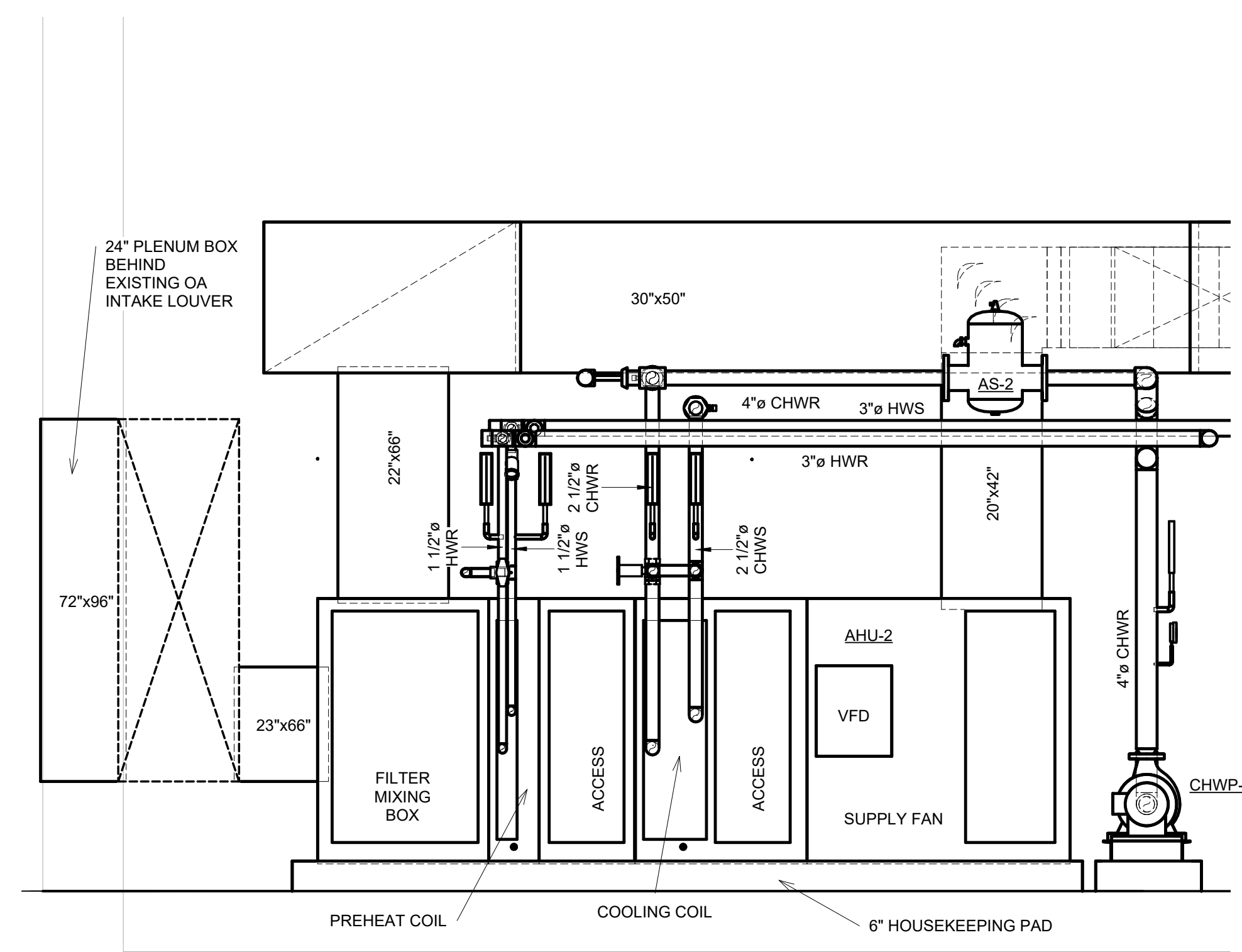


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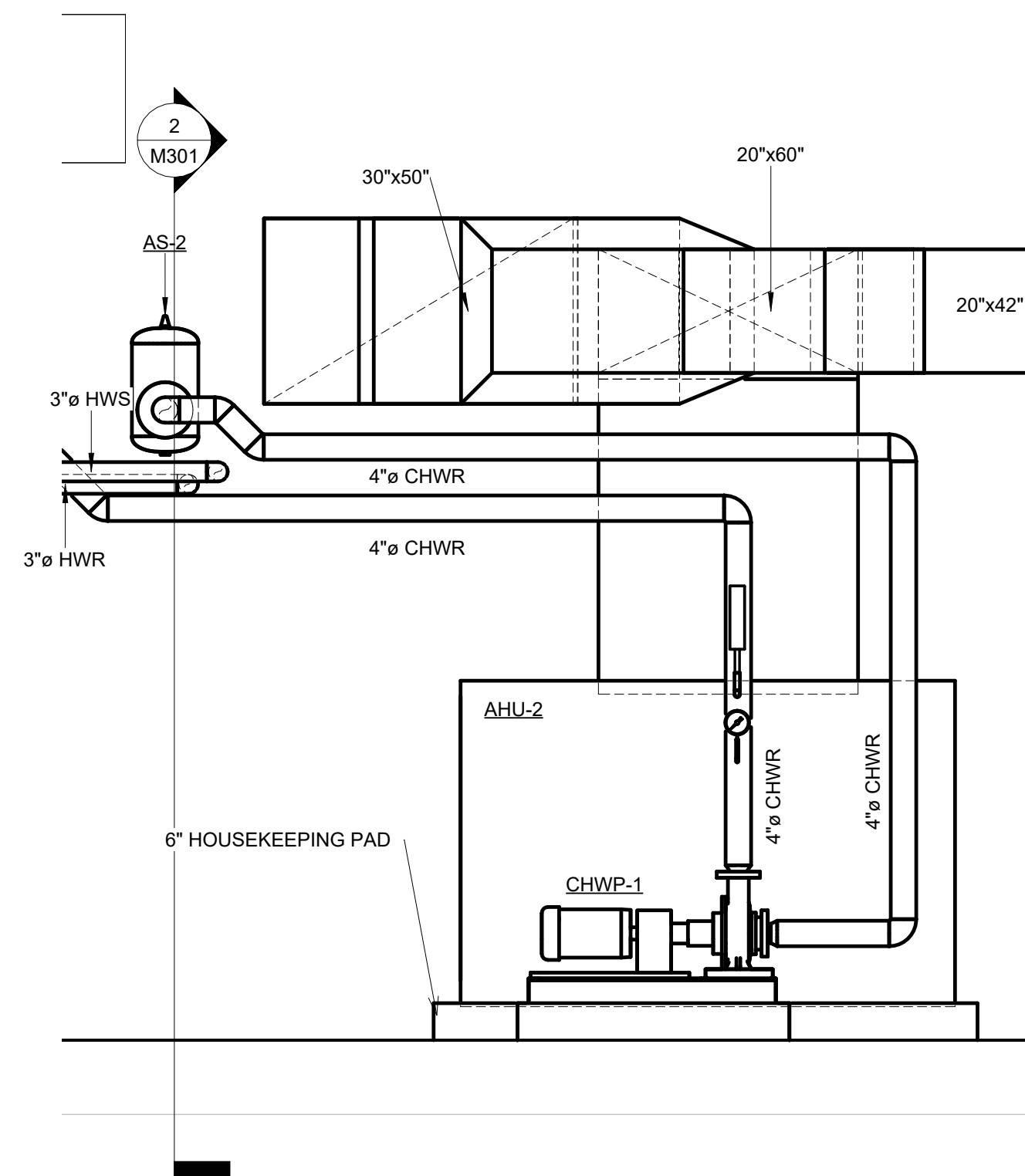
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DRAWN: PJR
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PROJECT NO: 2023_0030
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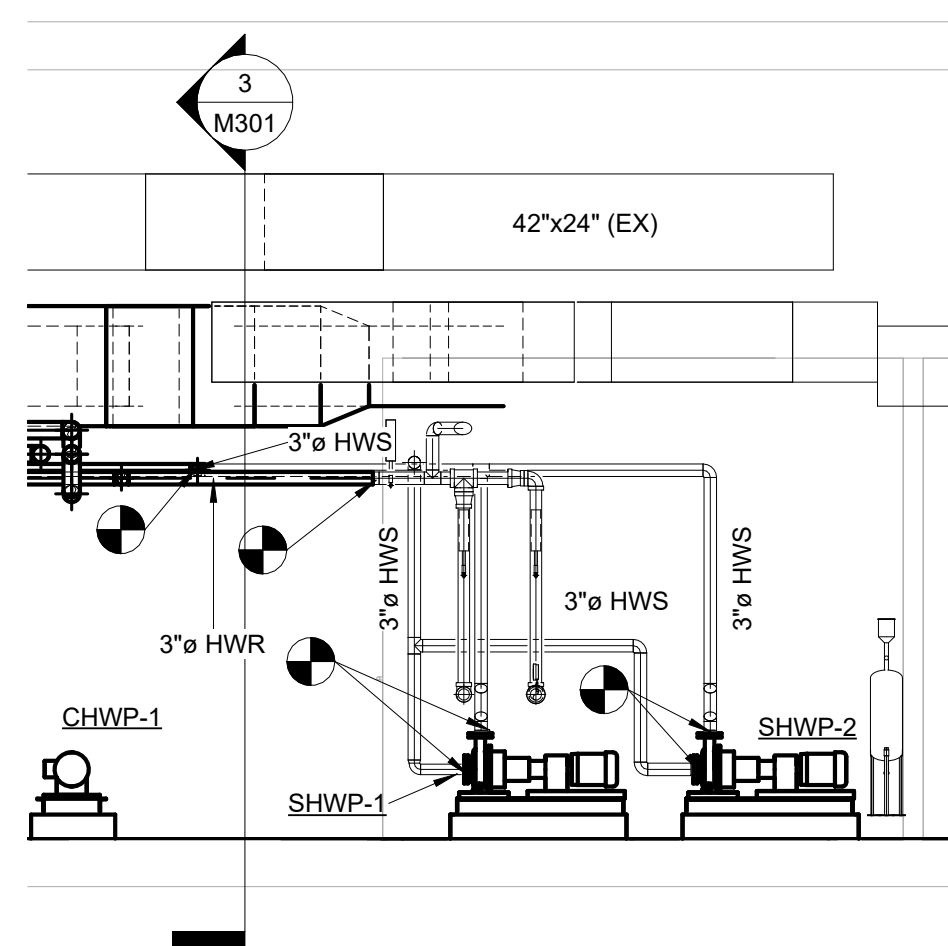
1 AHU-1 ELEVATION (ALTERNATE)
1/2" = 1'-0"



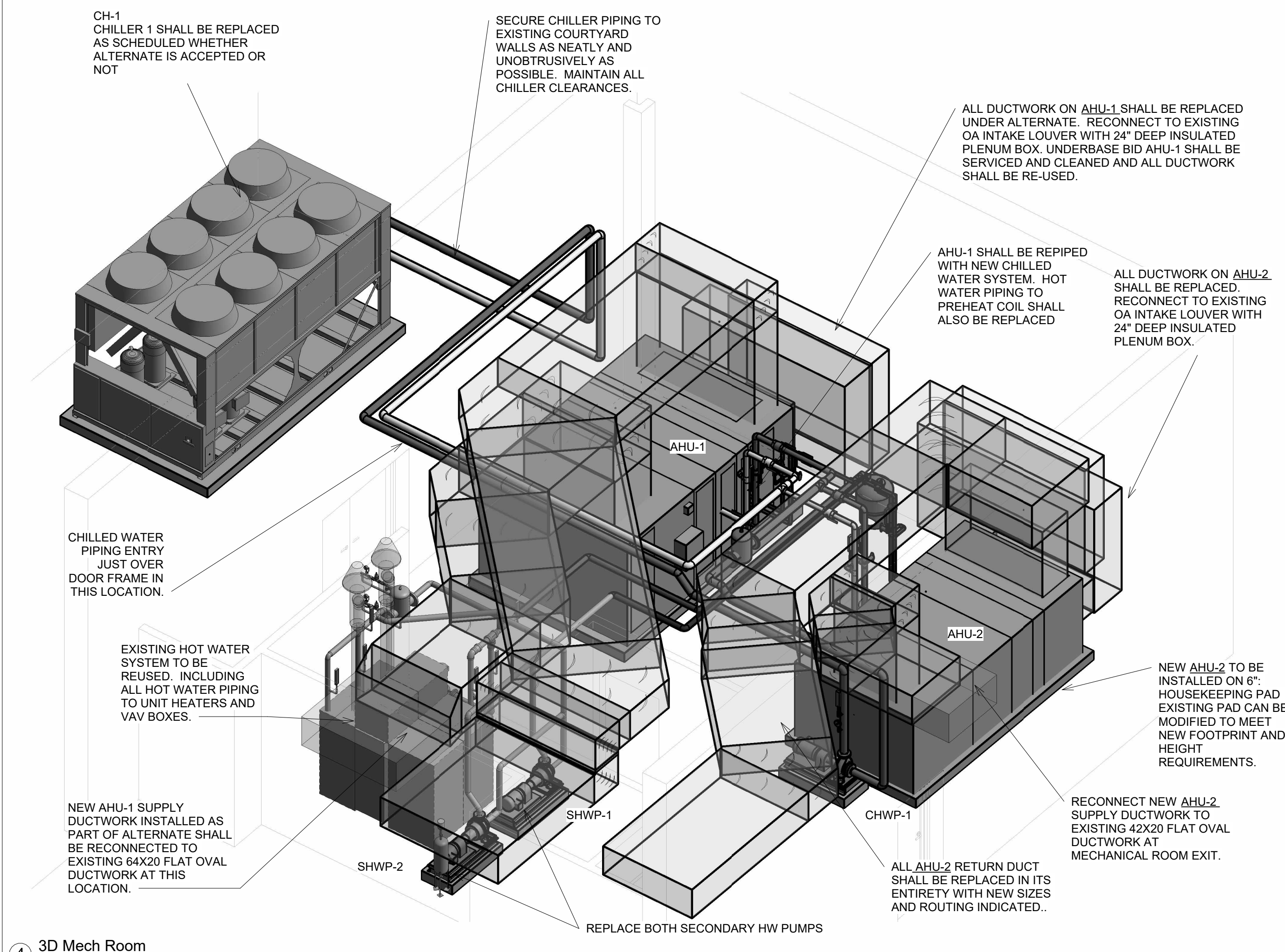
2 AHU-2 ELEVATION
1/2" = 1'-0"



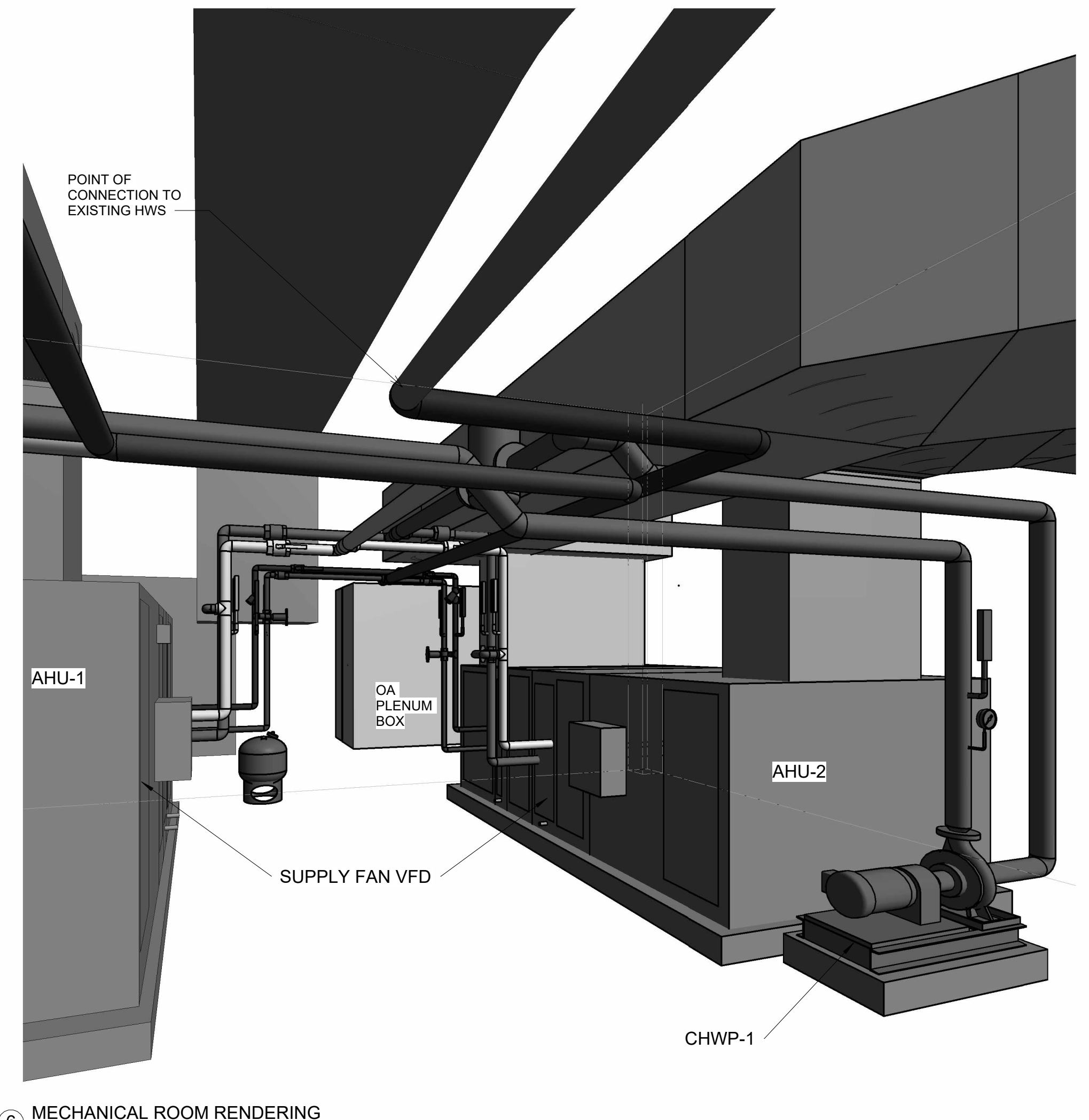
3 CHWP-1 ELEVATION
1/2" = 1'-0"



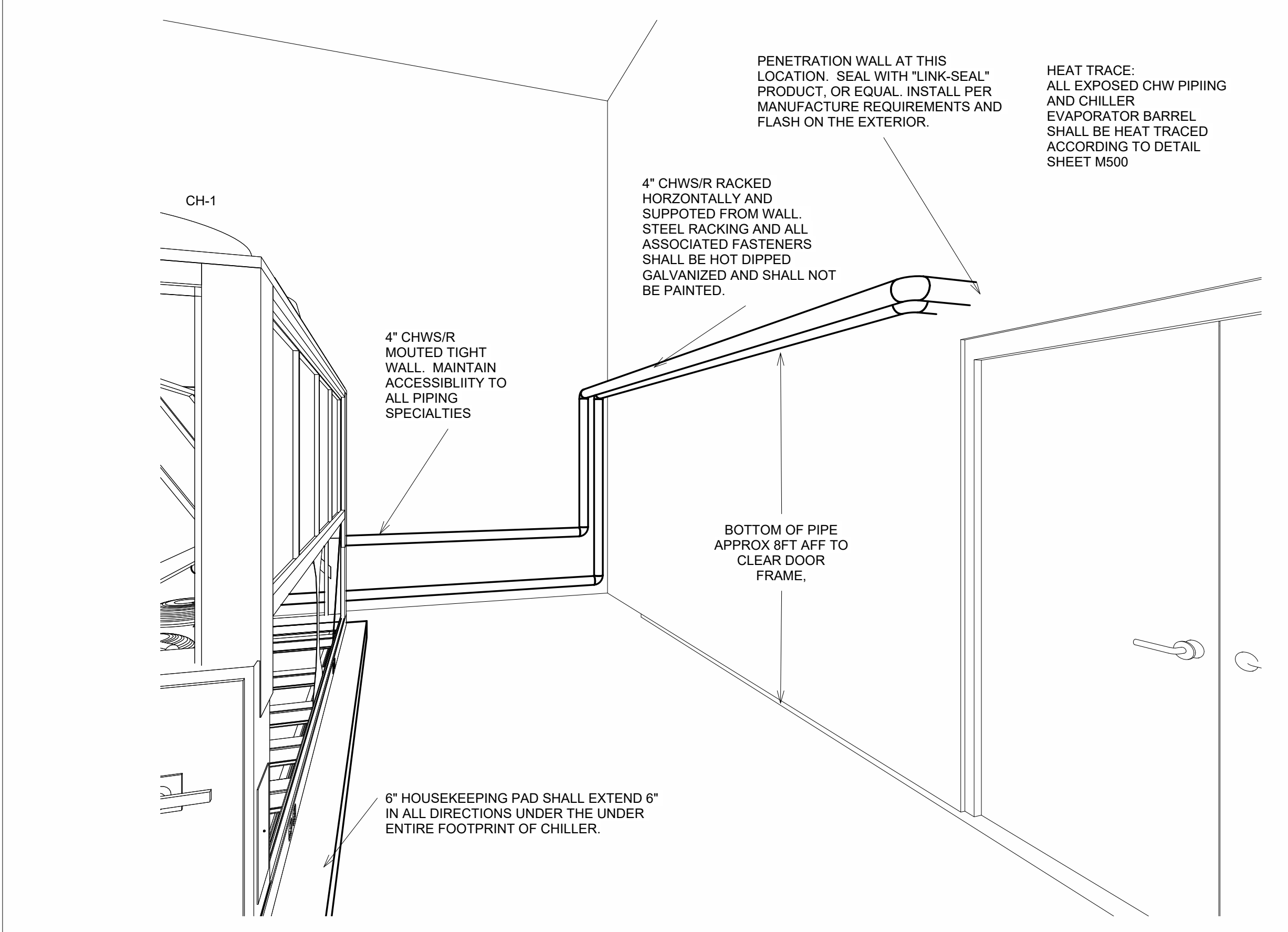
4 HW PUMP ELEVATION
1/4" = 1'-0"



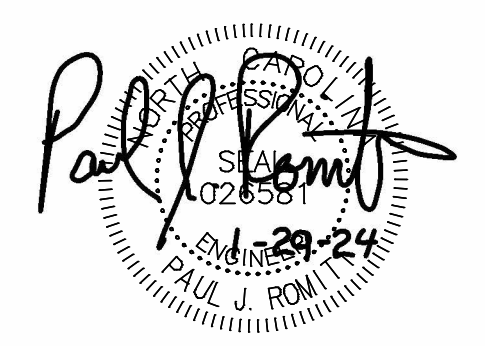
4 3D Mech Room



6 MECHANICAL ROOM RENDERING



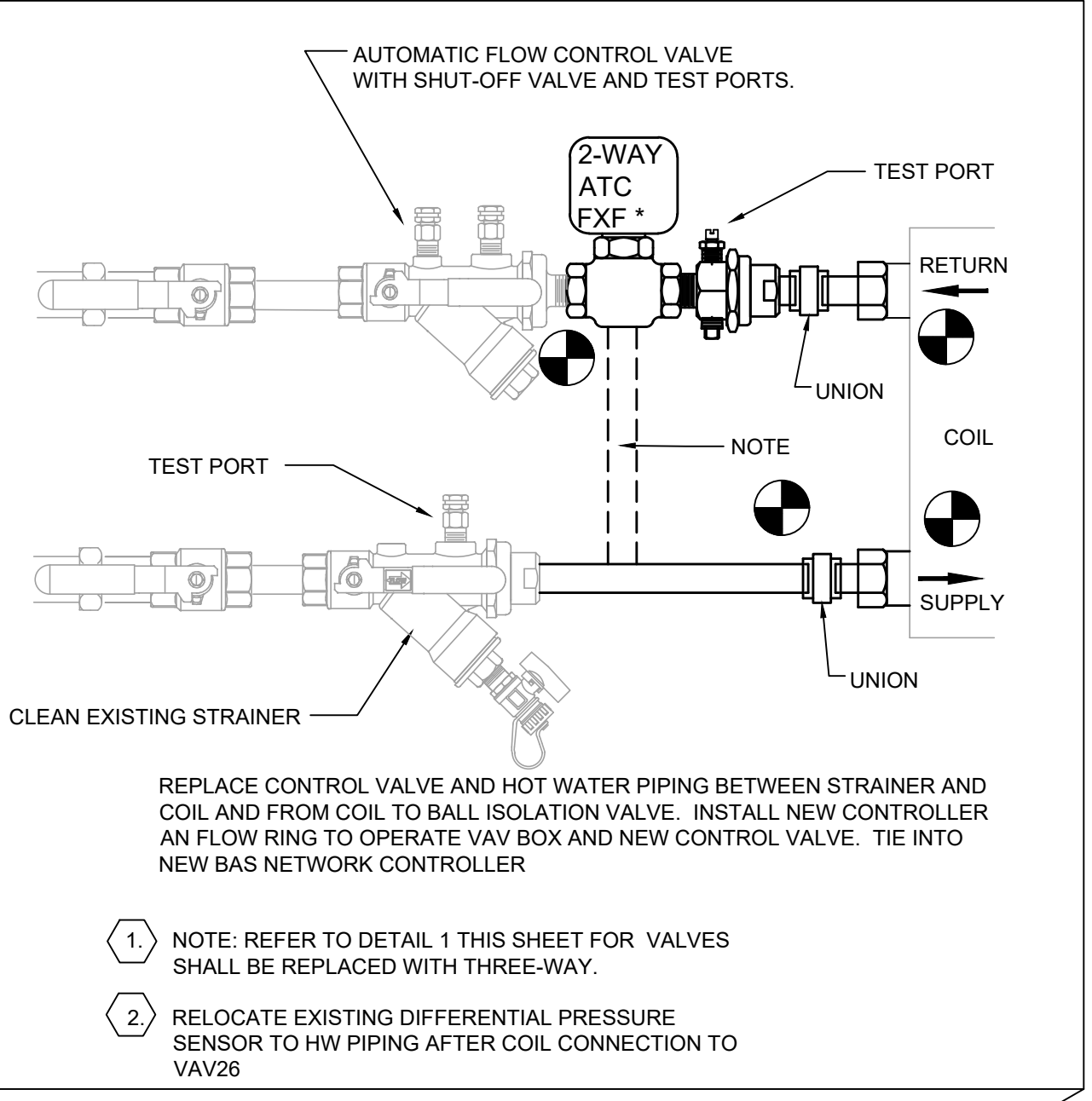
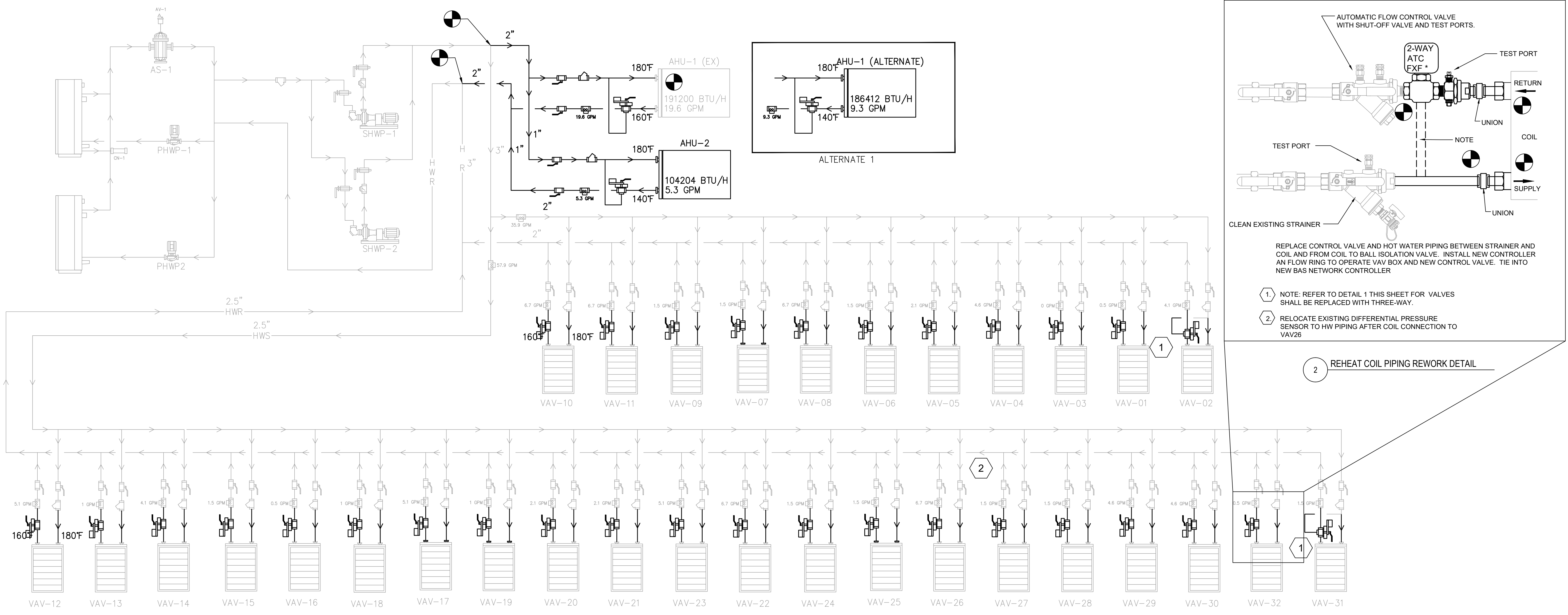
5 CHILLER COURTYARD RENDERING



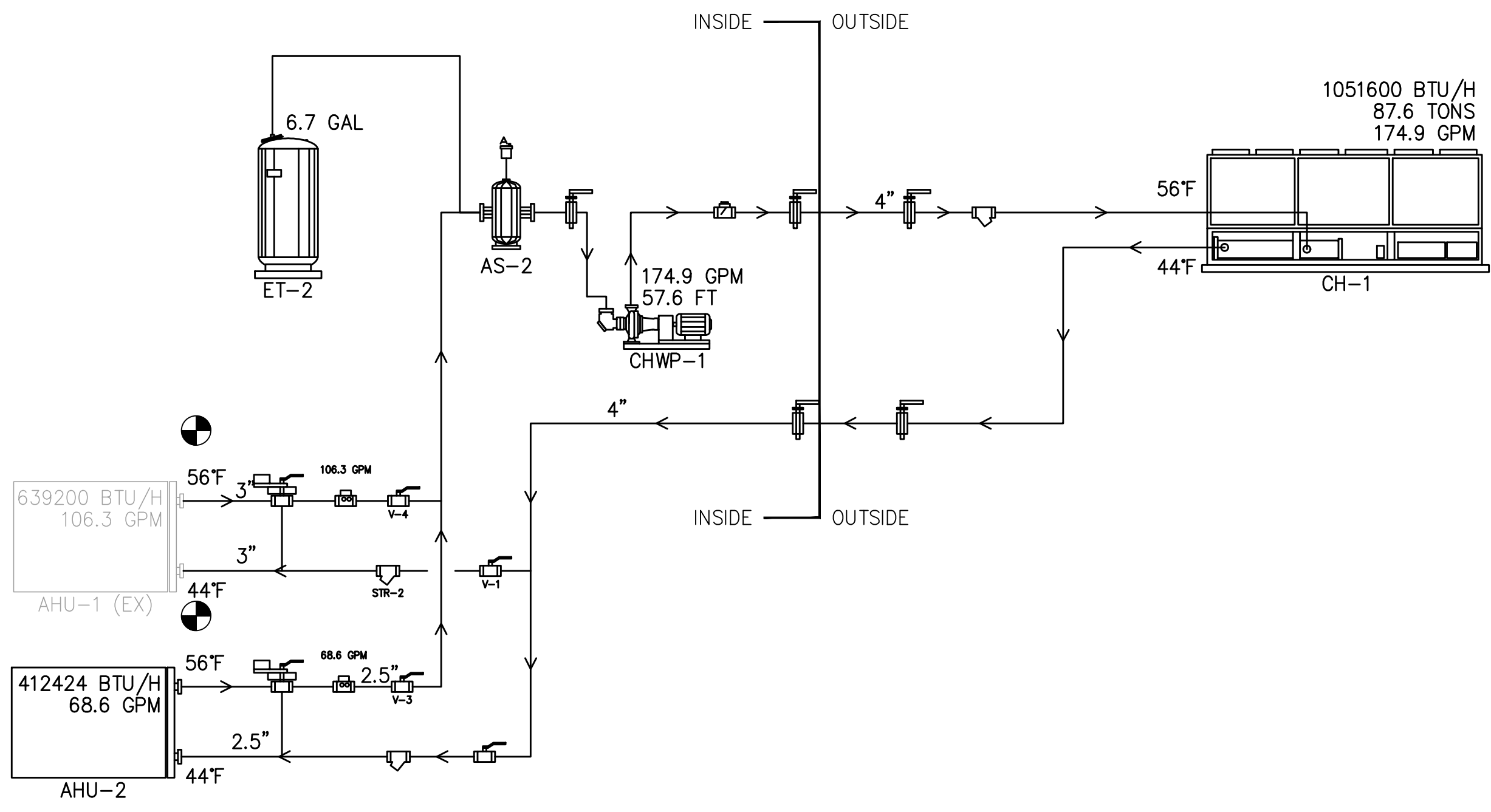
REVISIONS

No.	Description	Date

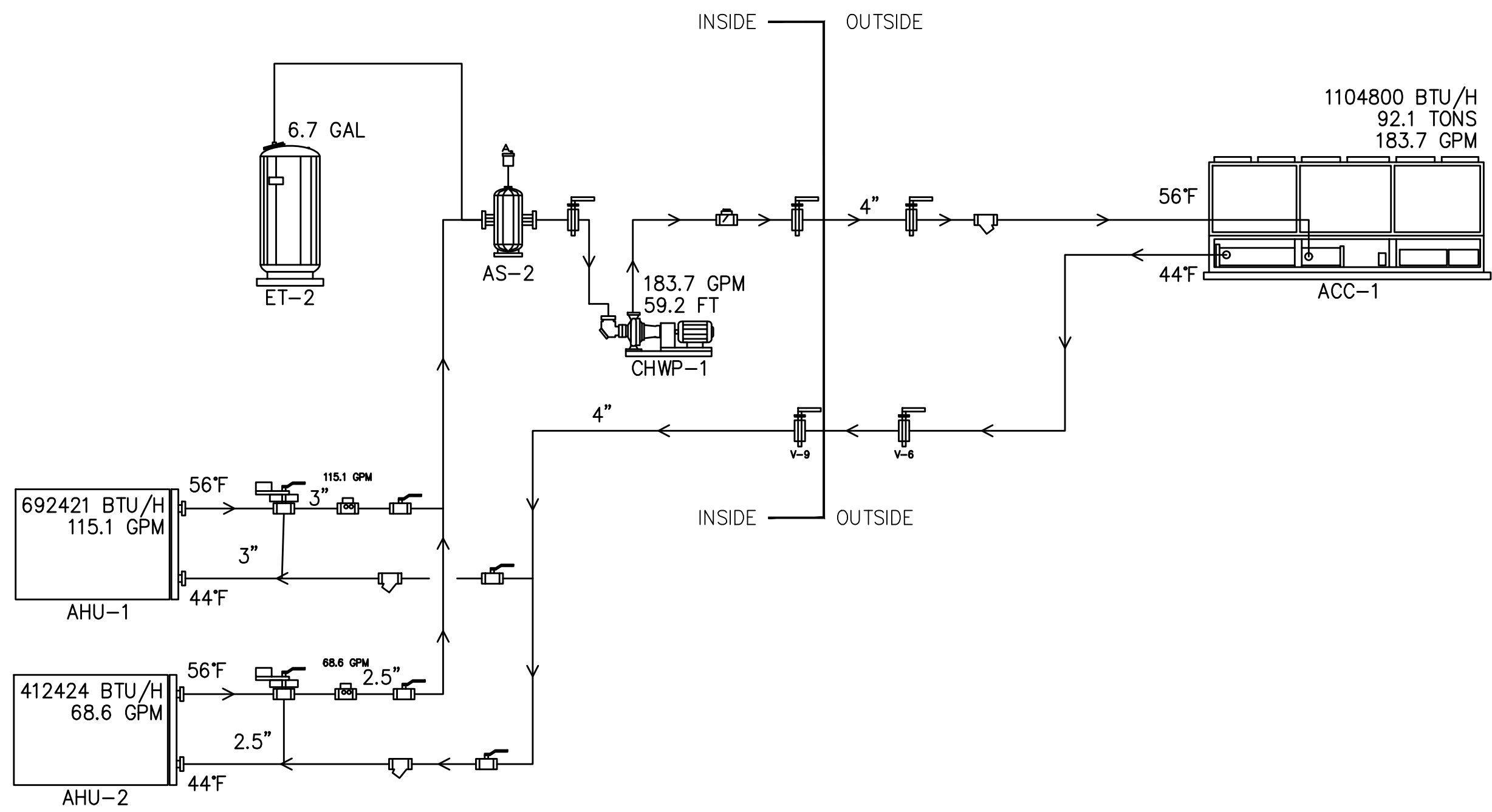
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DATE: 12.01.2023
DRAWN: PJR
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PROJECT NO: 2023_0030
PRINTING: 100% CONSTRUCTION DOCUMENTS



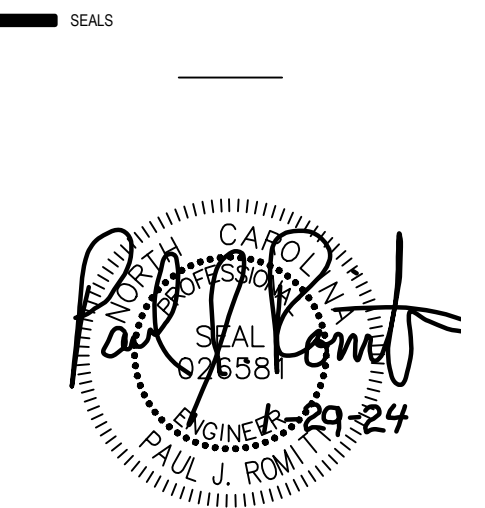
1 HOT WATER SYSTEM PIPING SCHEMATIC



3 CHILLED WATER SYSTEM PIPING SCHEMATIC



4 CHILLED WATER SYSTEM PIPING SCHEMATIC (ALTERNATE)



PERMIT SET
01.29.2024

PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

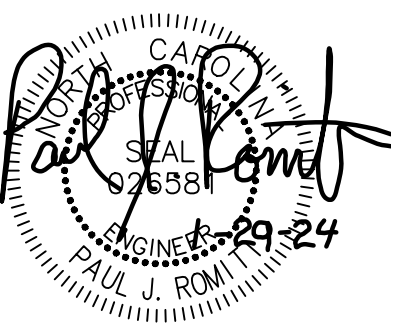
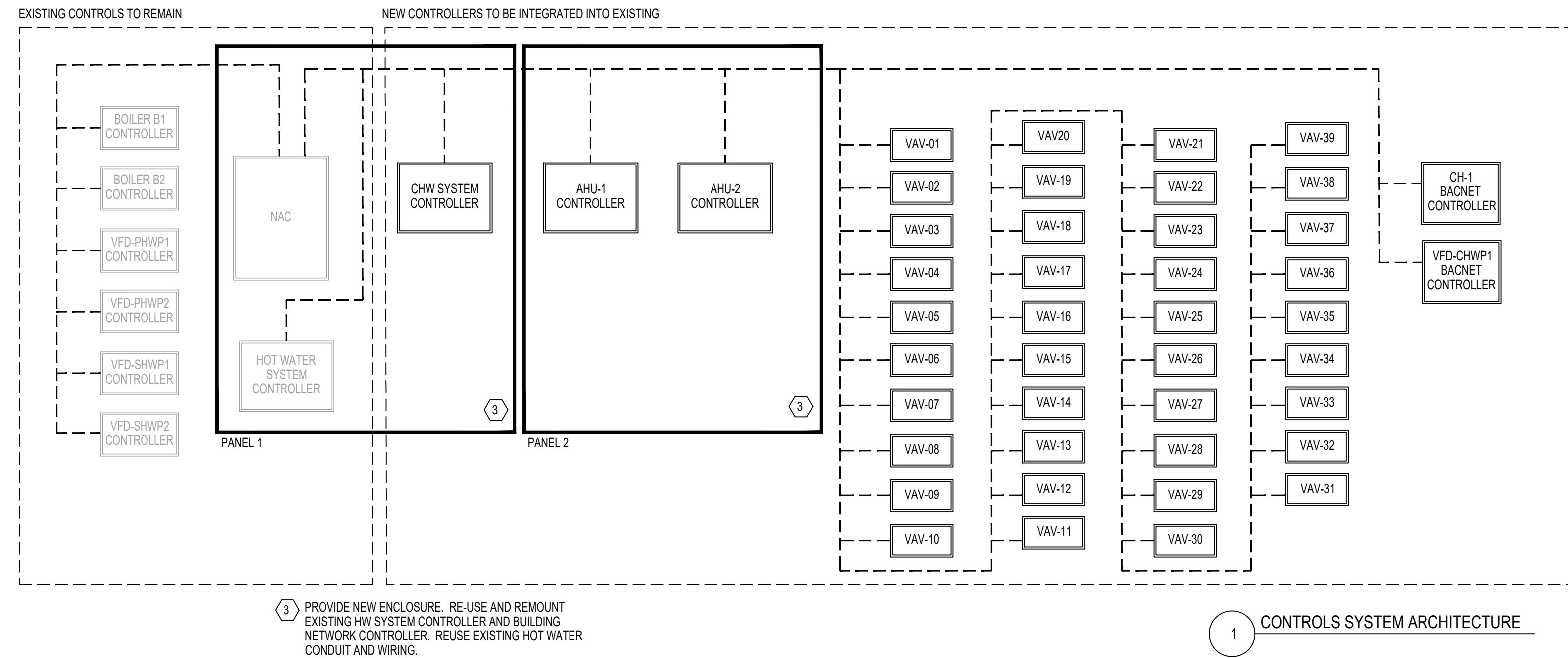
REVISIONS

No.	Description	Date

PROJECT DATA
DATE: 01.29.2024
DRAWN: PJR
CHECKED: PJR
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

SHEET DATA
MECHANICAL PIPING SCHEMATICS

SHEET NO.
M400



PERMIT
SET
01.29.2024

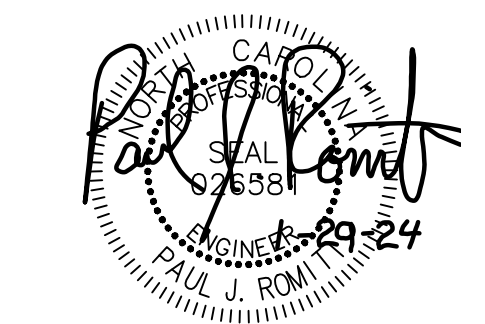
**WEST REGIONAL
LIBRARY
RENOVATION**
4000 LOUIS STEPHENS DR.
CARY, NC 27519

No.	Description	Date

DATE: 01.29.2024
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CHECKED: PJR
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

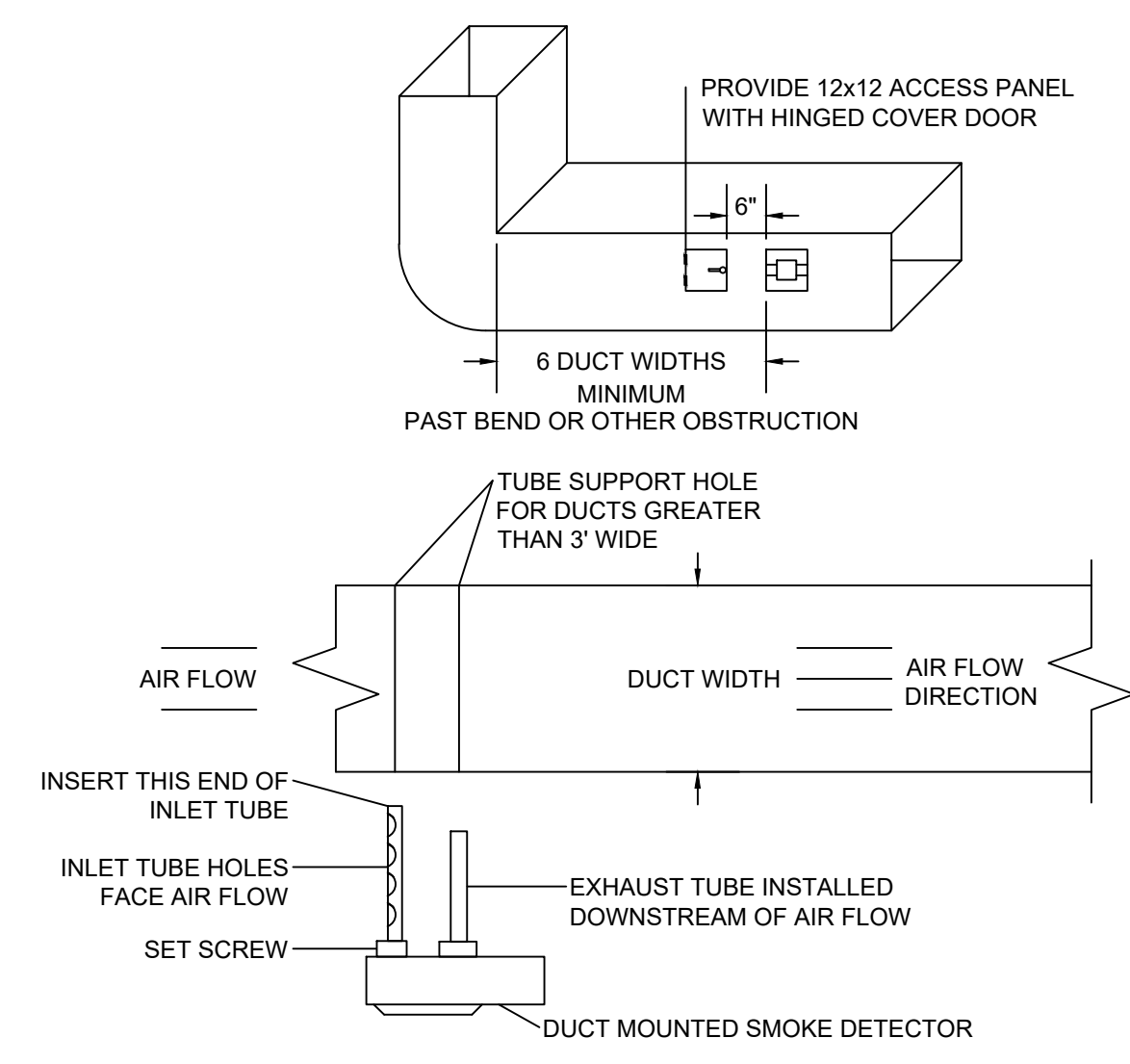
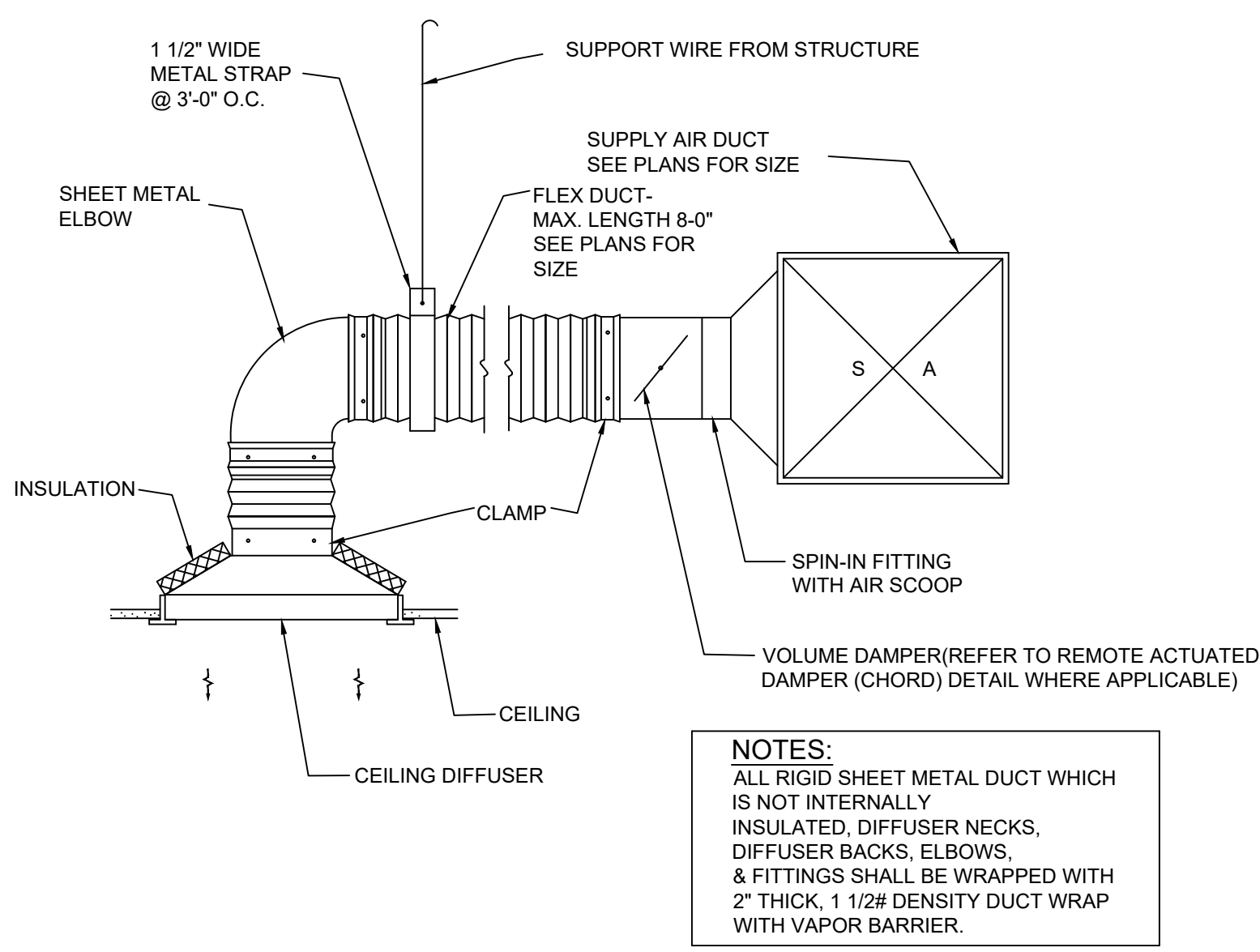
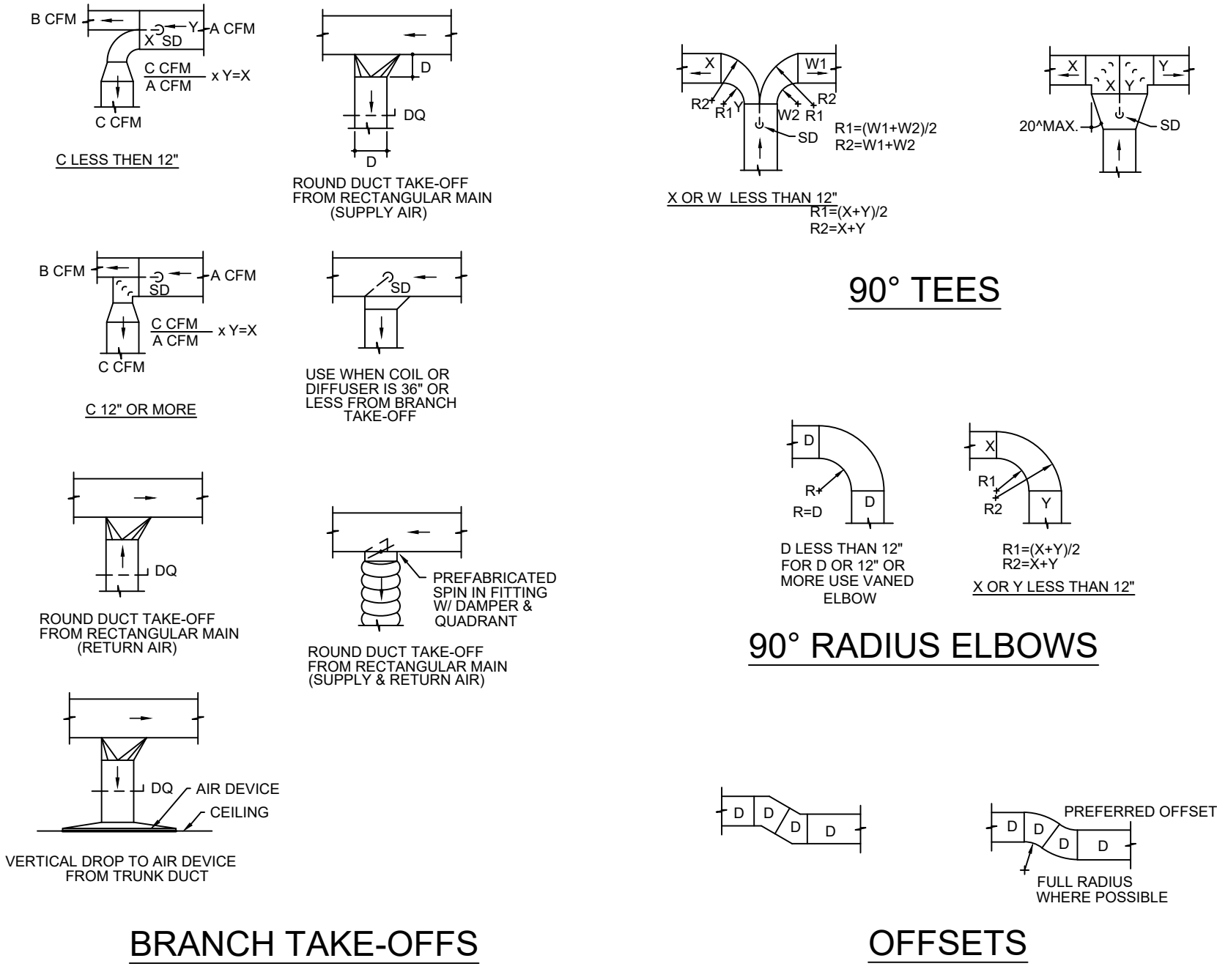
**MECHANICAL
SCHEMATICS**

M410



REVISIONS

No.	Description	Date



BRANCH TAKE-OFFS

OFFSETS

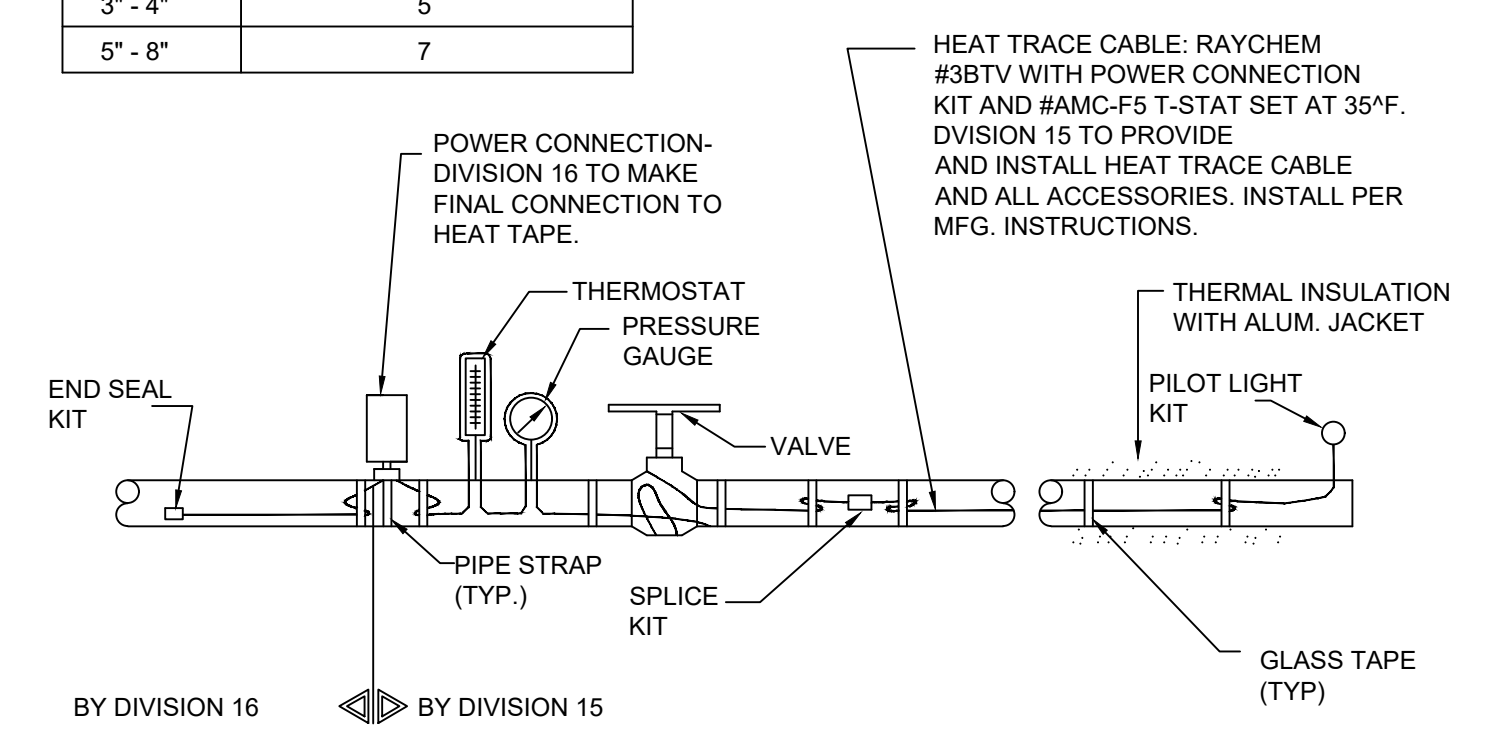
1 LOW PRESSURE DUCTWORK
NONE

2 SUPPLY DIFFUSER RUNOUT DETAIL
NONE

3 DUCT MOUNTED SMOKE DETECTOR DETAIL
Scale: NONE

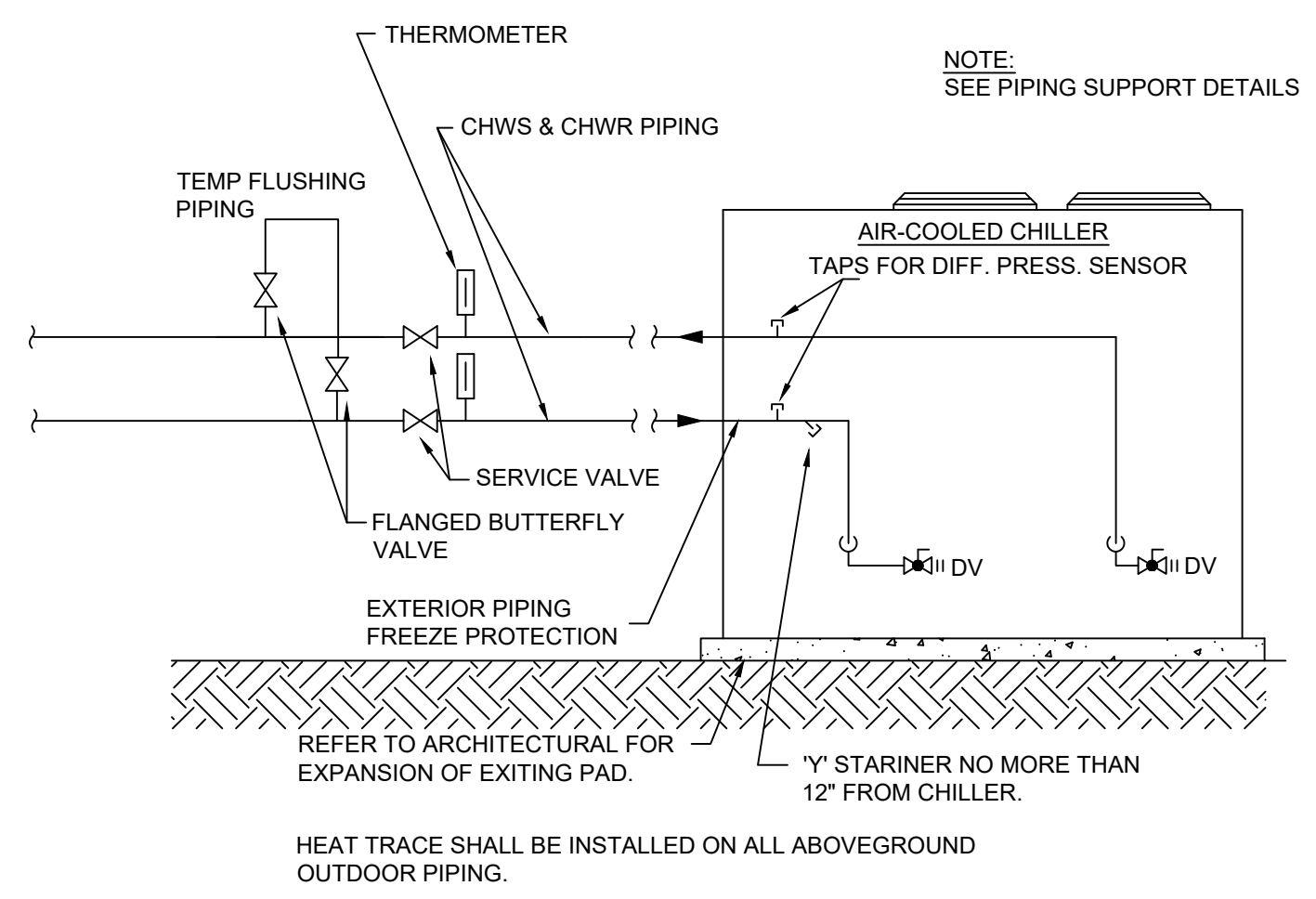
HEAT TRACE CABLE SIZING CHART

PIPE SIZE	MIN. WATTS PER FOOT
3" - 4"	5
5" - 8"	7

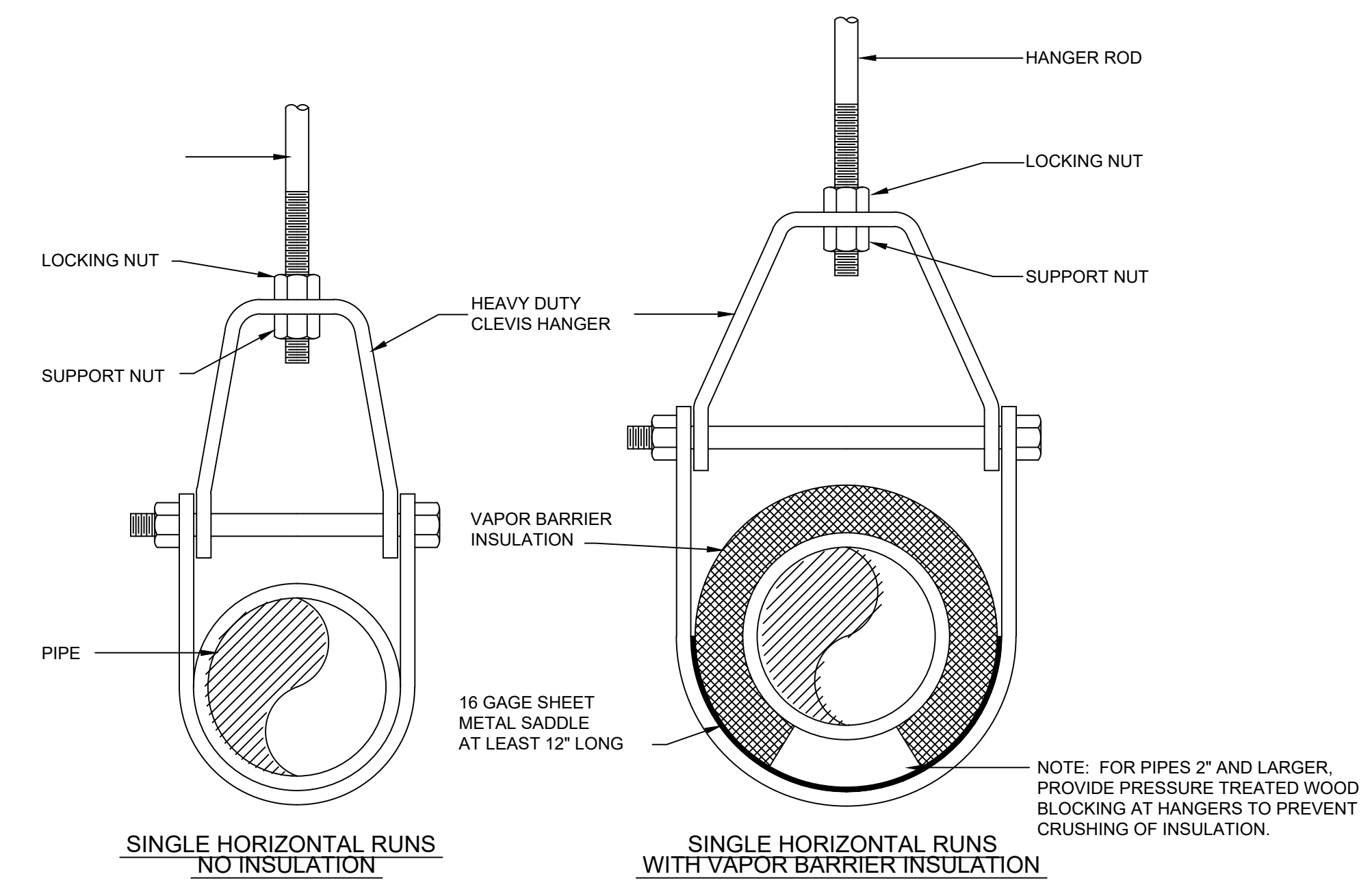


- NOTE:
- PROVIDE A TEE KIT WHEN CONNECTING THREE LENGTHS OF HEAT TRACE CABLE TOGETHER.
 - INSTALL HEAT TRACE CABLE ON ALL DEVICES PER UNIT MFG. RECOMMENDATIONS. THIS INCLUDES BUT IS NOT LIMITED TO PUMPS, TEES, ELBOWS, AND SUPPORTS.

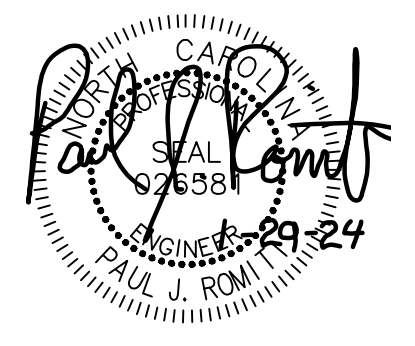
4 HEAT TRACE CABLE DETAIL
NONE



5 AIR-COOLED CHILLER INSTALLATION DETAIL
NONE

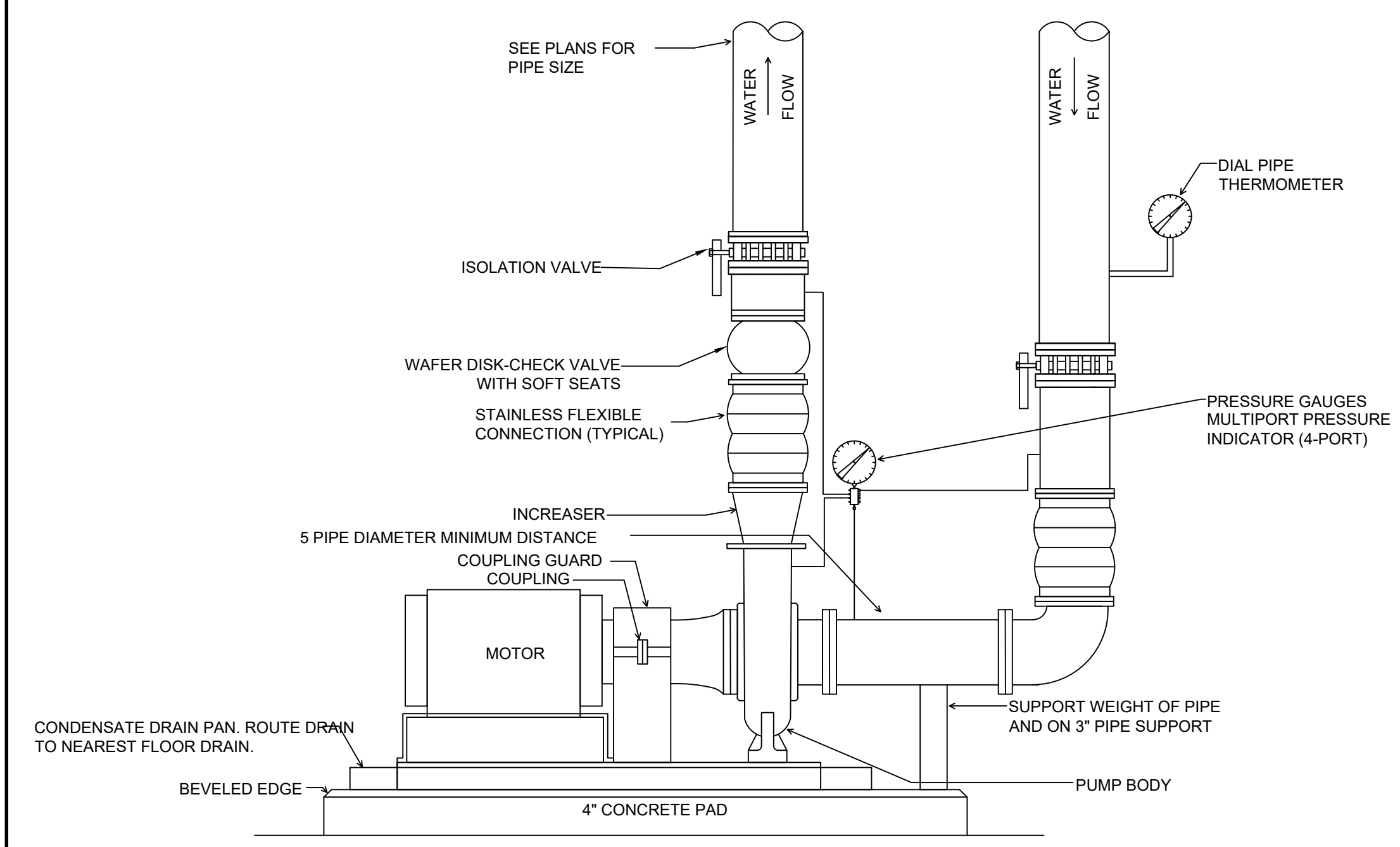


6 CLEVIS HANGER DETAIL
NONE

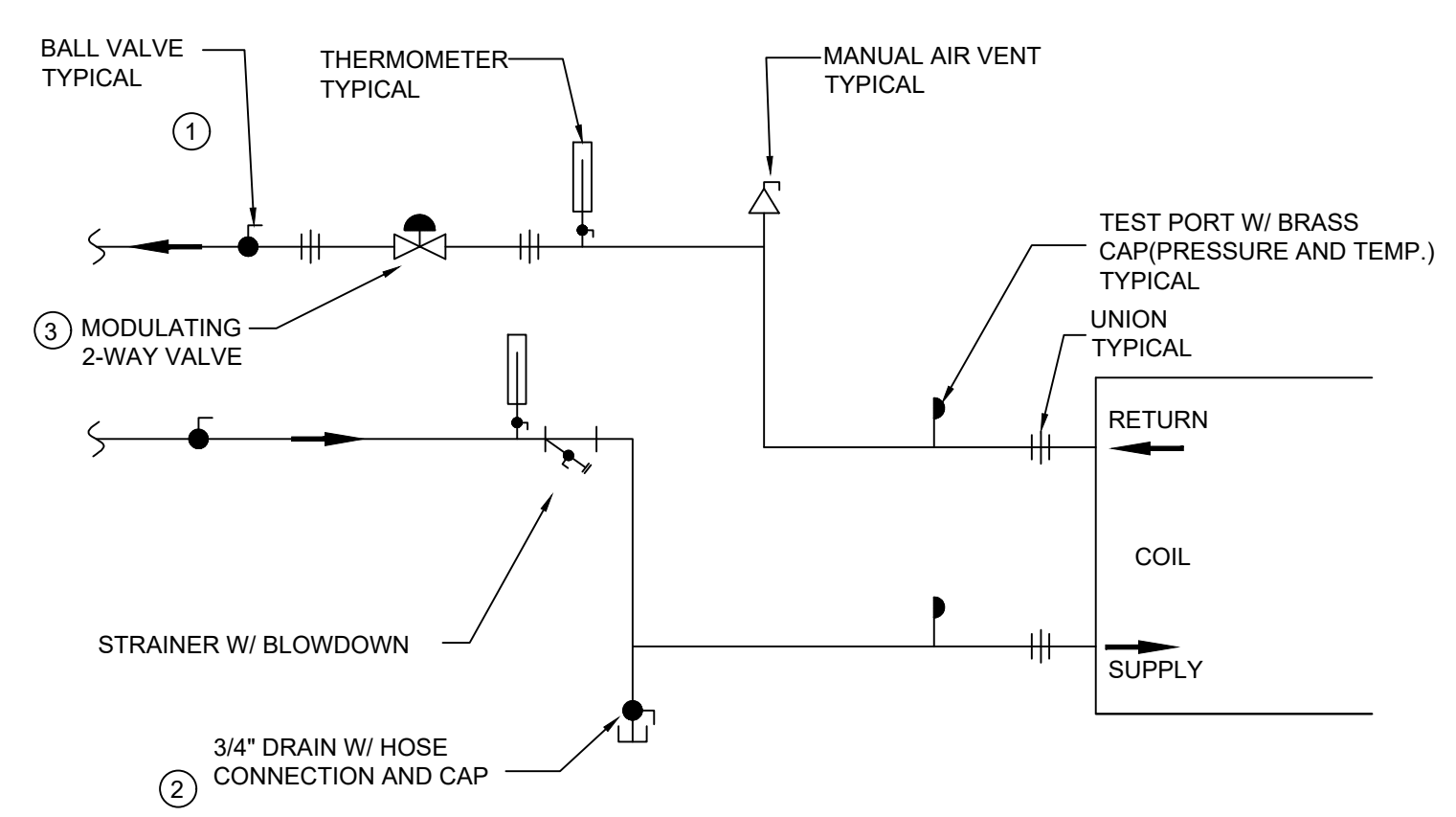


REVISIONS

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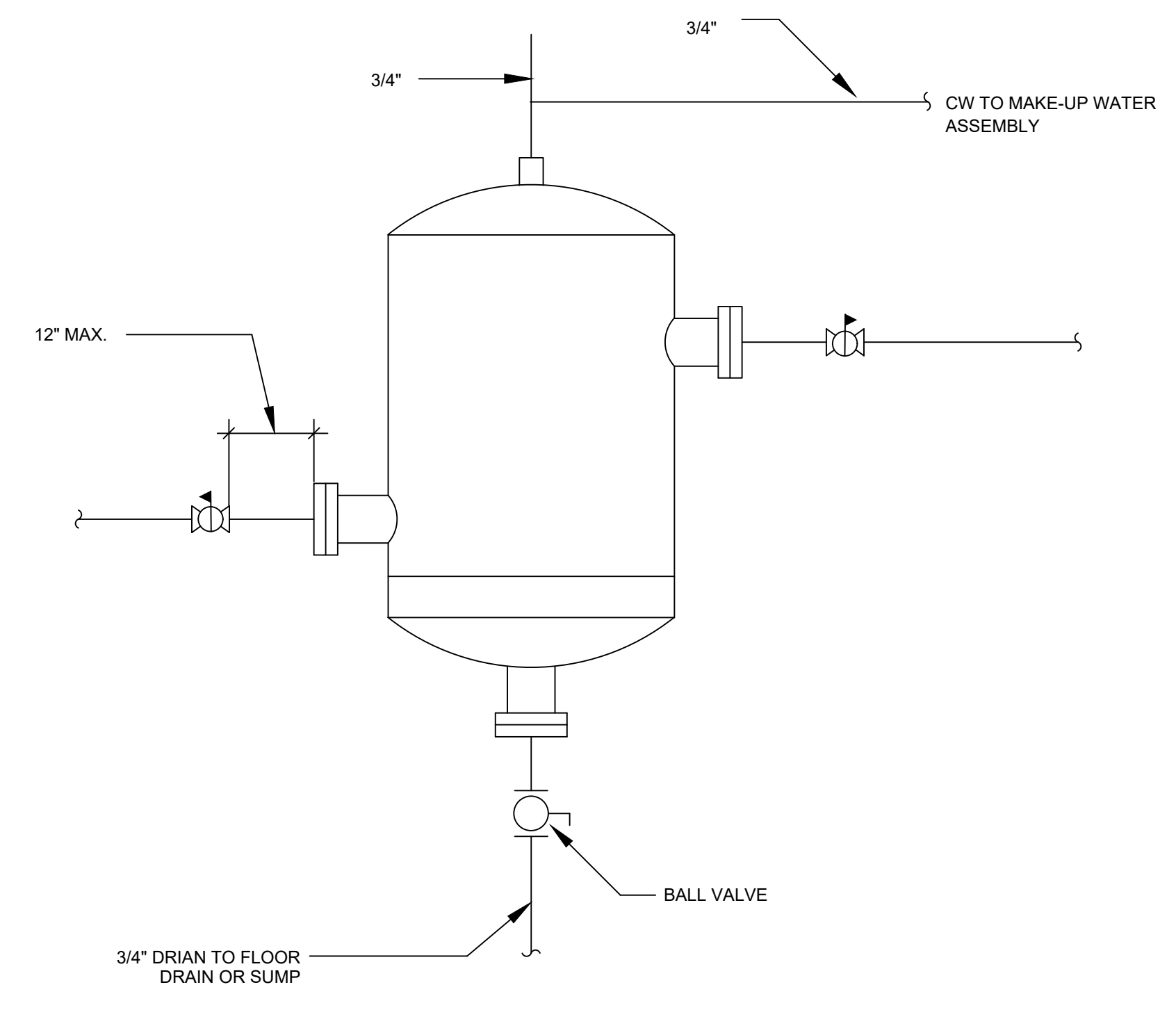


1 END SUCTION PUMP DETAIL
NONE

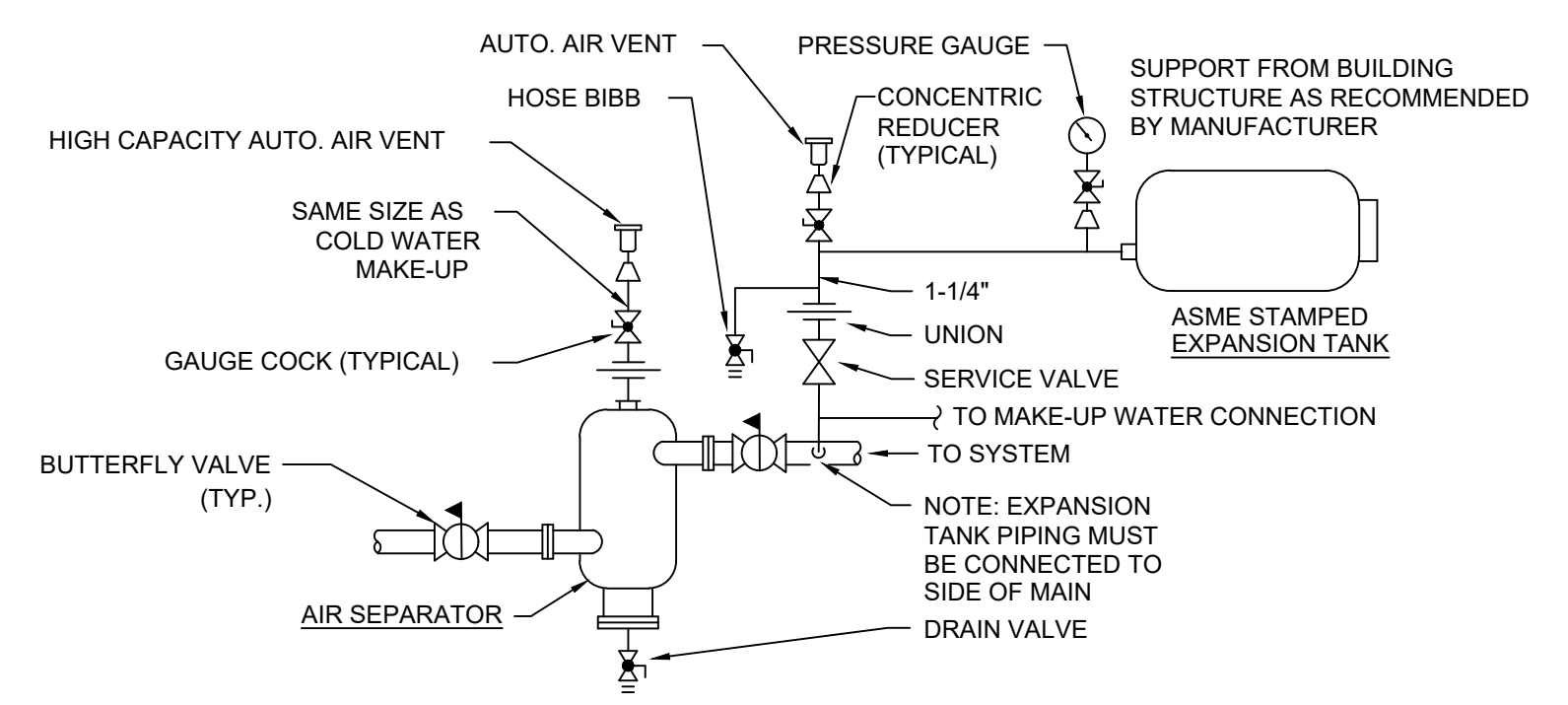


REMARKS:
1. PROVIDE BUTTERFLY VALVES FOR PIPE SIZES ABOVE 2".
2. INSTALL AT LOWEST POINT IN PIPING.
3. INSTALL MODULATING VALVE SO THAT STEM IS VERTICAL.

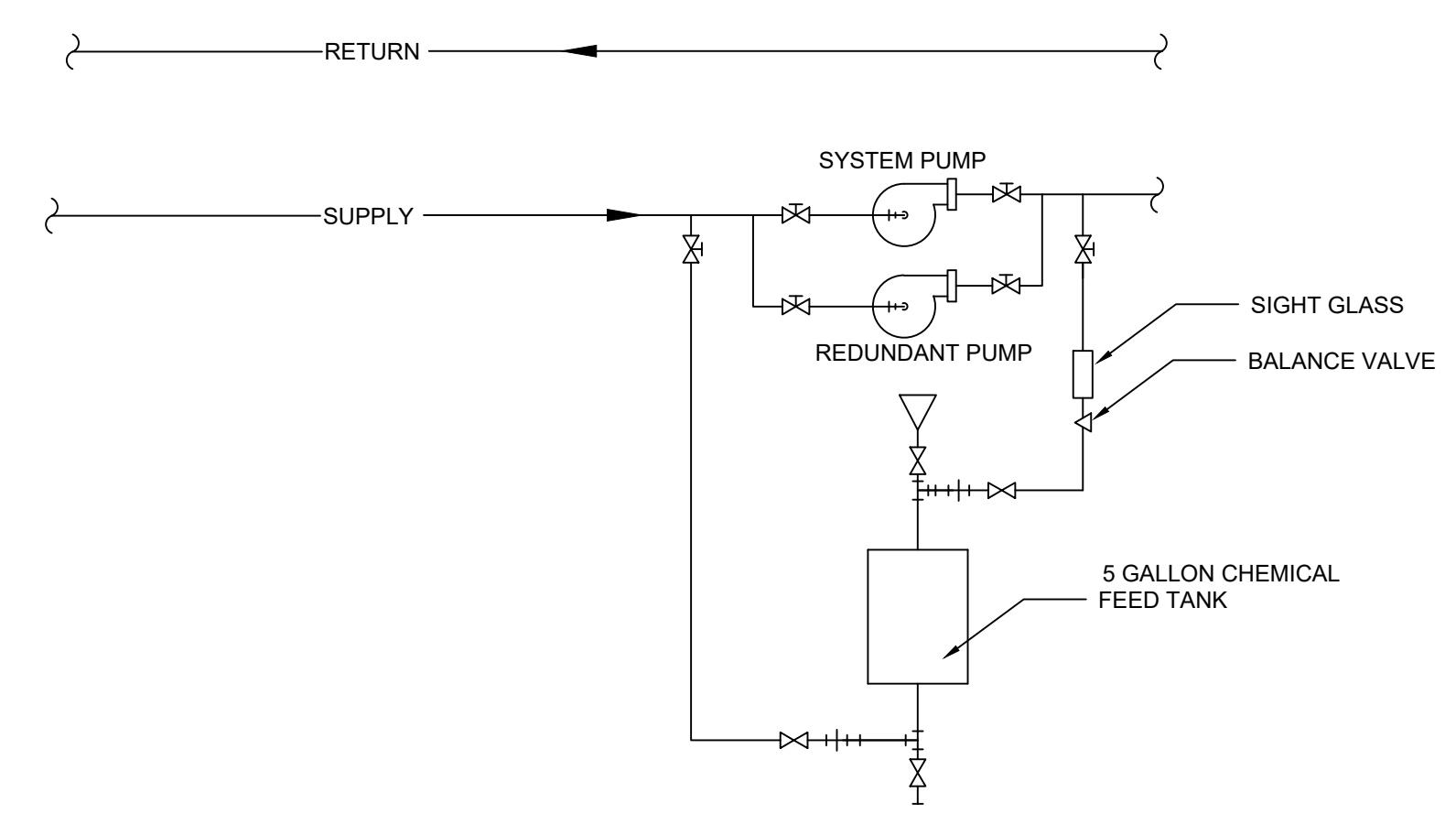
2 SINGLE COIL PIPING DETAIL
NONE



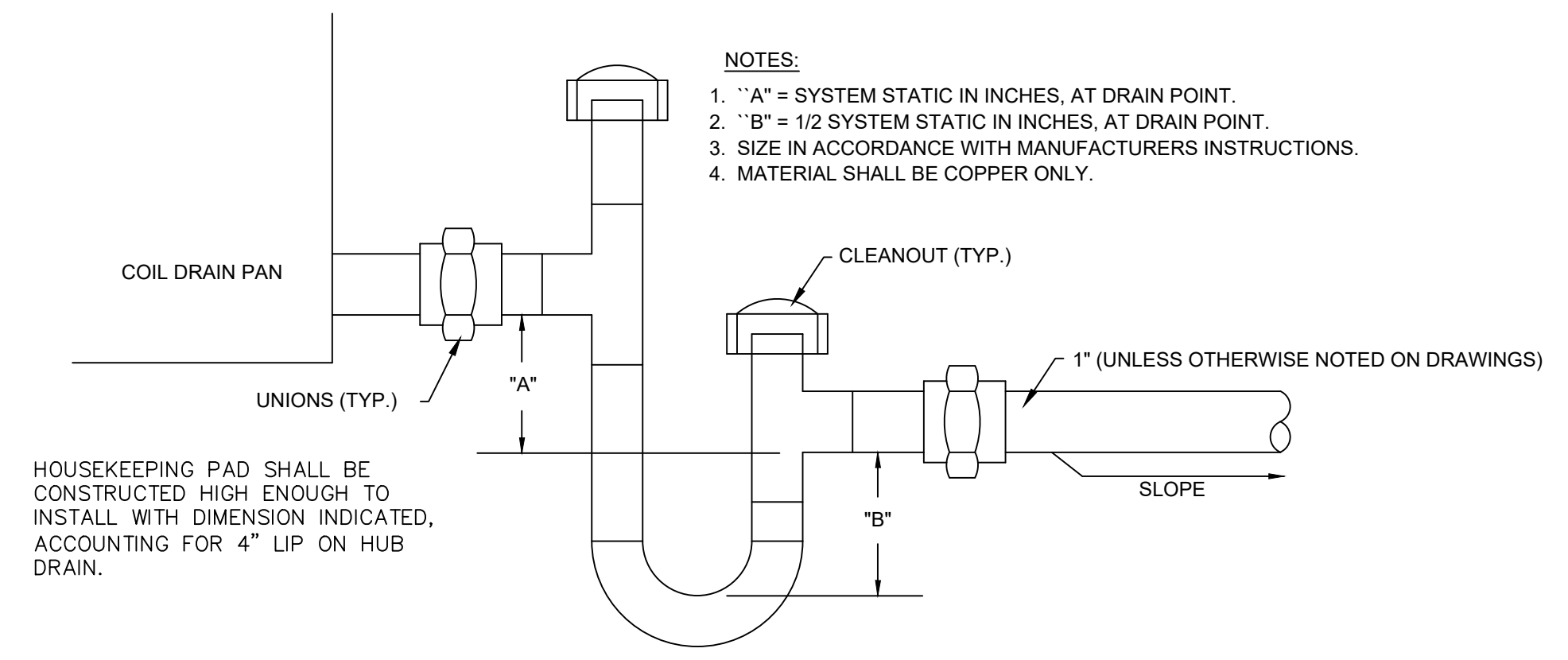
3 AIR DIRT SEPARATOR DETAIL
NONE



4 EXPANSION TANK / AIR SEPARATOR PIPING DETAIL (CHW SYSTEM)
NONE



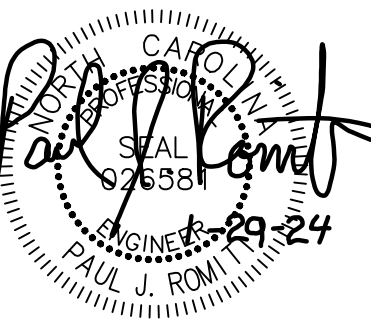
5 CHEMICAL FEED PIPING DETAIL
NONE



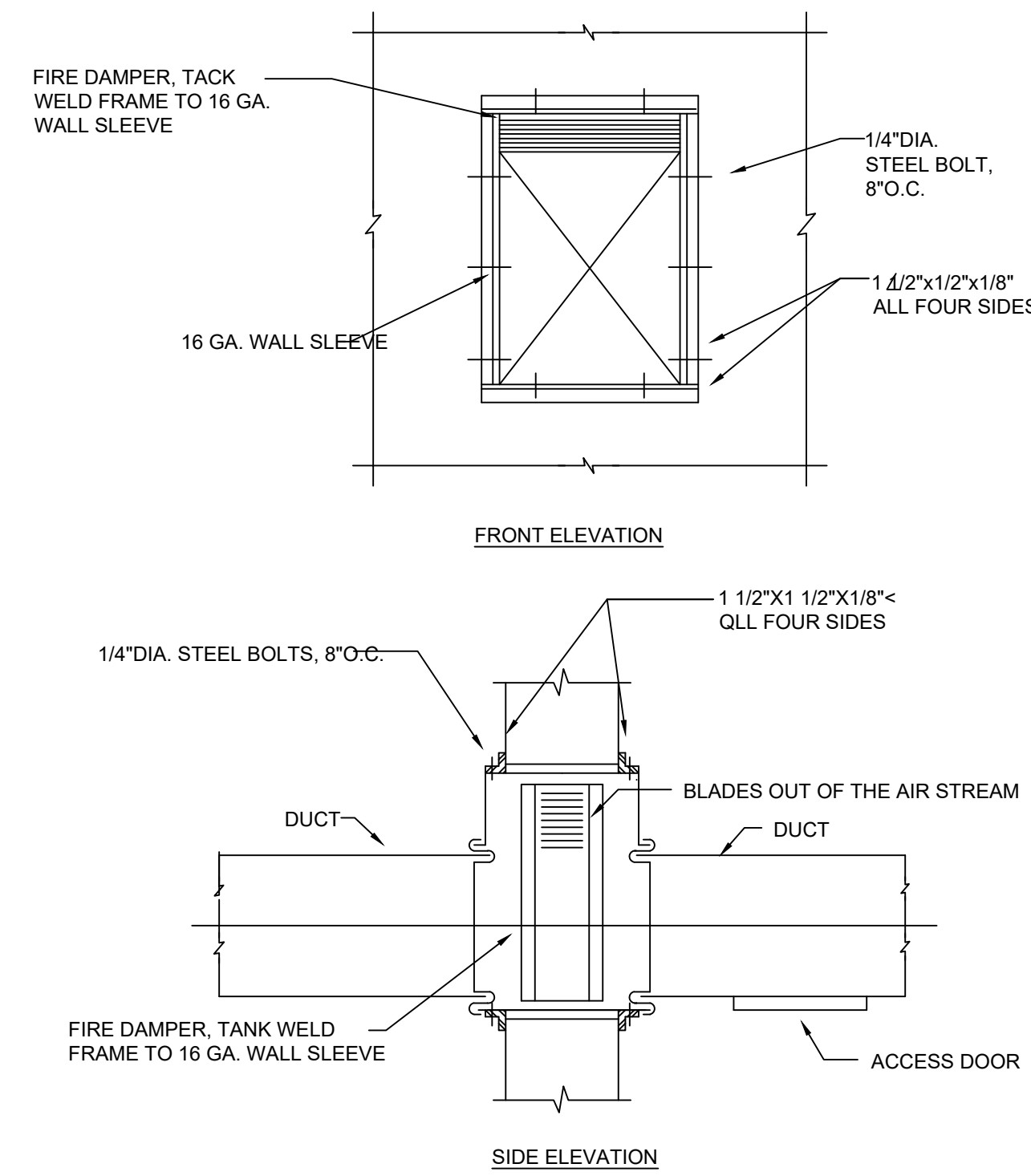
5 CONDENSATE DRAIN DETAIL
NONE

HOUSEKEEPING PAD SHALL BE CONSTRUCTED HIGH ENOUGH TO INSTALL WITH DIMENSION INDICATED, ACCOUNTING FOR 4\"/>

NOTES:
1. "A" = SYSTEM STATIC IN INCHES, AT DRAIN POINT.
2. "B" = 1/2 SYSTEM STATIC IN INCHES, AT DRAIN POINT.
3. SIZE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
4. MATERIAL SHALL BE COPPER ONLY.

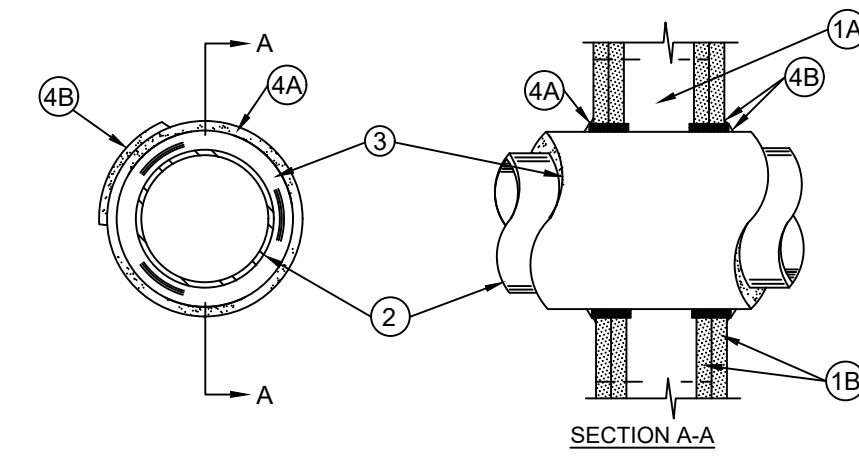


No.	Description	Date



1 VERTICAL FIRE DAMPER DETAIL
NONE

SYSTEM NO. W-L-5001
MAY 19, 2005
F RATINGS - 1, AND 2 HR (SEE ITEM 1)
T RATINGS - 3/4, 1 AND 1-1/2 HR. (SEE ITEM 3)
L RATING AT AMBIENT - 2 CFM PER SQ. FT.
L RATING AT 400°F - LESS THAN 1 CFM PER SQ. FT.



- WALL ASSEMBLY - THE 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300, U400 OR V400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
 - STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16 IN. OC WITH NOM 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. WIDE BY 1-3/8 IN. DEEP CHANNELS SPACED MAX 24 IN. OC.
 - GYPSUM BOARD* - NOM 5/8 IN. THICK, 4 FT WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 14-1/2 IN. FOR WOOD STUD WALLS AND 18 IN. FOR STEEL STUD WALLS.

THE HOURLY F RATING OF THE FIRE STOP SYSTEM IS 1 HR WHEN INSTALLED IN A 1 HR FIRE RATED WALL AND 2 HR WHEN INSTALLED IN A 2 HR FIRE RATED WALL.

- THROUGH PENETRANTS - ONE METALLIC PIPE OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBING MAY BE USED
 - STEEL PIPE - NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
 - COPPER TUBING - NOM 6 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
 - COPPER PIPE - NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

- PIPE COVERING* - NOM 1 OR 2 IN. THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN 3.5 PCF) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SEALED WITH METAL FASTENERS OR WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT. WHEN NOM 1 IN. THICK PIPE COVERING IS USED, THE ANNULAR SPACE BETWEEN THE PIPE COVERING AND THE CIRCULAR CUTOUT IN THE GYPSUM WALLBOARD LAYERS ON EACH SIDE OF THE WALL SHALL BE MIN 1/4 IN. TO MAX 3/8 IN. WHEN NOM 2 IN. THICK PIPE COVERING IS USED, THE ANNULAR SPACE BETWEEN THE PIPE COVERING AND THE CIRCULAR CUTOUT IN THE GYPSUM BOARD LAYERS ON EACH SIDE OF THE WALL SHALL BE MIN 1/2 IN. TO MAX 3/4 IN.

SEE PIPE AND EQUIPMENT COVING MATERIALS* (BRGU) CATEGORY IN BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS MAY BE USED.

THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS 3/4 HR WHEN NOM 1 IN. THICK PIPE COVERING IS USED. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS 1 HR AND 1-1/2 HR WHEN 2 IN. THICK PIPE COVERING IS USED WITH 1 HR AND 2 HR FIRE RATED WALLS, RESPECTIVELY.

- FIRESTOP SYSTEM - INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
 - FILL, VOID OR CAVITY MATERIALS* - WRAP STRIP - NOM 1/4 IN. THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN 2 IN. WIDE STRIPS. NOM 2 IN. WIDE STRIP TIGHTLY WRAPPED AROUND PIPE COVERING (FOIL SIDE OUT) WITH SEAM BUTTED. WRAP STRIP LAYER SECURELY BOUND WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND SLID INTO ANNULAR SPACE APPROX 1-1/4 IN. SUCH THAT APPROX 3/4 IN. OF THE WRAP STRIP WIDTH PROTRUDES FROM THE WALL SURFACE. ONE LAYER OF WRAP STRIP IS REQUIRED WHEN NOM 1 IN. THICK PIPE COVERING IS USED. TWO LAYERS OF WRAP STRIP ARE REQUIRED WHEN NOM 2 IN. THICK PIPE COVERING IS USED.

3M COMPANY - FS-195+

- FILL, VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - MIN 1/4 IN DIAM CONTINUOUS BEAD APPLIED TO THE WRAP STRIP/WALL INTERFACE AND TO THE EXPOSED EDGE OF THE WRAP STRIP LAYER APPROX 3/4 IN FROM THE WALL SURFACE.

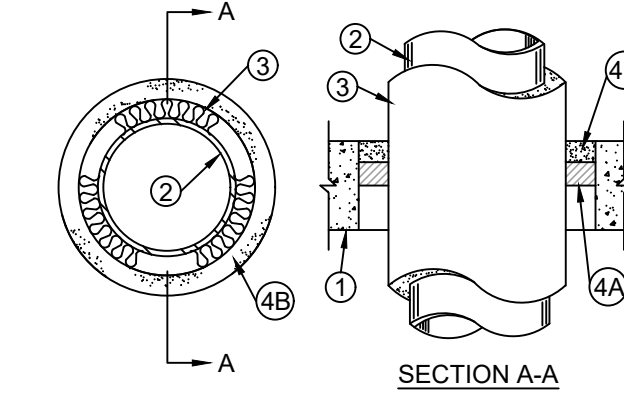
3M COMPANY - CP 25WB+, IC 15WB+, FIREDAM 150+ CAULK OR FB-3000 WT SEALANT.

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

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SYSTEM NO. C-AJ-5001
MARCH 05, 2007

F RATINGS - 1-1/2, 2 AND 3 HR (SEE ITEM 4)
T RATINGS - 0, 1/2, 3/4 AND 1 HR (SEE ITEMS 1A AND 4)
L RATING AT AMBIENT - 2 CFM PER SQ FT
L RATING AT 400°F - LESS THAN 1 CFM PER SQ FT



- FLOOR OR WALL ASSEMBLY - MIN 2-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 18 IN.

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

- STEEL SLEEVE - (OPTIONAL, NOT SHOWN) - NOM 10 IN. (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. SLEEVE MAY EXTEND A MAX OF 2 IN. ABOVE TOP OF FLOOR OR BEYOND EITHER SURFACE OF WALL. AS AN ALTERNATE, NOM 10 IN. DIAM (OR SMALLER) SLEEVE FABRICATED FROM NOM 0.019 IN THICK GALV STEEL CAST OR GROUTED INTO OR WALL ASSEMBLY FLUSH WITH FLOOR OR WALL SURFACES. T RATING IS 0 HR WHEN SLEEVE IS USED.

- THROUGH PENETRANT - NOM 4 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER PIPE, NOM 12 IN. DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN. DIAM (OR SMALLER) CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE OR NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE CENTERED IN THE OPENING AND RIGIDLY SUPPORTED ON BOTH SIDES OF THE FLOOR OR WALL ASSEMBLY.

- PIPE COVERING* - NOM 1/2 TO 2 IN. THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN. 3.5 PCF) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT.

SEE PIPE AND EQUIPMENT COVERING - MATERIALS* (BRGU) CATEGORY IN BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS MAY BE USED.

- FIRESTOP SYSTEM - THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
 - PACKING MATERIAL - MIN 1 IN. THICKNESS OF FIRMLY PACKED MINERAL WOOL BATT INSULATION USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR SLEEVE OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM B).
 - FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - APPLIED TO FILL THE ANNULAR SPACE FLUSH WITH THE TOP SURFACE OF THE FLOOR OR SLEEVE OR FLUSH WITH BOTH SURFACES OF WALL. WHEN NOM PIPE COVERING THICKNESS IS 2 IN., MIN THICKNESS OF CAULK FILL MATERIAL IS 2 IN. WHEN NOM PIPE COVERING THICKNESS IS 1-1/2 IN. OR LESS, MIN THICKNESS OF CAULK FILL MATERIAL IS 1 IN. THE HOURLY F AND T RATINGS OF THE FIRESTOP SYSTEM ARE DEPENDENT UPON THE THICKNESS OF THE FLOOR OR WALL, THE SIZE OF PIPE, THE THICKNESS OF PIPE COVERING MATERIAL AND THE EDGE OF THE ANNULAR SPACE (BETWEEN THE PIPE COVERING MATERIAL AND THE EDGE OF THE CIRCULAR THROUGH OPENING), AS SHOWN IN THE FOLLOWING TABLE:

MIN FLOOR OR WALL THKNS IN.	MAX PIPE DIAM. IN.	NOM. PIPE COVERING THKNS. IN.	ANNULAR SPACE IN.	F RATING HR.	T RATING HR.
2-1/2	4	1 or 1-1/2	1/2 to 2-3/8	2	1
4-1/2	4	2	1/4 to 3-5/8	2	1-1/2
2-1/2	12	1	1/2 to 1-1/2	2	1/2
4-1/2	12	1	1/2 to 2-3/8	3	1
2-1/2	12	1/2	1/2 to 2-3/8	2	0

3M COMPANY - CP 25WB+ OR FB-3000 WT

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

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LIGHTING SYMBOLS

- WALL OR CEILING MTD EXIT SIGN WITH SELF CONTAINED BATTERY BACK-UP, SINGLE FACE. ARROW WHEN USED INDICATES DIRECTION.
WALL OR CEILING MTD EXIT SIGN WITH SELF CONTAINED BATTERY BACK-UP, DOUBLE FACE. ARROW WHEN USED INDICATES DIRECTION.
SUSPENDED OR SURFACE MTD LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT.
SUSPENDED OR SURFACE MTD LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT.
CEILING MTD OR LAY-IN TYPE LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT.
CEILING MTD OR LAY-IN LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT.
CEILING MTD OR LAY-IN TYPE LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT.
CEILING MTD OR LAY-IN LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT.
CEILING/PENDENT MTD/RECESSED LIGHTING FIXTURE AND OUTLET, LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT.
CEILING/PENDENT MTD/RECESSED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT.
SURFACE MOUNTED WALL LUMINAIRE OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT.
SURFACE MOUNTED WALL LUMINAIRE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT CONNECTED TO REMOTE EMERGENCY INVERTER.
EMERGENCY WALL BATTERY PACK UNIT PER THE SCHEDULE. LETTER NEXT TO FIXTURE ON PLANS INDICATES FIXTURE TYPE. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.
EMERGENCY CEILING BATTERY PACK UNIT PER THE SCHEDULE. LETTER NEXT TO FIXTURE ON PLANS INDICATES FIXTURE TYPE. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.

NOTE TO ALL LIGHTING:
XY-SUBSCRIPTS @ LIGHTING FIXTURES:
1. X-REPRESENTS OCCUPANCY SENSOR THAT CONTROLS FIXTURE.
2. Y-REPRESENTS SWITCH THAT CONTROLS FIXTURE.
3. WHEN NO SUBSCRIPT IS SHOWN, LOCAL OCC SENSOR AND SWITCH CONTROLS FIXTURE.

- SOR DIGITAL TIMER SWITCH-INTERMATIC EI235 OR EQUAL
SDT DIGITAL TIMER SWITCH-INTERMATIC ST01 OR EQUAL
S FLUSH MTD TOGGLE SWITCH, S.P.S.T., 20A, 120/277V
S3 FLUSH MTD 3-WAY TOGGLE SWITCH, 20A, 120/277V
S4 FLUSH MTD 4-WAY TOGGLE SWITCH, 20A, 120/277V
Sd FLUSH MTD 0-10V LED DIMMER SWITCH
SOS SWITCH TYPE OCCUPANCY SENSOR WITH BUILT-IN OVERRIDE SWITCH
SL SURFACE MTD TOGGLE SWITCH, S.P.S.T., 20A, 120/277V W/LOCKABLE COVER PLATE
Sa Sb LOWER CASE SUBSCRIPT INDICATE WHICH LIGHTS THE SWITCH IS TO BE CONNECTED TO.
SCS DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR; AV DESIGNATES SENSOR PROVIDED AS PART OF DIMMING OR AV PACKAGE
UH DESIGNATES ULTRA-SONIC DEVICE RATED FOR HALLWAY INSTALL
SM WALL MOUNTED OCCUPANCY SENSOR
NOTE ON OCC SENSORS: SENSORS SHALL PROVIDE COVERAGE TO 1000 SF AND SWITCH LOAD OFF AFTER 20 MIN.
PS PARTITION SENSOR
LC LIGHTING CONTACTOR

POWER SYMBOLS

- OUTLET BOX WITH BLANK COVER - LOCATE AS REQUIRED TO FOR EQUIPMENT SERVED.
FLUSH MTD DUPLEX RECEPTACLE AND OUTLET, 20A, 125V, 3W
FLUSH MTD QUADRUPLEX RECEPTACLE AND OUTLET, 20A, 125V, 3W
FLUSH MOUNTED QUADRUPLEX RECEPTACLE AND OUTLET 20A, 125V, 3W, INSTALLED 4" ABOVE BACKSPASH OR COUNTER IF NO BACKSPASH EXISTS.
FLUSH MOUNTED QUADRUPLEX RECEPTACLE AND OUTLET 20A, 125V, 3W, INSTALLED 4" ABOVE BACKSPASH OR COUNTER IF NO BACKSPASH EXISTS.
FLOOR BOX, BOX TO BE FLUSH MOUNTED IN CONCRETE FLOORS.
FLOOR MOUNTED POKE-THRU DEVICE.

- NOTE TO ALL RECEPTACLES/JUNCTION BOXES:
1. SUBSCRIPT EWC INDICATES GROUND FAULT TYPE RECEPTACLE/ OR PROTECTED CIRCUIT FOR ELECTRIC WATER COOLER.
2. SUBSCRIPT WP INDICATES GROUND FAULT TYPE RECEPTACLE/ OR PROTECTED CIRCUIT WITH STEEL LOCKABLE CLOSED WEATHERPROOF COVER.
3. SUBSCRIPT GFI INDICATES GROUND FAULT TYPE RECEPTACLE/ OR PROTECTED CIRCUIT.
4. SUBSCRIPT VEN INDICATES GROUND FAULT TYPE RECEPTACLE/ OR PROTECTED CIRCUIT FOR VENDING MACHINE.
5. SUBSCRIPT TV INDICATES RECEPTACLE FOR TV MOUNTED IN BRACKET.
6. SUBSCRIPT SL INDICATES SHORELINE INSTALLATION PER DETAILS.
7. SUBSCRIPT USB INDICATES COMBINATION 20A OUTLET AND USB PORT.
8. SUBSCRIPT HD INDICATES HAND DRYER CONNECTION.
9. SUBSCRIPT MF INDICATED GFI RECEPTACLE MOUNTED BELOW SINK FOR ELECTRIC METERED FAUCET CONNECTION.
10. SUBSCRIPT DW INDICATES DISHWASHER CONNECTION. PROVIDE WITH 120 VOLT 20 AMPERE SWITCH ABOVE COUNTER FOR DISCONNECT.
11. SUBSCRIPT GD INDICATES GARBAGE DISPOSAL CONNECTION. PROVIDE WITH 120 VOLT 20 AMPERE SWITCH ABOVE COUNTER FOR DISCONNECT.
12. SUBSCRIPT RH INDICATES RANGE HOOD CONNECTION.
13. SUBSCRIPT RNG INDICATES RANGE CONNECTION.
14. SUBSCRIPT CR INDICATES 120 V POWER FOR CARD READER.
15. SUBSCRIPT HB INDICATES 120 V POWER CONNECTION FOR HOT BOX CONNECTION.
16. SUBSCRIPT GS INDICATES 120 V POWER CONNECTION FOR WAKE COUNTY GROUND SIGN CONNECTION.
17. SUBSCRIPT FP INDICATES 120 V POWER CONNECTION FOR FLAG POLE LIGHTING CONNECTION.
18. SUBSCRIPT MR INDICATES 120 VOLT POWER CONNECTION FOR MOTORIZED HVAC REGISTER.
19. SUBSCRIPT OHD INDICATES OVERHEAD DOOR CONTROLS PER DETAILS.
20. SUBSCRIPT EL-ATS INDICATES ELEVATOR/TRANSFER SWITCH INTERFACE AS NOTED ON DRAWINGS.

- (X) TELE/COMM OUTLET 4" SQ. BOX WITH 1" (ABOVE SLAB) OR 1.25" (BELOW SLAB) AND (X) CAT 6 CABLES TO IDF OR MDF, TERMINATED AND TESTED AT BOTH ENDS. CABLING BY DIVISION 27 TELECOM CONTRACTOR.
J-HOOKS PER DRAWINGS AND PROJECT MANUAL.

NOTE TO ALL TELECOM OUTLETS:
1. SUBSCRIPT WAP DESIGNATES WIRELESS ACCESS POINT MOUNTED IN CEILING OR ON WALL AT 84" AFF.
2. SUBSCRIPT FA DESIGNATES CONNECTION FOR FIRE ALARM DIAL OUT.
3. SUBSCRIPT EL DESIGNATES CONNECTION FOR ELEVATOR PHONES.
4. SUBSCRIPT W DESIGNATES WALL MOUNTED PHONE MOUNTED AT 48" AFF.
5. SUBSCRIPT DC DESIGNATES DOOR COUNTER CONNECTION.
6. SUBSCRIPT SEC DESIGNATES CONNECTION FROM DROP.
7. SUBSCRIPT ER DESIGNATES EMERGENCY RESPONSE PHONE WITH DEDICATED LINE.
8. SUBSCRIPT AV DESIGNATES 1" TO ABOVE CEILING FOR AV CONNECTION.
9. SCADA INDICATES 1" CONDUIT TO SCADA SYSTEM FOR CONNECTION TO NETWORK
10. PV INDICATES 1" CONDUIT TO INVERTERS FOR CONNECTION TO NETWORK.
11. ECP INDICATES 1" CONDUIT FROM BAY EXHAUST CONTROL PANEL TO NETWORK.

- HC HANDICAPPED DOOR OPERATOR
DISCONNECT SWITCH-PROVIDE 30A, NON-FUSED U.O.N.
NF 30 NON-FUSED DISCONNECT SWITCH. NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.
20 30 AMP FUSED DISCONNECT SWITCH, FUSED AT 20 AMP. NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.
WVP WEATHERPROOF NEMA 3R DISCONNECT SWITCH. NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.
4X 30 NEMA 4X SS DISCONNECT SWITCH. NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.
FVNR FVNR COMBINATION DISCONNECT SWITCH AND MAGNETIC MOTOR STARTER OR VFD (IF MARKED VFD)
M MANUAL MOTOR STARTER SWITCH WITHOUT OVERLOAD HEATERS
1 A.C. MOTOR, NUMERAL INDICATES HP 'F' INDICATES FRACTIONAL HP
PANEL BOARD, FLUSH MOUNTED
PANEL BOARD, SURFACE MOUNTED
CONCEALED RACEWAY. INDICATES HOMERUN TO PANEL IN 3/4" CONDUIT-WIRE PER PANEL SCHEDULES.

ELECTRICAL SYMBOL NOTES

- 1. SYMBOLS AND ABBREVIATIONS MAY NOT ALL BE UTILIZED FOR THIS PROJECT.
2. SYMBOLS NOT LISTED IN THIS ELECTRICAL SYMBOL LEGEND ARE IDENTIFIED ON THE DRAWINGS WHERE THEY OCCUR.
3. MOUNTING HEIGHT GIVEN IN THE ELECTRICAL SPECIFICATIONS IS TO THE CENTERLINE OF THE DEVICE AND SHALL BE FOLLOWED UNLESS OTHERWISE NOTED.

AV SYSTEM SYMBOLS

- WALL MOUNTED TV. PROVIDE POWER, T/C AND HDMI OUTLETS PER XXXXXX. MOUNT AT 84" AFF PER DETAIL.

MISC. SYSTEM SYMBOLS

- DOOR BELL BUTTON MOUNTED AT 48" AFF. CONNECT TO CHIME SYSTEM.
DOOR BELL CHIME. PROVIDE 120 VOLT CONNECTION TO 24V TRANSFORMER AND 24V CHIME. MOUNT CHIME AT 80" AFF.

SECURITY SYSTEM SYMBOLS

REFER TO DETAILS SHEET SEC400 FOR ROUGH-IN DETAILS RELATED TO SEC. SYSTEMS INSTALLATION.

- REFER TO SEC400 FOR ROUGH-IN INFORMATION
CARD READER.
CARD READER DOOR ROUGH IN. PROVIDE POWER CONNECTION AS NOTED ON POWER DRAWINGS.
ELECTRIC LOCK ROUGH IN AND POWER.
DOOR CONTACT.
GLASS BREAK.
KEY PAD
SECURITY CONNECTION AT KNOX BOX.
SECURITY CONNECTION AT REFRIGERANT MONITORING SYSTEM.
LATCH RELEASE CONTROL.
MOTION DETECTOR.
DURESS BUTTON.
SECURITY CAMERAS.

ABBREVIATIONS

Table with 2 columns: Abbreviation and Full Name. Includes: AMPERE, AMMETER; ABOVE FINISHED FLOOR; AMPERES INTERRUPTING CAPACITY; AIR HANDLING UNIT; AUTOMATIC TRANSFER SWITCH; AUDIO-VISUAL; BI-DIRECTIONAL ANTENNA SYSTEM; BELOW FINISHED GRADE; CONDUIT; CABLE (COMMUNITY) ANTENNA TELEVISION; COPPER; DISCONNECT; DOMESTIC WATER; ELECTRICAL CONTRACTOR; ENCLOSED CIRCUIT BREAKER; EQUIPMENT GROUNDING CONDUCTOR; ELECTRIC VEHICLE CHARGING STATION; ELECTRIC WATER COOLER; EXISTING; FIRE ALARM; FIRE ALARM ANNUNCIATOR PANEL; FIRE ALARM CONTROL PANEL; FIRE PROTECTION; GROUNDING ELECTRODE CONDUCTOR; GROUND; GENERAL CONTRACTOR; GROUND FAULT INTERRUPTER; HANDHOLE; HORSEPOWER; ISOLATED GROUND; JUNCTION BOX; KILOWATT-AMPERES; KILOWATTS; LIGHTING CONTACTOR; LIGHTING; LOW VOLTAGE; MAIN BREAKER; MECHANICAL CONTRACTOR; MAIN CIRCUIT BREAKER; MOTOR CONTROL CENTER; MANHOLE; MAIN LUGS ONLY; MOUNTING; NON FUSED; NOT IN CONTRACT; NIGHT LIGHT; POLE, PHASE; PULL BOX; PLUMBING CONTRACTOR; PANELBOARD; PAIR; PHOTO-VOLTAIC; SOLID NEUTRAL; SWITCH; SWITCHBOARD; TELECOM; UNDERGROUND; UNLESS OTHERWISE NOTED; VOLT; WEATHERPROOF; TRANSFORMER.

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SEALS
DocuSigned by:
Mr. Reginald D. Adams
1/29/2024

PERMIT SET
01.29.2024

PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(ELECTRICAL SUMMARY)
ELECTRICAL SUMMARY
ELECTRICAL SYSTEM AND EQUIPMENT
METHOD OF COMPLIANCE: ENERGY CODE [] PERFORMANCE [X] PRESCRIPTIVE
ASHRAE 90.1 [] PERFORMANCE [] PRESCRIPTIVE
LIGHTING SCHEDULE
LAMP TYPE REQUIRED IN FIXTURE PER SCHEDULE
NUMBER OF LAMPS IN FIXTURE PER SCHEDULE
BALLAST TYPE USED IN THE FIXTURE PER SCHEDULE
NUMBER OF BALLASTS IN FIXTURE PER SCHEDULE
TOTAL WATTAGE PER FIXTURE PER SCHEDULE
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED 13247W vs 37167W
TOTAL EXTERIOR WATTAGE SPECIFIED VS ALLOWED 684W vs 1000W
ADDITIONAL EFFICIENCY PACKAGE OPTIONS
(WHEN USING THE 2018 NCECC; NOT REQUIRED FOR ASHRAE 90.1)
[] C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
[X] C406.3 REDUCED LIGHTING POWER DENSITY
[] C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
[] C406.5 ON-SITE RENEWABLE ENERGY
[] C406.6 DEDICATED OUTDOOR AIR SYSTEM
[] C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING
DESIGNER STATEMENT:
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENT OF THE NORTH CAROLINA STATE BUILDING CODE
SIGNED: [Signature]
NAME: REGGIE ADAMS P.E.
TITLE: ELECTRICAL ENGINEER

REVISIONS table with columns: No., Description, Date

PROJECT DATA
DATE: 01.29.2024
DRAWN: RDA
CHECKED: RDA
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

ELECTRICAL LEGEND

E001

GENERAL NOTES

- NOT ALL NOTES ARE NECESSARILY APPLICABLE FOR THIS PROJECT. COORDINATE WITH DESIGNER WHERE APPLICABILITY IS IN QUESTION.
- ALL WORK ON THIS PROJECT SHALL CONFORM TO THE 2020 NEC, ALL LOCAL AND STATE CODES, STATE BUILDING CODE AND REQUIREMENTS BY THE AUTHORITY HAVING JURISDICTION.
- SYMBOLS AND ABBREVIATIONS MAY NOT ALL BE UTILIZED FOR THIS PROJECT.
- UNLESS OTHERWISE INDICATED THE CONTRACTOR, IS RESPONSIBLE FOR ALL CUTTING, CORE- DRILLING AND PATCHING REQUIRED TO INSTALL ELECTRICAL RELATED WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ELECTRICAL RELATED WORK WITH OTHER TRADES. THE CONTRACTOR IS CAUTIONED THAT IT IS TOTALLY HIS RESPONSIBILITY TO COORDINATE HANGERS AND SUPPORTS WITH OTHER TRADES. ADDITIONAL REQUIRED HANGERS & SUPPORTS MUST BE IN PLACE PRIOR TO APPLICATION OF FIRE PROOFING MATERIAL. ANY DAMAGE INCURRED ON FIRE PROOFING MATERIAL DUE TO INSTALLATION OF ELECTRICAL HANGERS WILL BE REPAIRED BY FIRE PROOFING SUB-CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- UTILITIES SERVING AREAS OF THIS PROJECT STILL OCCUPIED BY THE OWNER DURING DEMOLITION AND NEW CONSTRUCTION SHALL BE MAINTAINED UNTIL THE OWNER VACATES THE AREA. UNLESS OTHERWISE NOTED.
- ALL SHUTDOWNS WILL BE COORDINATED AND APPROVED THROUGH THE OWNER'S PROJECT MANAGER AND THE BUILDING MANAGER AND WILL REQUIRE ADVANCE NOTICE OF 10 WORKING DAYS EXCLUDING WEEKEND. THIS TIME LENGTH MAY BE LONGER OR SHORTER FOR SOME SHUTDOWNS AT THE OWNER'S DISCRETION. THE SCHEDULING OF SUCH SHUTDOWNS MAY TAKE TWO WEEKS OR MORE AND THE CONTRACTOR MUST BE PREPARED TO WORK SECOND OR THIRD SHIFT, SATURDAY OR SUNDAY AS NECESSARY TO PERFORM THE WORK. FURTHERMORE, IN SOME CASES AN ALTERNATE POWER SOURCE MAY BE REQUIRED, THE CONTRACTOR MUST BE PREPARED TO MAKE TAPS, INSTALL CIRCUIT BREAKERS, ETC., WHILE EXISTING EQUIPMENT IS ENERGIZED. ALL SHUTDOWNS WILL BE INITIATED AND CONTROLLED BY OWNER.
- VISIT THE SITE PRIOR TO BID DATE AND EXAMINE ALL AREAS TO BE DEMOLISHED AND RENOVATED. THOROUGHLY FAMILIARIZE YOURSELF WITH EXISTING CONDITIONS. NO EXTRA COMPENSATION WILL BE GIVEN FOR FAILURE TO THOROUGHLY EXAMINE EXISTING CONDITIONS TO DETERMINE THE EXACT SCOPE OF DEMOLITION WORK. "KEYED" NOTES ON THE DEMOLITION DRAWINGS ARE PROVIDED TO ASSIST BIDDERS TO DETERMINE THE SCOPE OF DEMOLITION WORK.
- EXISTING AREAS WHETHER WITHIN OR WITHOUT THE "GENERAL LIMITS OF CONSTRUCTION", SHALL BE REPAIRED WHERE ANY DAMAGE HAS OCCURRED DUE TO CONSTRUCTION BY THE CONTRACTOR.
- ALL AREAS OUTSIDE THE PROJECT LIMITS IN WHICH WORK MUST TAKE PLACE WILL BE CLEANED AND RETURNED TO NORMAL (INCLUSIVE OF CEILING TILE REPLACEMENT) AT THE END OF EACH DAY. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE EACH DAY BEFORE LEAVING THE CONTRACT PROJECT LIMITS REGARDING THE CLEANLINESS OF THE AREA IN WHICH WORK TOOK PLACE OUT SIDE OF THE PROJECT LIMITS.
- WHERE WORK IS TAKING PLACE OUTSIDE THE PROJECT LIMITS CANNOT ALLOW A RETURN TO NORMAL APPEARANCE OF WALLS, CEILING, ETC., AT THE END OF EACH DAY DUE TO ITS EXTENSIVE NATURE; THE CONTRACTOR SHALL ERECT A BLACK PLASTIC CURTAIN AROUND HIS WORK. SUCH A CURTAIN SHALL REMAIN IN PLACE UNTIL THE WORK IS COMPLETE. SUCH CURTAINS WILL HAVE CAUTIONARY SIGNS AFFIXED INDICATING CONSTRUCTION ACTIVITY WITHIN.
- PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PADS WITH CHAMFERED EDGES UNDER ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT.
- DO NOT MOUNT ANY WALL RECEPTACLES OR TELEPHONE/COMPUTER OUTLETS BACK TO BACK.
- USE 3/4" DEEP MUD RINGS ON BOXES IN 5/8" DRYWALL SO FACE OF RING IS FLUSH WITH FACE OF DRYWALL. PROVIDE CADDY #RLC ADAPTER ON ALL OUTLETS WHERE DRYWALL IS CUT IN EXCESS OF 1/8" LARGER THAN MUD RING OR WHERE THE DEVICE "EARS" ARE NOT SUPPORTED BY THE DRYWALL.
- 20A BRANCH CIRCUIT WIRE SIZING SHALL BE IN ACCORD WITH THE FOLLOWING TABLE:

VOLTS	DISTANCE	(FIRST DEVICE)	REMAINDER OF CIRCUIT
120/208	0' - 50'	#12	#12
	50' - 100'	#10	#12
	100' - 150'	#8	#10

- THE ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION OF LIGHTS, ETC. IN MECHANICAL ROOMS WITH MECHANICAL CONTRACTOR BEFORE ROUGH-IN TO AVOID CONFLICT WITH DUCT WORK.
- ALL CONDUCTORS SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM.
- ALL BRANCH CIRCUIT BREAKERS SHALL BE 20A, 1P, WITH 2 #12 AWG 1#12 GND IN 3/4" MINIMUM CONDUIT, UNLESS OTHERWISE NOTED. EXTERIOR CONDUIT OR UNDERGROUND/SLAB CONDUIT SHALL BE 1" C MINIMUM.
- ALL WIRING LUGS THROUGHOUT THE PROJECT, INCLUDING BUT NOT LIMITED TO BREAKERS, PANELBOARD/SWITCHBOARD LUGS, SAFETY SWITCH LUGS, AND TRANSFORMER LUGS, SHALL BE RATED FOR USE WITH 75 DEGREE CONDUCTORS SIZED IN ACCORDANCE WITH NEC TABLE 310-16.
- ALL RACEWAYS SHALL BE METAL UNLESS SPECIFICALLY NOTED OR APPROVED OTHERWISE. ANY RACEWAY IN POURED CONCRETE SHALL BE RIGID METAL (HEAVY WALL). REFER TO SPECIFICATIONS FOR ALL OTHERS.
- CONTRACTOR SHALL MINIMIZE NUMBER OF HOME RUN CONDUITS. CONTRACTOR MAY COMBINE UP TO THREE CIRCUITS PER HOME RUN IN A SINGLE CONDUIT; WHERE MORE THAN THREE (3) CONDUCTORS ARE PROVIDED PER RACEWAY MINIMUM CONDUIT SIZE SHALL BE 3/4".
- IN GENERAL ALL ELECTRICAL CONDUIT WILL BE RUN AT THE ELEVATION JUST BELOW THE BOTTOM OF THE STRUCTURAL BEAMS. THE CONTRACTOR SHALL OFFSET THE ELECTRICAL CONDUIT TO AVOID INTERFERENCE WITH ANY DUCTWORK, SPRINKLER OR MECHANICAL PIPING. THE CONTRACTOR SHALL COORDINATE HIS CONDUIT AND RACEWAY LOCATIONS WITH ALL OTHER TRADES BEFORE INSTALLATION.
- THE ROUTING FOR THE RACEWAY SHOWN ON THE DWGS IS DIAGRAMMATIC ONLY. BASED ON CURSORY FIELD SURVEY BY DESIGNER. CONTRACTOR IS CAUTIONED THAT SPACE ABOVE CLG IS VERY CONGESTED WITH EXISTING MECHANICAL, ELECTRICAL & PLUMBING ITEMS, AND WORK SPACE IS LIMITED. CONTRACTOR IS REQUIRED TO VISIT THE SITE PRIOR TO BID DATE AND LOOK ABOVE THE CLG OF THE PROPOSED ROUTING TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS. PROVIDE ANY AND ALL ADDITIONAL JB'S, OFFSETS, CONDUITS AND FITTINGS AS REQUIRED TO AVOID ANY EXIST. OBSTRUCTIONS ALONG THE PROPOSED ROUTING. ANY SHUTDOWNS CAUSED BY RELOCATING EXISTING EQUIPMENT SHALL BE COORDINATED WITH OWNER. FAILURE TO EXAMINE EXISTING CONDITIONS AND COORDINATE THE EXACT CONDUIT ROUTING WILL NOT EXCUSE CONTRACTOR FROM PERFORMING ALL DUTIES NECESSARY TO COMPLETE THE WORK. DO NOT ROUTE CONDUIT IN A MANNER THAT WILL BLOCK ACCESS TO EXISTING ITEMS AS JUNCTION BOXES, VALVES, FILTERS OR SERVICE ACCESS TO EQUIPMENT.
- ELECTRICAL PLANS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL ALIGN FIXTURES, FIRE ALARM DETECTORS, CEILING DIFFUSERS, ETC. AS REQUIRED TO PROVIDE A PATTERN OF UNIFORMITY. AT NO TIME SHALL A SMOKE DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN GRILLE.
- WIRE AND CIRCUIT BREAKERS ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND SHALL VERIFY THE ELECTRICAL DATA FOR EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED BY THE OTHER CONTRACTORS AND RECOMPUTE WIRE AND BREAKER SIZES IF REQUIRED TO COMPLY WITH THE N.E.C.
- REFER TO MECHANICAL DRAWINGS AND COORDINATE VERTICAL RUNS OF WIRE AND CONDUIT WITH MECHANICAL PIPING. COORDINATE WITH MECHANICAL CONTRACTORS. (NOTE: STACK RUNS OF CONDUIT AND PROVIDE OFFSETS AS NECESSARY.)
- LABEL ALL CONDUITS TERMINATING IN THE CEILING CAVITIES.
- LIGHTING & POWER PANELS ARE DESIGNED AROUND SQUARE "D" "NQOD" WITH A MAXIMUM DEPTH OF 5 3/4" AND WIDTH OF 20".
- THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS, JUNCTION BOXES AND DISCONNECT SWITCHES SHALL BE REVIEWED AND COORDINATED WITH CASEWORK DRAWINGS AND ACTUAL EQUIPMENT LOCATION, PRIOR TO INSTALLATION. ANY DIFFERENCES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL CEILING TYPES AND FINISHES BEFORE PURCHASE OF ANY LIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDED FOR THE CEILING TO BE INSTALLED. ANY DIFFERENCES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THE PROJECT, PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND TO ALLOW FOR OPTIMUM MAINTENANCE AND WORKING SPACE. PROVIDE COORDINATION DRAWINGS TO THE ENGINEER FOR APPROVAL. ANY REWORK THAT NEEDS TO BE DONE DO TO CONFLICTS BETWEEN TRADES SHALL BE DONE AT THIS CONTRACTORS EXPENSE.
- ALL LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF THE SUSPENDED CEILING SYSTEM. REFER TO THE SPECIFICATIONS FOR MORE DETAILED INFORMATION.
- WHERE ELECTRICAL EQUIPMENT PENETRATES EXTERIOR WALLS OR THE ROOF, THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ENGINEER. SUBMIT DETAIL OF PROPOSED WORK.
- IN ALL AREAS WHERE THE FIRE RATED WALLS, FLOORS AND CEILINGS ARE INSTALLED OR ARE EXISTING, ALL PENETRATIONS OF ELECTRICAL CONDUITS OR OTHER RELATED ELECTRICAL MATERIALS SHALL BE PROPERLY SEALED WITH APPROVED FIRE RATED MATERIALS TO MAINTAIN THE RATINGS OF THE BUILDING CONSTRUCTION.
- ALL FUSES, DISCONNECT SWITCHES AND BREAKER SIZES, SHOWN FOR MECHANICAL EQUIPMENT, SHALL BE VERIFIED BEFORE THE PURCHASE OR INSTALLATION OF SAID EQUIPMENT, WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.
- UPON COMPLETION OF WORK ALL KEYS TO ELECTRICAL POWER PANELS SHALL BE TURNED OVER TO THE OWNER AND A SIGNED RECEIPT SHALL BE OBTAINED.
- ALL MULTIWIRE BRANCH CIRCUITS NEED TO HAVE SEPARATE NEUTRAL CONDUCTORS TO COMPLY WITH NEC 2020 ARTICLE 210.4. NO SHARED NEUTRAL CONDUCTORS PERMITTED ON THIS PROJECT.
- ANY RECEPTACLE WITH-IN 6'-0" OF A SINK SHALL BE A GROUND FAULT TYPE (GFI) RECEPTACLE.
- ALL WORK ON THIS PROJECT SHALL BE INSTALLED IN COMPLIANCE WITH ANSI A117.1, ADA STANDARDS FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES.

INTERIOR LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER	MANUFACTURER CATALOG MUNBER	LAMPS	NO. OF BALLASTS	INPUT WATTS	VOLT	REMARKS
F1	PENDANT MOUNTED DIRECT/INDIRECT	STARTEK (TEAM EQUAL) (SESCO EQUAL)	BEAMD1-8FT-750-350-SD-BW-35K-90-PW-ACW10-U-1C EQUAL EQUAL	LED	LED DRIVER	62	UNV	PROVIDE CR190 LEDES.
F1E	PENDANT MOUNTED DIRECT/INDIRECT	STARTEK (TEAM EQUAL) (SESCO EQUAL)	BEAMD1-8FT-750-350-SD-BW-35K-90-PW-ACW10-U-1C-EMB10 EQUAL EQUAL	LED	LED DRIVER	62	UNV	PROVIDE CR190 LEDES.
F2	MID-BAY LED	ALPHABET (TEAM EQUAL) (SESCO EQUAL)	DELTA-M-SW-40LM-35K-90-CS-WH-RPX-UNV-DIM10 EQUAL EQUAL	LED	LED DRIVER	40	UNV	PROVIDE CR190 LEDES. PROVIDE RIGID PENDANT IN LENGTH REQUIRED. MT 11"4" AFF TO BOTTOM OF FIXTURE.
F3	WALL MOUNTED LED	SPI (TEAM EQUAL) (SESCO EQUAL)	EW11906-L57W-PT51-120/277V-3500K-BRK-DF_DIM1 EQUAL EQUAL	LED	LED DRIVER	57	UNV	PROVIDE CR190 LEDES.
F3E	WALL MOUNTED LED	SPI (TEAM EQUAL) (SESCO EQUAL)	EW11903-L57W-PT51-120/277V-3500K-BRK-DF_DIM1-EMR EQUAL EQUAL	LED	LED DRIVER	57	UNV	PROVIDE CR190 LEDES.
F4	2X4 LED TROFFER	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	STAK-2X4-3000LM-80CRI-35K-COL-MIN10-ZT-MVOLT EQUAL EQUAL	LED	LED DRIVER	24	UNV	
F4E	2X4 LED TROFFER	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	STAK-2X4-3000LM-80CRI-35K-COL-MIN10-ZT-MVOLT-E7W EQUAL EQUAL	LED	LED DRIVER	24	UNV	
F4E(DM)	2X4 LED TROFFER	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	STAK-2X4-3000LM-80CRI-35K-COL-MIN10-ZT-MVOLT-E7W EQUAL EQUAL	LED	LED DRIVER	24	UNV	FIXTURE TO BE DIMMABLE. PROVIDE UL924 RELAY IF REQUIRED TO INSURE OPERATION ON LOSS OF POWER
F5	PENDANT MOUNTED INDUSTRIAL	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	ZL1D-L48-SMR-3000LM-FST-MVOLT-35K-80CRI-WGZ48 EQUAL EQUAL	LED	LED DRIVER	30	UNV	PROVIDE ON CHAIN HANGERS
F5E	PENDANT MOUNTED INDUSTRIAL	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	ZL1D-L48-SMR-3000LM-FST-MVOLT-35K-80CRI-WGZ48-E7W EQUAL EQUAL	LED	LED DRIVER	30	UNV	PROVIDE ON CHAIN HANGERS
F6	2X2 LED TROFFER	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	STAK-2X2-2000LM-80CRI-35K-COL-MIN10-ZT-MVOLT EQUAL EQUAL	LED	LED DRIVER	16.8	UNV	
F7	2X4 FLAT PANEL	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	CPX 2X4 ALO8 SWWW7 M2 EQUAL EQUAL	LED	LED DRIVER	40	UNV	
F8T	TWO CIRCUIT TRACK LIGHTING	JUNO (TEAM EQUAL) (SESCO EQUAL)	2-CIRCUIT 120 VOLT WHITE TRACK EQUAL EQUAL	LED	LED DRIVER	0	UNV	
F8A	LED TRACK HEAD	JUNO (TEAM EQUAL) (SYSCO EQUAL)	T236L WHITE EQUAL EQUAL	LED	LED DRIVER	21	UNV	PROVIDE TWELVE (12) TRACK HEADS
F9	DECORATIVE WALL MOUNTED LED	DELTA (TEAM EQUAL) (SESCO EQUAL)	24621-9330 W-W EQUAL EQUAL	LED	LED DRIVER	3	UNV	PROVIDE NON-DIMMING REMOTE DRIVER AND WALL MOUNTING KIT.
F10	LED TAPE LIGHT	QTRAN (TEAM EQUAL) (SESCO EQUAL)	SW24/1.5-DRY-35-BRL-TBD-WH-CL2P-48" VEVE EXTRUSTION EQUAL EQUAL	LED	LED DRIVER	6	UNV	PROVIDE WITH NON-DIMMING 24 VOLT POWER SUPPLY.
F11	4" DOWNLIGHT	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	LDN4R-35/10LS6-WR-LSS-TRW-MVOLT EQUAL EQUAL	LED	LED DRIVER	11	UNV	
F12	WALL MOUNTED LED	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	CLX-L36-2250LM-SF-FDL-MVOLT-GZ1-35K-80CRI EQUAL EQUAL	LED	LED DRIVER	18	UNV	WALL MOUNT ABOVE DOOR

EMERGENCY LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER	MANUFACTURER CATALOG MUNBER	LAMPS	NO. OF BALLASTS	INPUT WATTS	VOLT	REMARKS
EM	EMERGENCY EGRESS FIXTURE	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	ELM4L EQUAL EQUAL	LED	LED DRIVER	4	UNV	
EX	EDGE LIT EXIT	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	EDG-1 1 OR 2 AS SHOWN;GMR-EL EQUAL EQUAL	LED	LED DRIVER	3	UNV	
INV 1/2	REMOTE 375 WATT EMERGENCY INVERTER	IOTA (TEAM EQUAL) (SESCO EQUAL)	IS 375 LED EQUAL EQUAL	NA	NA	375	277	

EXTERIOR LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER	MANUFACTURER CATALOG MUNBER	LAMPS	NO. OF BALLASTS	INPUT WATTS	VOLT	REMARKS
X1	6"X48" LED SLIM PROFILE LED	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	LSIX-8FT-4000LM-80CRI-35K-FFR-SWL-MVOLT-DNA EQUAL EQUAL	LED	LED DRIVER	30	UNV	SEE NOTE 5 BELOW.
X2	6" SQUARE LED DOWNLIGHT	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	LDN6SQ-35/10-LS6-CTBD-FTBD-CTBD-MVOLT EQUAL EQUAL	LED	LED DRIVER	11	UNV	SEE NOTE 6 BELOW.
X3	WALL MOUNTED LED	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	WST LED-P2-40K-VF-MVOLT-BLT EQUAL EQUAL	LED	LED DRIVER	24	UNV	
X4	WALL MOUNTED LED	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	WST LED-P1-40K-VF-MVOLT-BLT EQUAL EQUAL	LED	LED DRIVER	11	UNV	
X4E	WALL MOUNTED LED	LITHONIA (TEAM EQUAL) (SESCO EQUAL)	WST LED-P1-40K-VF-MVOLT-BLT-E20WC EQUAL EQUAL	LED	LED DRIVER	11	UNV	
X5	96" LED LINEAR FLOOD	HYRDEL (TEAM EQUAL) (SESCO EQUAL)	HLF501-LSL-8FT-MSL4-450LMF-80CRI-35K-MVOLT-30X60DEG-FCA-H500ADJH2-SIT EQUAL EQUAL	LED	LED DRIVER	34	UNV	

- NOTES:**
- TBD-OPTION TO BE DECIDED BASED ON FIELD CONDITIONS
 - CTBD-COLOR TO BE DECIDED PRIOR TO BIDDING
 - FTBD-FINISH TO BE DECIDED PRIOR TO BIDDING
 - (DM) NOTATION AT FIXTURE ON PLAN DENOTES EMERGENCY FIXTURE REQUIRING UL 924 RELAY TO ALLOW CONTROL.
 - NEW FIXTURE IS SMALLER THAN EXISTING. PROVIDE CUSTOM METAL FLANGE TO CLOSE OPENING. FINISH TO MATCH EXISTING. PROVIDE SAMPLE TO ARCH FOR REVIEW.
 - NEW FIXTURE IS SMALLER THAN EXISTING. PROVIDE CUSTOM METAL FLANGE TO CLOSE OPENING. FINISH TO MATCH EXISTING. IN ADDITION, PROVIDE CUSTON TRIM TO MATCH FLANGE PROVIDE SAMPLE TO ARCH FOR REVIEW.
 - REFER TO DIVISION 26 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS RELATED TO THE LIGHTING PACKAGE.



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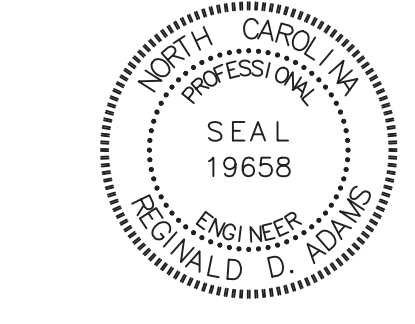
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SEALS

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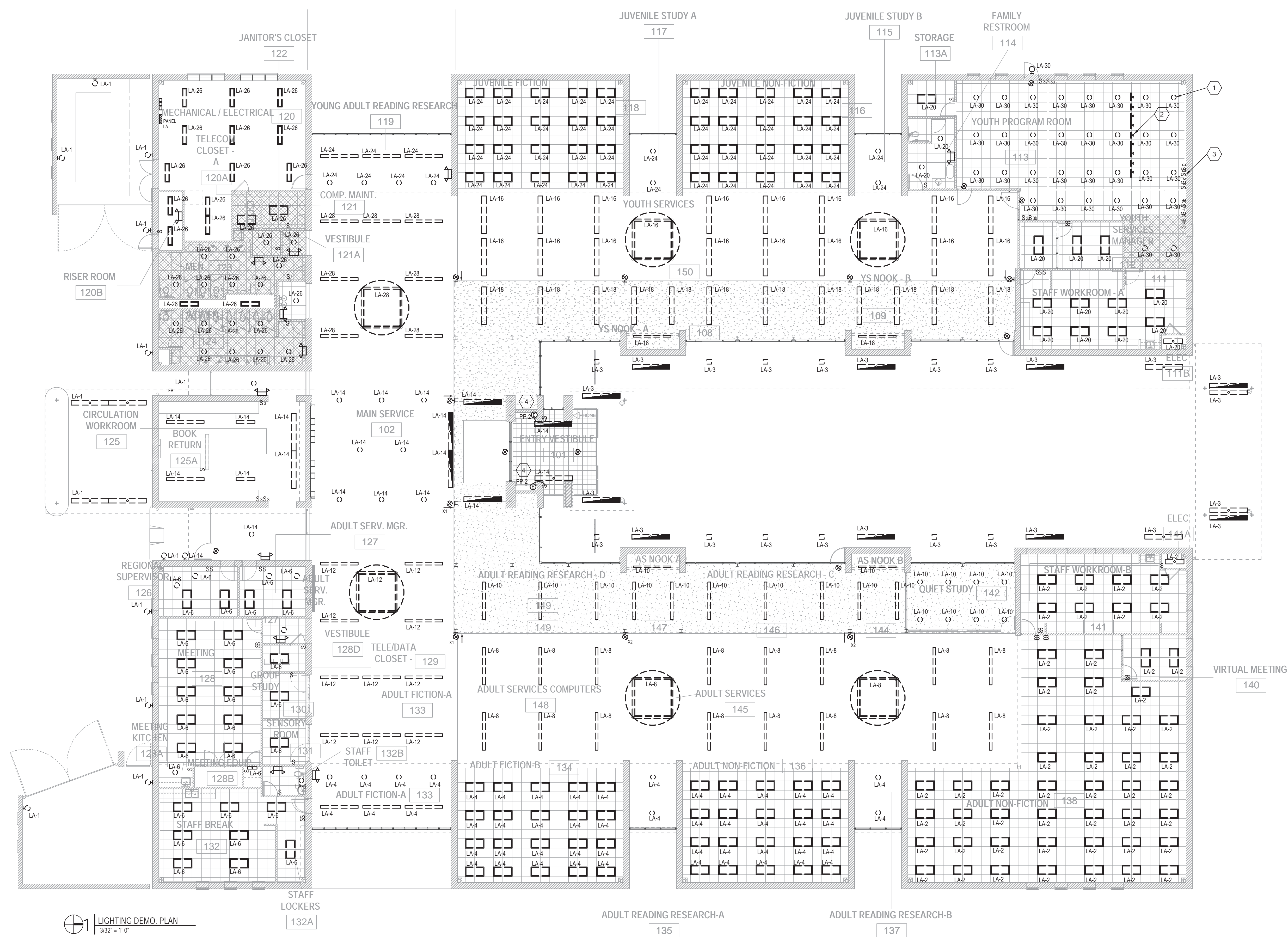
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SHEET DATA

GENERAL NOTES & SCHEDULES

SHEET NO.



1 LIGHTING DEMO. PLAN
3/32" = 1'-0"

GENERAL NOTES:

- REFER TO SHEET E001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.
- ALL EXISTING LIGHTING IS FED FROM PANEL "LA" THRU LIGHTING CONTACTORS LOCATED IN ROOM 120 NEXT TO PANEL "LA" UON.
- ALL LIGHTING AND SWITCHING SHOWN IS TO BE REMOVED. REMOVE WIRING TO SOURCE, UTILIZE EXISTING RACEWAYS FOR NEW WORK.
- WHERE SWITCHING IS REMOVED AND NO NEW SWITCHING IS TO BE INSTALLED IN THAT SAME LOCATION, CONTRACTOR SHALL PROVIDE STAINLESS STEEL COVER PLATE OVER SWITCH BOX.
- REFERENCE A-SERIES SHEET FOR EXTENT OF CEILING DEMOLITION.

KEYED NOTES:

- TYPICAL EXISTING LIGHT FIXTURE. ALL FIXTURES ARE TO BE REMOVED AND WIRE TO BE REMOVED BACK TO LIGHTING PANEL LA, THRU EXISTING CONTACTOR. CONDUIT SYSTEM IS TO REMAIN AND BE REUSED FOR NEW WORK. TYPICAL ALL LIGHTING (EXCEPT AS NOTED BELOW).
- EXISTING TRACK TO BE REMOVED. CIRCUITED TO PB-2.4.
- TYPICAL LIGHT SWITCH. ALL SWITCHES AND THEIR WIRES ARE TO BE REMOVED. EXISTING SWITCH BOXES SHALL REMAIN AND BE REUSED OR A BLANK STAINLESS STEEL COVER PLATE PROVIDED. TYPICAL ALL INTERIOR LIGHT SWITCH LOCATIONS.
- EXISTING CABINET LIGHTS TO BE REMOVED. REFERENCE E200 FOR NEW WORK RELATED TO EXISTING WIRING.

SEALS
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Mr. Reynold D. Adams
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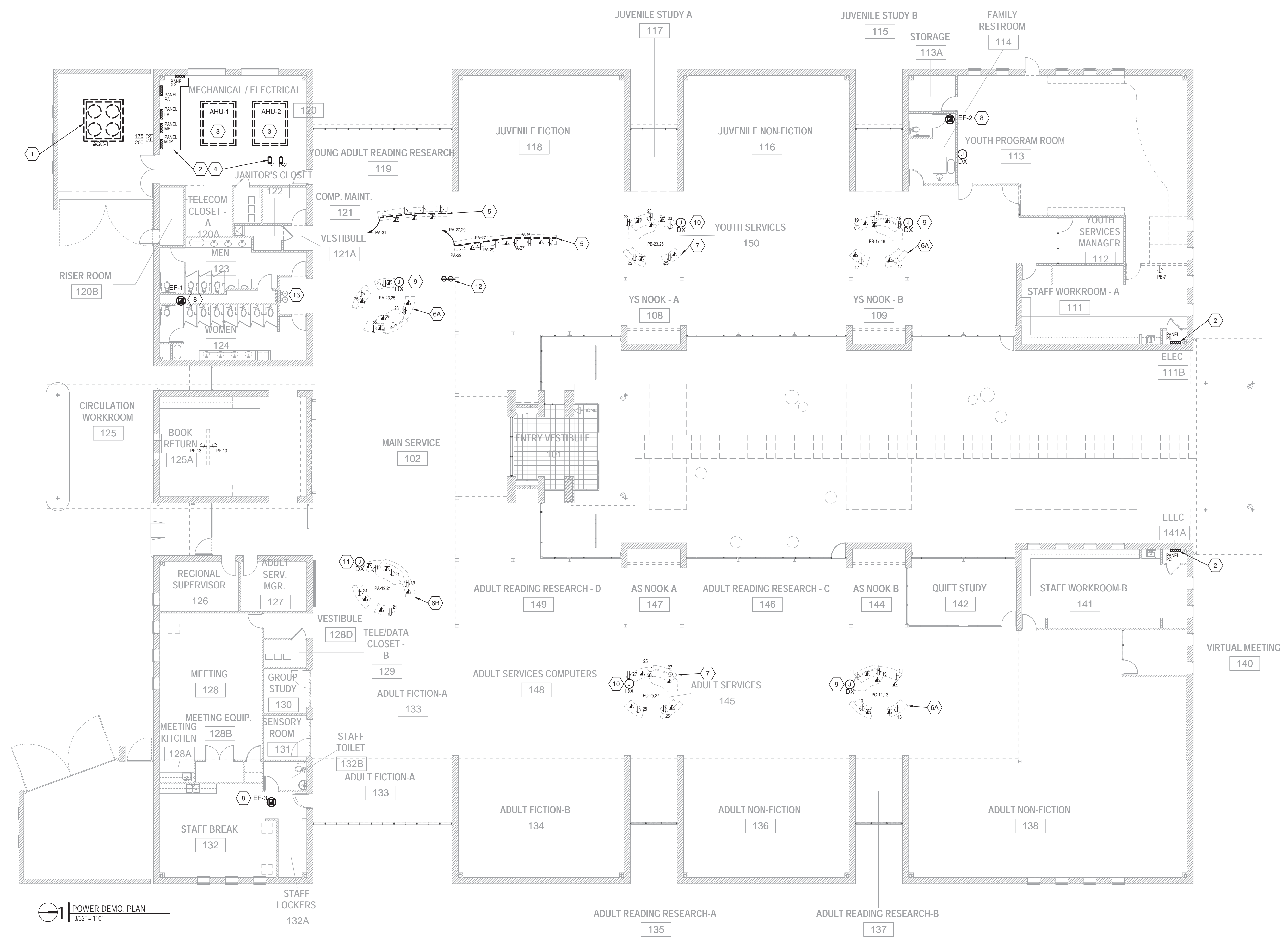
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SHEET DATA
LIGHTING DEMOLITION

SHEET NO.

E100



POWER DEMO PLAN
3/32" = 1'-0"

GENERAL NOTES:
1. REFER TO SHEET E001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.

KEYED NOTES:

- 1 REMOVE DISCONNECT AND WIRING TO SOURCE (PANEL MDP) FOR CURRENT AIR COOLED CHILLER.
- 2 EXISTING PANELS. REFERENCE E600 FOR REVISIONS TO SCHEDULES.
- 3 EXISTING AHU TO BE REMOVED. REMOVE WIRING AND CONDUIT TO SOURCE (PANEL ME).
- 4 EXISTING PUMPS TO BE REMOVED. REMOVE WIRING AND CONDUIT TO SOURCE (PANEL ME).
- 5 EXISTING SHELVING DISPLAYS TO BE DEMOLISHED. REMOVE POWER AND TELECOM WIRING TO SOURCE. CUT CONDUITS TO BELOW SLAB AND CAP.
- 6A EXISTING SERVICE DESK TO BE DEMOLISHED. REMOVE POWER AND TELECOM WIRING TO SOURCE. CUT CONDUITS TO BELOW SLAB AND CAP AS NECESSARY. MAINTAIN CONDUIT FOR EXISTING RECEPTACLE PER KEYNOTE #12.
- 6B EXISTING SERVICE DESK TO BE DEMOLISHED. REMOVE POWER AND TELECOM WIRING TO SOURCE. REFERENCE E201 FOR ADDITIONAL WORK REQUIRED FOR TELECOM AND POWER CONDUITS AND WIRING.
- 7 EXISTING SERVICE DESK TO BE DEMOLISHED. CONTRACTOR SHALL RE-WORK EXISTING CONDUIT AND UTILIZE FOR NEW WORK. REMOVE TELECOM WIRING TO SOURCE.

KEYED NOTES:

- 8 CONNECT NEW EXHAUST FANS TO EXISTING CIRCUITS. COORDINATE WITH DIVISION 23.
- 9 EXISTING DURESS BUTTON. WIRING AND BUTTON TO BE REMOVED BY DIVISION 27. DIVISION 26 TO CUT AND CAP CONDUIT BELOW SLAB.
- 10 EXISTING DURESS BUTTON. WIRING AND BUTTON TO BE REMOVED BY DIVISION 27. DIVISION 26 TO CUT EXISTING 1" CONDUIT BACK AND PROVIDE NEW 1" CONDUIT AS REQUIRED FROM POINT OF REMOVAL AND STUB-UP IN NEW CIRCULATION DESK. REFERENCE SEC200 FOR EXTENT OF NEW WORK.
- 11 EXISTING DURESS BUTTON. WIRING AND BUTTON TO BE REMOVED BY DIVISION 27. DIVISION 26 TO CUT EXISTING 1" CONDUIT BACK REQUIRED FROM POINT OF REMOVAL AND STUB-UP IN NEW CIRCULATION DESK. REFERENCE SEC200 FOR EXTENT OF NEW WORK.
- 12 EXISTING RECEPTACLE CONNECTED TO PA-23. PROVIDE NEW CONDUIT AS NECESSARY AT SERVICE DESK AND PROVIDE NEW WIRING FROM PANEL TO RECEPTACLE.
- 13 MAINTAIN EXISTING SERVICE SWITCH RELATED TO EWC TO BE REMOVED BY DIVISION 22 CONTRACTOR.

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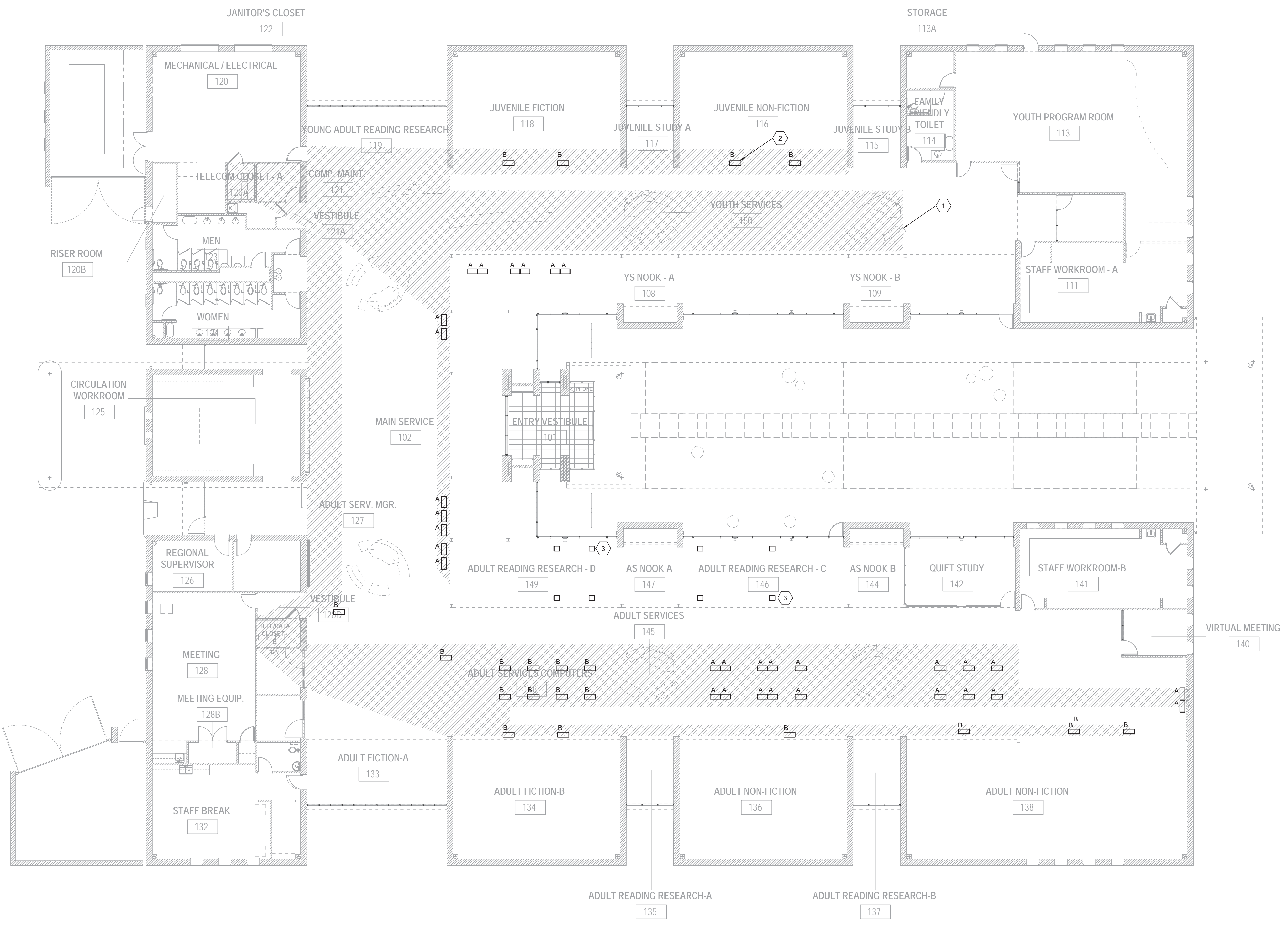
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SHEET DATA
POWER DEMOLITION

SHEET NO.
E101



POWER DEMO. PLAN
3/32" = 1'-0"

- KEYED NOTES:**
- 1 PURPORTED EXTENTS OF EXISTING UNDERGROUND RACEWAY SYSTEM MAJOR ROUTING.
 - 2 CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING FLOOR BOX COVERS. COVERS TO BE:
A-LEGRAND CAT#FP-B-TC-NK (COVERS WITH NO CARPET INSERTS)
B-LEGRAND CAT#FP-PE-TC-NK (FURNITURE FEED COVERS)
 - 3 REPLACE RECEPTACLE COVERS WITH NEW STAINLESS DUPLEX COVER PLATE.

SEALS

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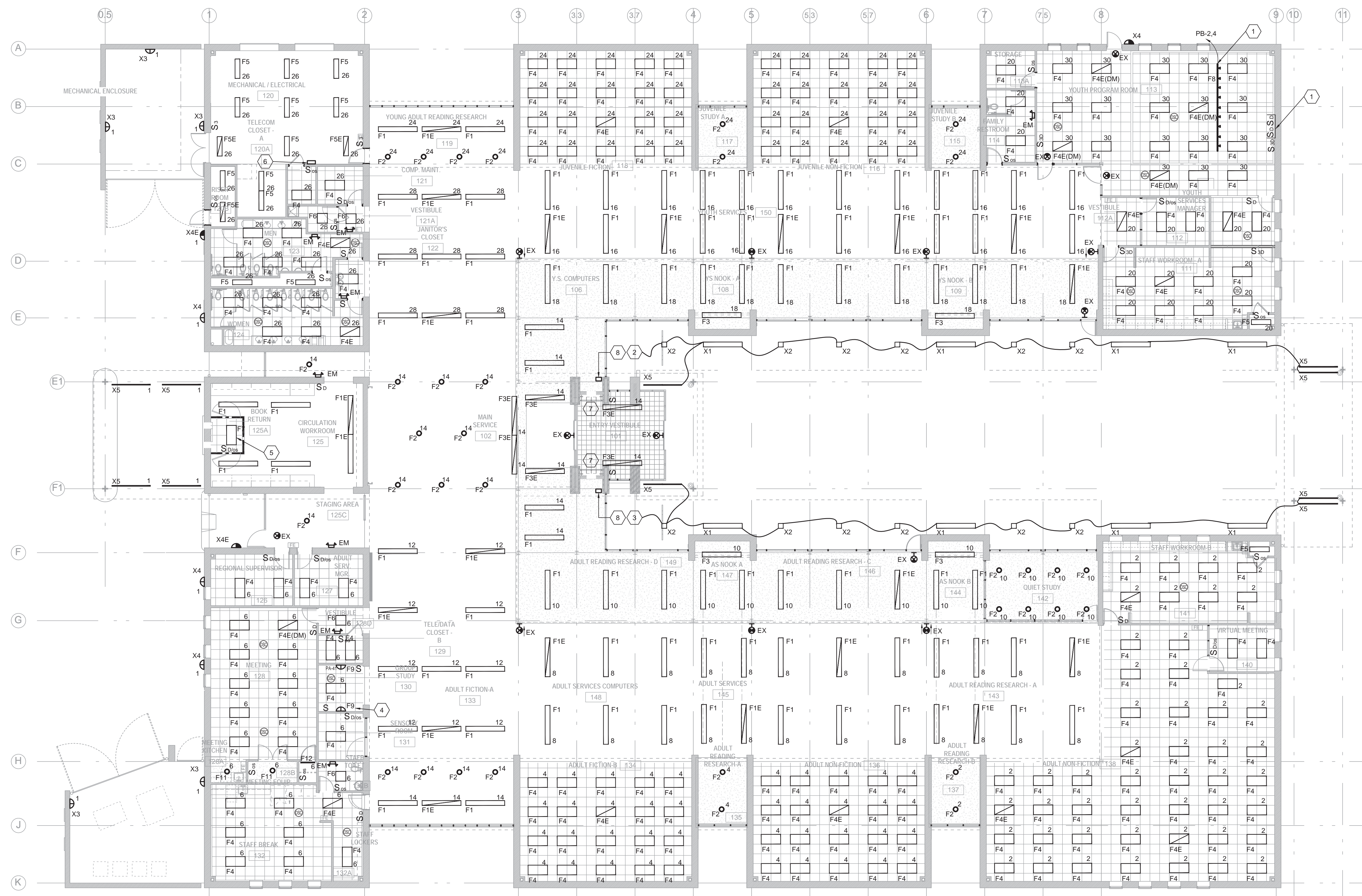
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SHEET DATA
EXIST. IUG PATHWAYS/ FL. BOX WORK



1 | NEW LIGHTING PLAN
3/32" = 1'-0"

RATED PARTITION WALL LEGEND
1-HR RATED WALL

- GENERAL NOTES:**
- REFER TO SHEET E001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.
 - REFER TO SHEET E002 FOR LUMINAIRE SCHEDULE.
 - REFERENCE ARCH. ROP FOR ADDITIONAL INFORMATION REGARDING MOUNTING AND EXISTING HVAC DUCTWORK.
 - ALL INTERIOR EMERGENCY LIGHTING SHALL REMAIN UNSWITCHED UON. CONNECT TO NEAREST CIRCUIT.
 - CONTRACTOR SHALL PROVIDE ALL NEW WIRING IN EXISTING RACEWAY SYSTEMS TO PANEL "LA", HOWEVER NEW RACEWAY SYSTEMS SHALL BE PROVIDED FOR ANY ADDITIONAL FIXTURES NOT ASSOCIATED WITH THOSE BEING DEMOLISHED AND FOR ANY ADDITIONAL CONTROLS SUCH AS CEILING MOUNTED OCCUPANCY SENSORS, THRU EXISTING LIGHTING CONTACTORS (NOTE AT CONSTRUCTION DOCUMENTS-RECOMMEND CARRYING AN ALLOWANCE OF 500 LF OF 2" EMT FOR NEW WIRING SYSTEMS).
 - WIRING FROM INVERTERS TO FIXTURES SHALL NOT BE SHARED WITH ANY NEW NON-EMERGENCY WIRING.

- KEYED NOTES:**
- CONNECT TO NEW DIMMERS THIS ROOM.
 - PROVIDE 3 #10 AWG IN EXISTING CONDUIT SYSTEM TO CIRCUIT LA-3 THRU LIGHTING INVERTER INV-1. REFERENCE KEYNOTE #6 THIS SHEET FOR LOCATIONS.
 - PROVIDE 3 #10 AWG IN EXISTING CONDUIT SYSTEM TO CIRCUIT LA-3 THRU LIGHTING INVERTER INV-2. REFERENCE KEYNOTE #6 THIS SHEET FOR LOCATIONS.
 - NEW FIXTURE. PROVIDE NEW WIRING AND CONDUIT AS NECESSARY. TYPICAL TYPE "F9".
 - NEW FIXTURE. PROVIDE NEW WIRING AND CONDUIT AS NECESSARY. TYPICAL TYPE "F7".
 - PROVIDE NEW LIGHTING INVERTERS INV-1 AND INV-2 ADJACENT TO DOOR LEADING TO SPACE 120A. PROVIDE NEW WIRING FROM INVERTERS TO FIXTURES AS NOTED ABOVE AND NEW 3 #10, #10G IN 2" C TO EXISTING LIGHTING CONTACTOR FOR EXTERIOR LIGHTING.
 - PROVIDE THREE (3)-TYPE "F10" LED TAPE LIGHTS AT ENTRY VESTIBULE. LIGHTING TO BE MOUNTED IN SHELVING. EXTRUSION TYPE TO BE DETERMINED. PROVIDE MAN. RECOMMENDED DRIVER ABOVE CEILING AS NOTED, KEYNOTE #8.
 - PROVIDE DRIVER FOR TYPE "F10" ABOVE CEILING. G.C. TO PROVIDE 12X12 ACCESS PANEL. CONNECT TO EXISTING CIRCUITS PP-2. PROVIDE NEW SWITCHING AS SHOWN.

SEALS

Designed by
Mr. Reginald D. Adams
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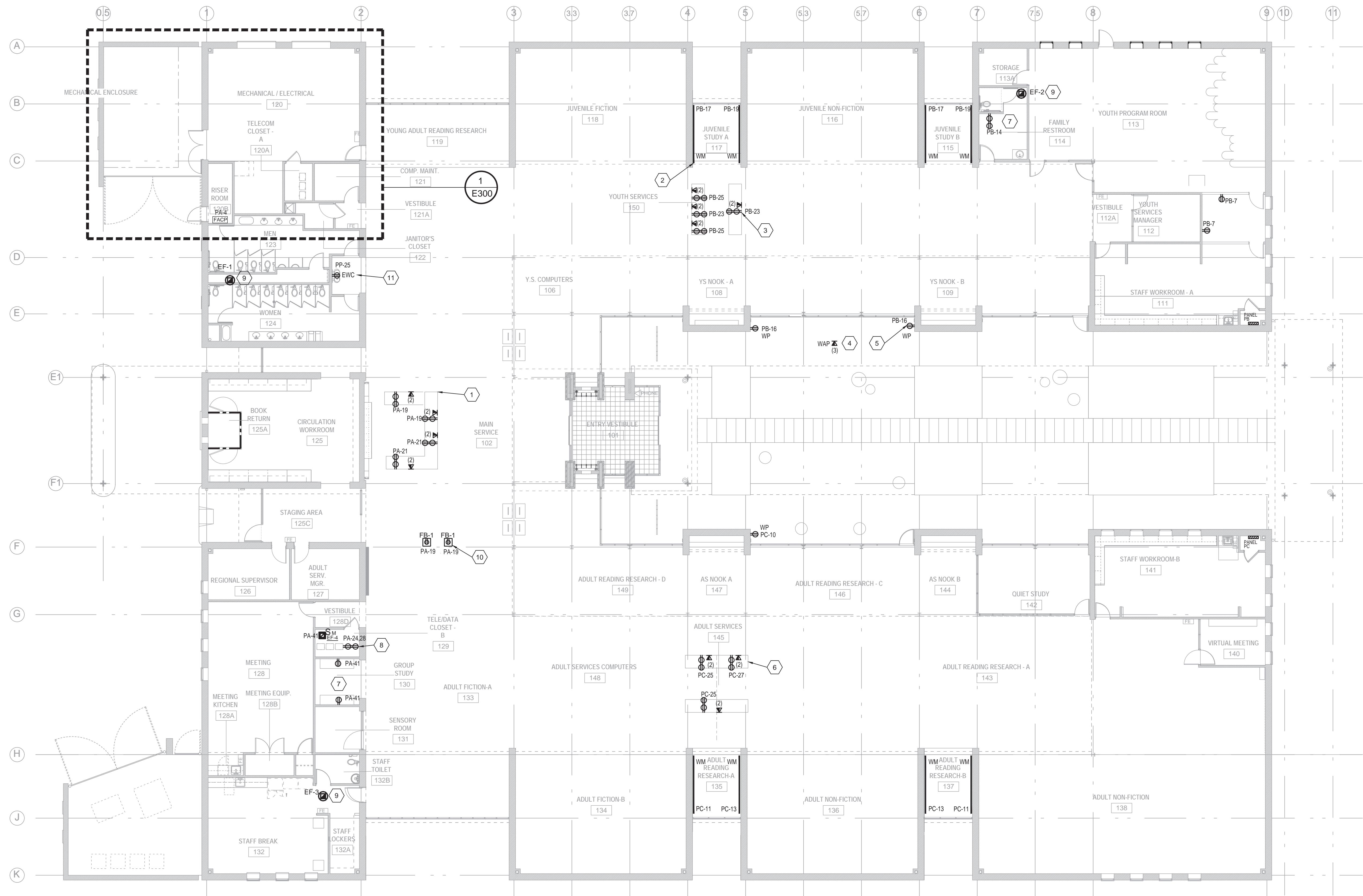
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LIGHTING PLAN

SHEET NO.

E200



1 NEW POWER PLAN
3/32" = 1'-0"

RATED PARTITIONWALL LEGEND
- - - - - 1-HR RATED WALL

GENERAL NOTES:

- REFER TO SHEET E001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.
- PATCH ALL EXISTING FINISHES AS REQUIRED BY EXTENT OF NEW WORK.
- DIVISION 26 CONTRACTOR IS RESPONSIBLE FOR POWER AND CONDUIT ONLY FOR TELECOM SYSTEMS. INSTALLATION OF WIRING AND DEVICES WILL BE BY THE DIVISION 27 TELECOM CONTRACTOR.**

KEYED NOTES:

- PROVIDE QUAD RECEPTACLES AND TELECOM OUTLETS AT NEW SERVICE DESK. TELECOM WIRING SHALL BE PROVIDED IN 1.25" CONDUIT. INTERCEPT EXISTING CONDUITS FROM KEYNOTE #6B, E101 AND PROVIDE NEW WIRING AS NECESSARY.
- PROVIDE HORIZONTAL WIREMOLD AT 34" AFF. BASIS OF DESIGN: WIREMOLD AL5200. PROVIDE WITH 20 AMPERE OUTLETS 18" ON CENTER, TYPICAL EIGHT (8) LOCATIONS, REFERENCE 3/E501. WIRE AS SHOWN.
- PROVIDE QUAD RECEPTACLES AND TELECOM OUTLETS AT NEW SERVICE DESK. WIRING FOR OUTLETS SHALL BE AS SHOWN. ANY NEW CONDUIT FOR TELECOM SHALL BE 1.25" C. PROVIDE NEW TURN UPS IN EXISTING CONDUIT TO FURNITURE. REFERENCE KEYNOTE #7, E101 FOR ADDITIONAL INFORMATION.
- PROVIDE JUNCTION BOX FOR WIRELESS ACCESS POINT IN EXTERIOR SOFFIT. PROVIDE 1-1/4" FROM BOX TO ROOM 120A.
- PROVIDE NEW GFCI OUTLET IN LOCKABLE METAL WEATHERPROOF COVER. WIRE AS SHOWN. TYPICAL.
- PROVIDE QUAD RECEPTACLES AND TELECOM OUTLETS AT NEW SERVICE DESK. WIRING FOR OUTLETS SHALL BE AS SHOWN. ANY NEW CONDUIT FOR TELECOM SHALL BE 1.25" C. PROVIDE NEW TURN UPS IN EXISTING CONDUIT TO FURNITURE. REFERENCE KEYNOTE #7, E101 FOR ADDITIONAL INFORMATION.
- PROVIDE NEW RECEPTACLES IN SPACE AS SHOWN. MT DEVICES HORIZONTALLY AT 42" AFF. DEVICES AND PLATES TO BE BLACK IN THIS AREA ONLY.
- PROVIDE QUAD RECEPTACLES MOUNTED ON EXISTING LADDER RACK (OR AS DIRECTED BY DESIGNER) FOR NEW TELECOM RACK PROVIDED BY DIVISION 27.
- COORDINATE RECONNECTION OF NEW EXHAUST FANS TO EXISTING WIRING WITH DIVISION 23.
- PROVIDE NEW TWO (2) GANG ON-GRADE FLOOR BOX. BASIS OF DESIGN LEGRANDE RFB-20G. PROVIDE WITH TWO (2) 20-AMPERE OUTLETS (NO LOW VOLTAGE REQUIRED). COVER TO BE LEGRAND CAT#FP-C-TC-NK. PROVIDE NEW CONDUIT AND WIRING AS SHOWN.
- PROVIDE NEW OUTLET AND REPLACE EXISTING 20 AMPERE BREAKER SERVING CURRENT EWC WITH A NEW 20 AMPERE GFCI BREAKER.

SEALS
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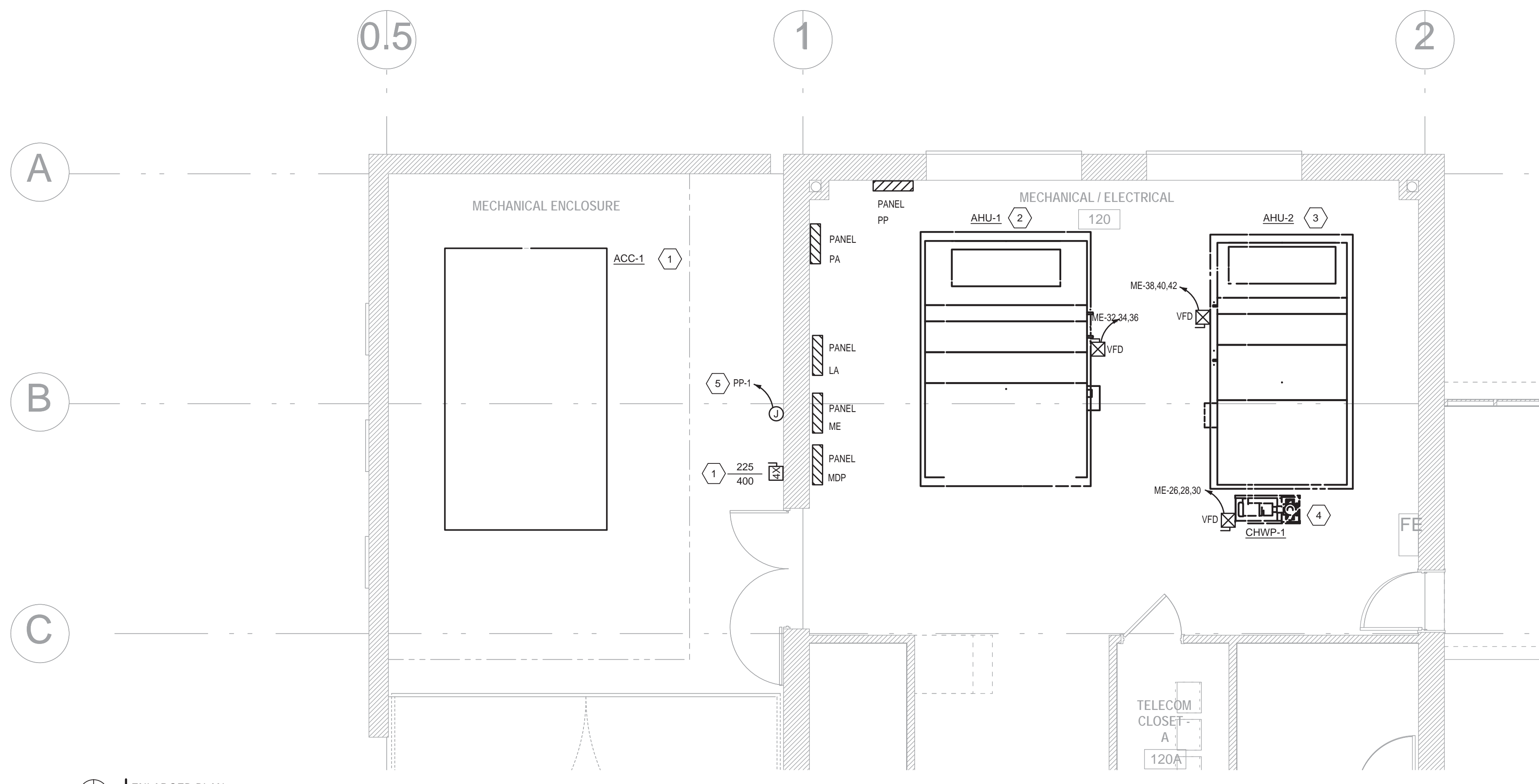
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POWER PLAN

SHEET NO.

E201



- KEYED NOTES:**
- 1 PROVIDE NEW FUSIBLE DISCONNECT AND WIRING PER E400 FOR NEW AIR COOLED CHILLER. ROUTE CONDUIT IN CONJUNCTION WITH DIVISION 23 CHILLED WATER PIPING.
 - 2 NEW AHU-1. PROVIDE WIRING AS PART OF ALTERNATE 1.
 - 3 NEW AHU-2. WIRING WILL BE PART OF BASE BID.
 - 4 NEW CHILLED WATER PUMP. WIRING WILL BE PART OF BASE BID.
 - 5 PROVIDE NEW 120 VOLT, 20 AMPERE GFPE PROTECTION MODULE IN NEMA 4X ENCLOSURE AT EXISTING CIRCUIT PP-1 TO PROTECT NEW HEAT TRACE ON CHILLED WATER PIPING.

1 ENLARGED PLAN
1/4" = 1'-0"

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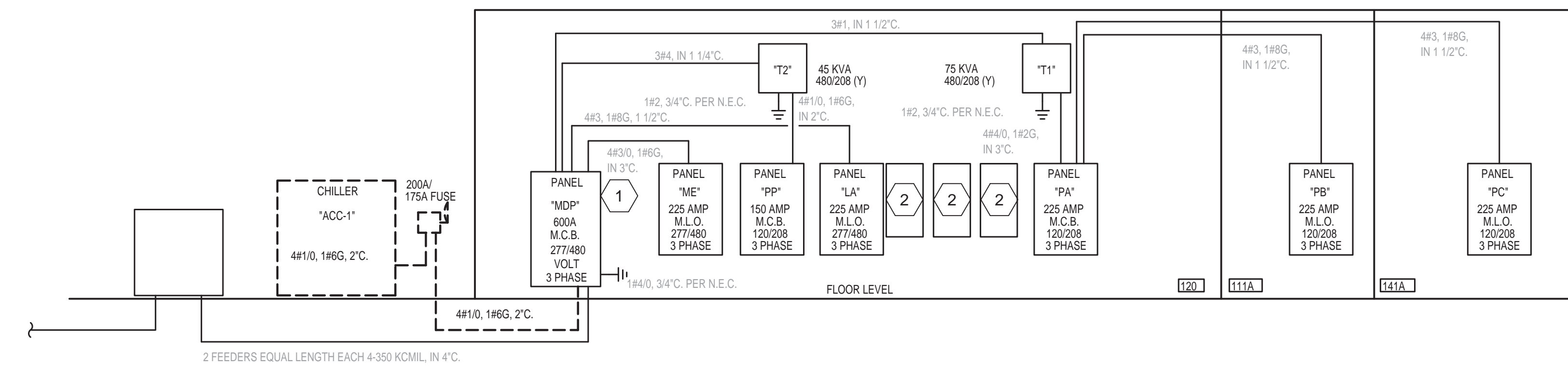
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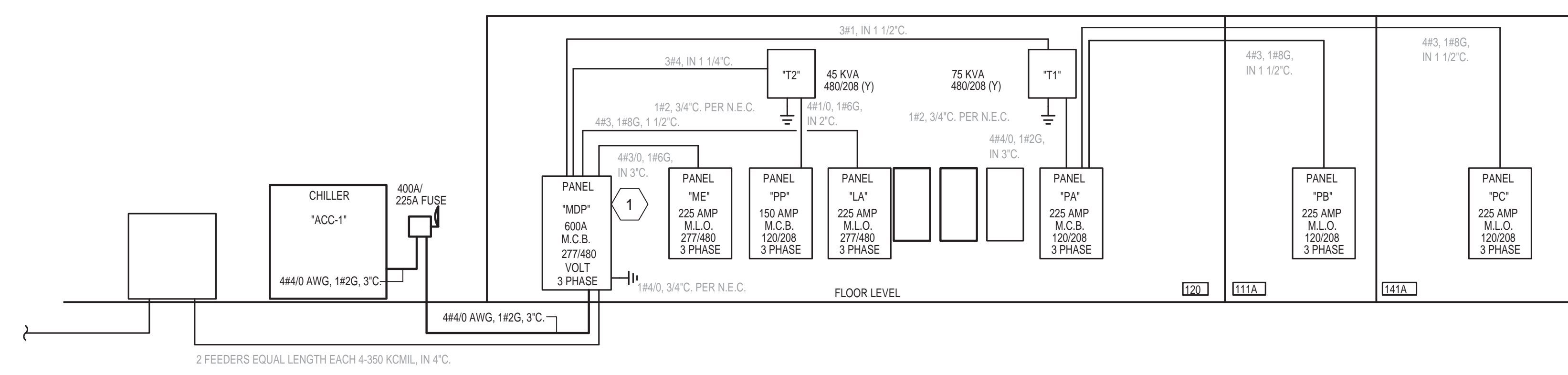
SHEET NO.
E300

- KEYED NOTES:**
- 1 RETURN EXISTING BREAKER FEEDING ACC-1 TO OWNER.
 - 2 EXISTING LIGHTING CONTACTORS TO REMAIN.



1 | EXIST. POWER RISER
NO SCALE

- KEYED NOTES:**
- 1 PROVIDE NEW WIRING TO ACC-1 AS SHOWN.



2 | NEW POWER RISER
NO SCALE

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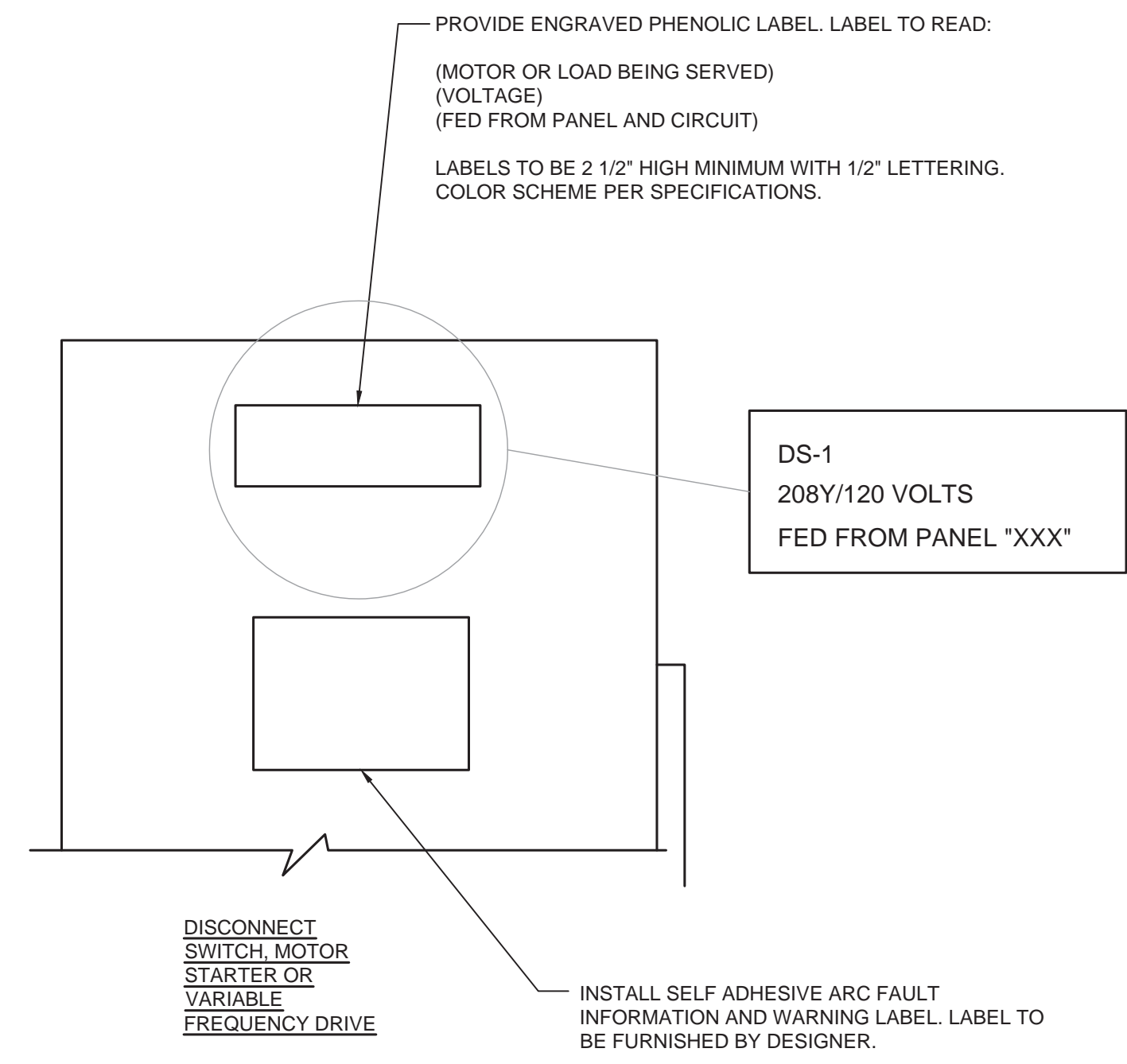
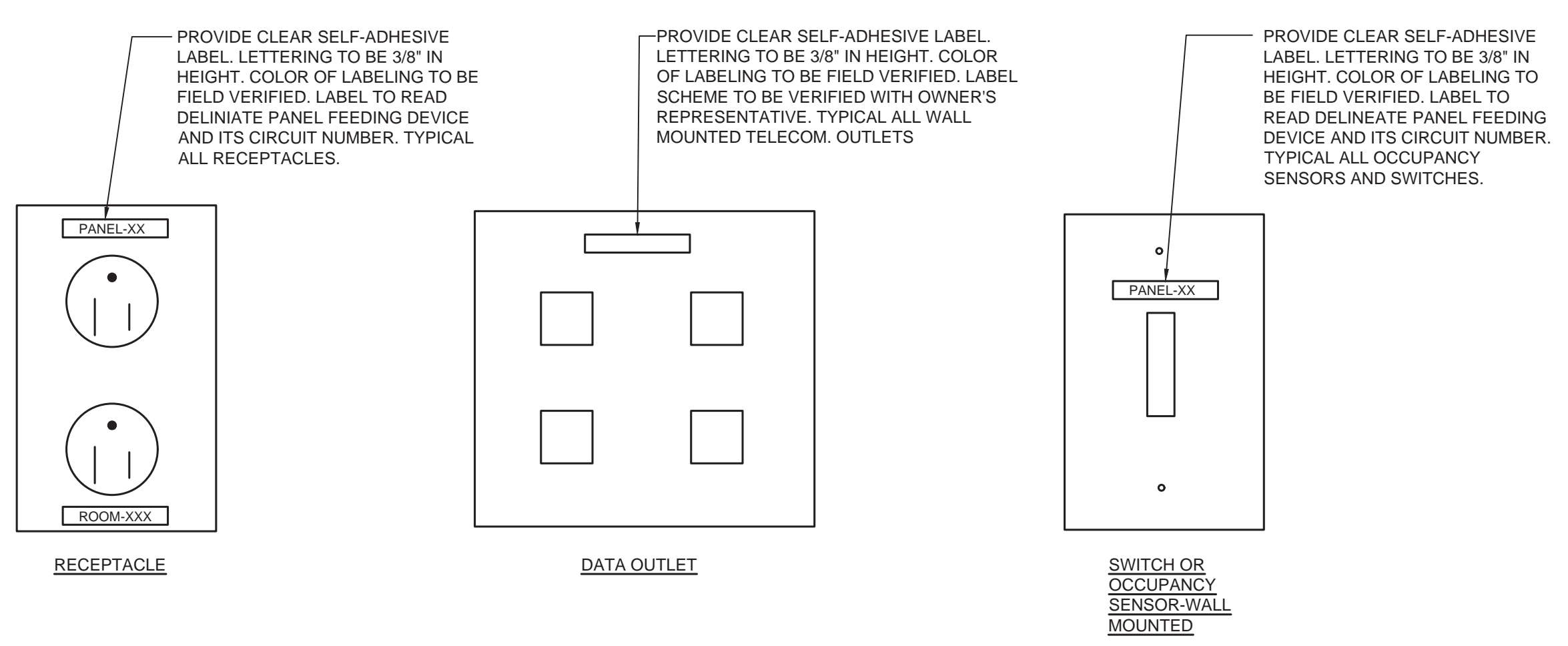
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ELECTRICAL POWER RISERS

E400



1 LABELING DETAILS
NO SCALE

Conduit Box and Color Scheme Standards

System	Junction Box and Cover	Conduit Color	Raceway Labels	Comments
208Y/120 V Equipment	Galvanized	Galvanized		
480Y/277 V Equipment	Black	Galvanized		
Fire Alarm	Bright Red	Red	White	
Emergency Systems	Green	Green		
Telephone Systems	Orange	Orange		
Data Systems	Brown	Orange		
Paging	White	Orange		
TV Systems	Purple	Orange		
Audio Visual	Blue	Galvanized		
HVAC Controls	Gvanized	Blue		
Communications (Security)	Galvanized	Yellow	Orange	Intercom System
Security Control	Galvanized	Yellow	Green	Card Reader System
Video Surveillance	Galvanized	Yellow	Blue	Camera System
Network - Security	Galvanized	Yellow	Yellow	Security Backbone

2 CONDUIT/BOX COLOR CODES
NO SCALE

SEALS
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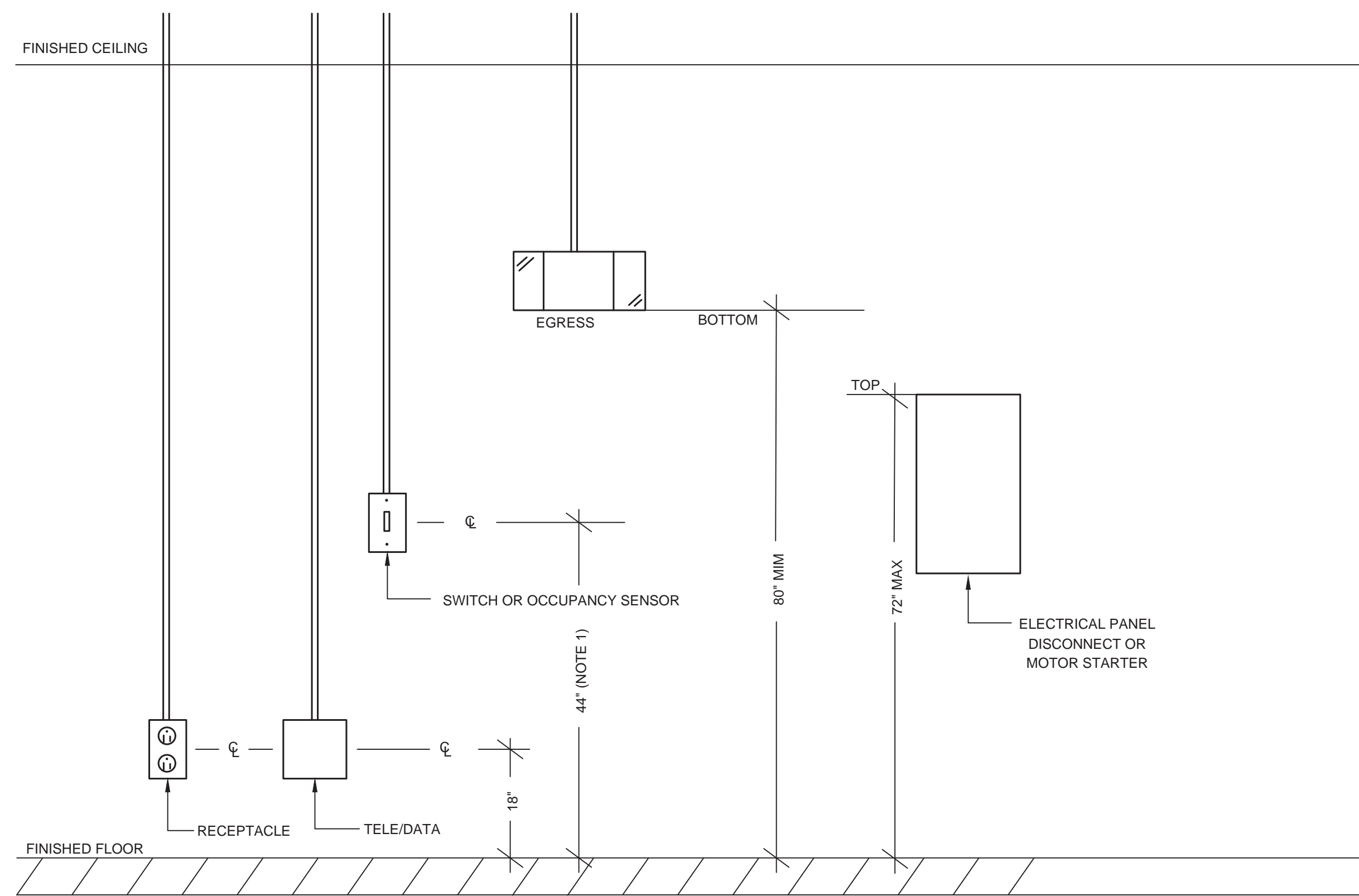
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CARY, NC 27519

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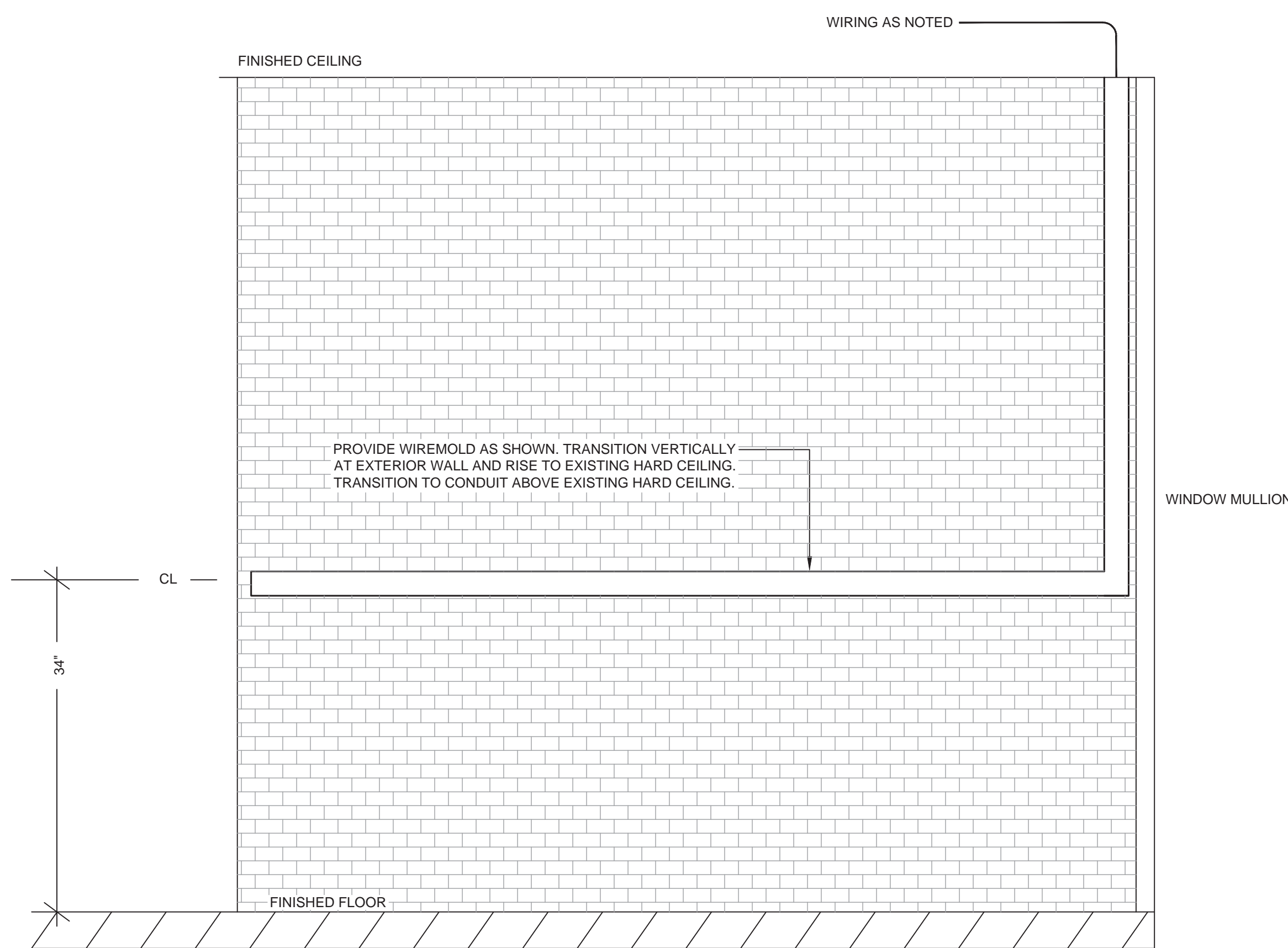
No.	Description	Date

PROJECT DATA
DATE: 01.29.2024
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PROJECT NO: 2023_0030
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SHEET DATA
ELECTRICAL DETAILS



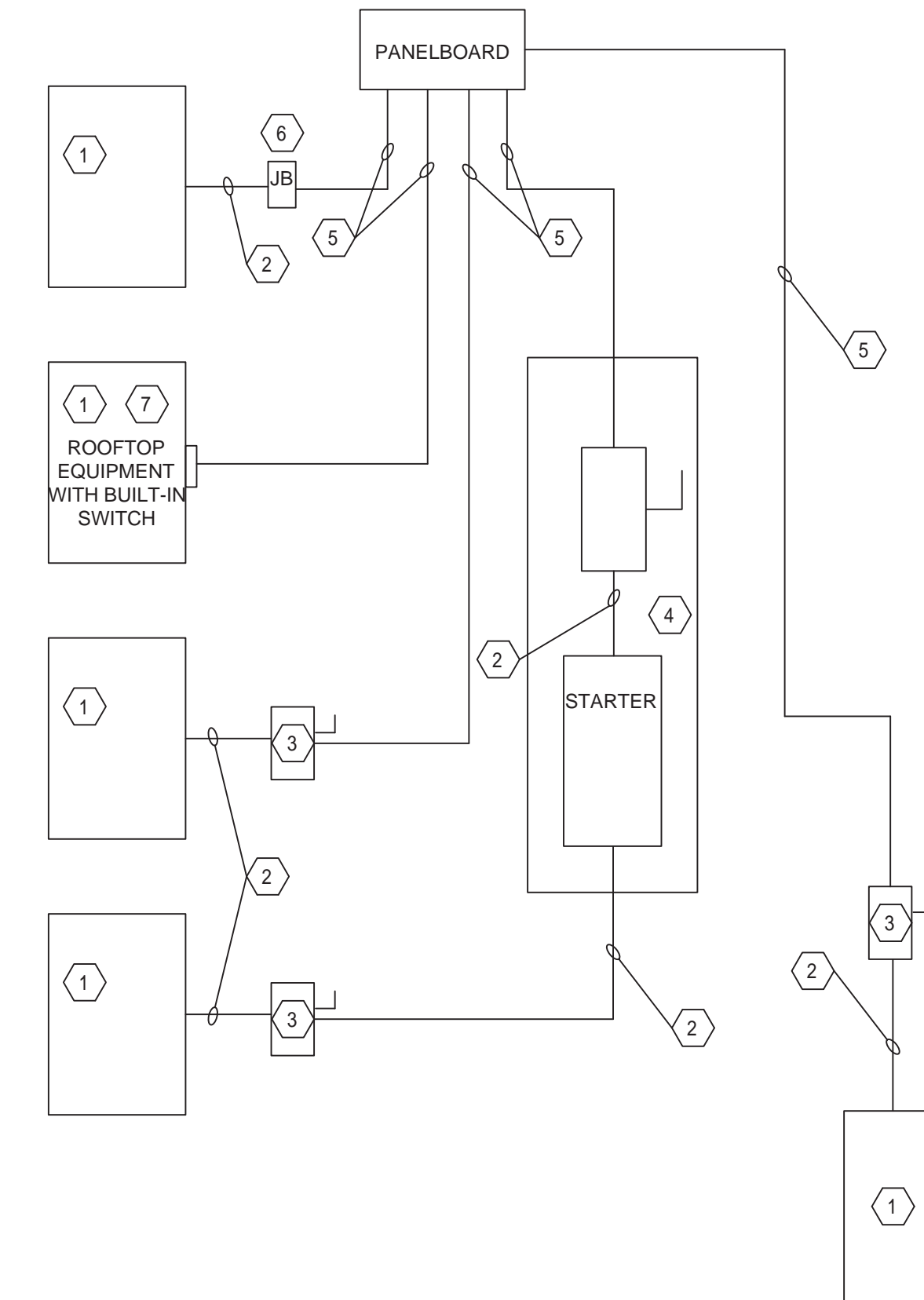
1 | MOUNTING DETAILS-NEW WORK
NO SCALE



3 | WIREMOLD INSTALL DETAIL
NO SCALE

KEYED NOTES:

- 1 EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
- 2 CONDUIT & WIRING BY HVAC, PLUMBING CONTRACTOR OR OTHER TRADES. IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
- 3 IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
- 4 A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATED ADJACENT TO EQUIPMENT.
- 5 FEEDER CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
- 6 JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
- 7 IF THE ROOF TOP EQUIPMENT IS NOT PROVIDED WITH BUILT IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.



NOTE: DIVISION 23 CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DIRECTION OF ROTATION FOR ALL THREE PHASE EQUIPMENT.
NOTE: DIVISION 26 CONTRACTOR SHALL BE RESPONSIBLE FOR LABELING OF ALL DISCONNECTS.

2 | DIVISION OF WORK
NO SCALE



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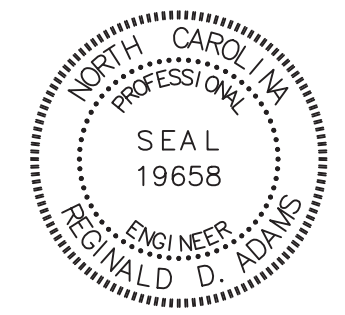
CONSULTANTS

MEP Engineer

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SEALS

Designed by:
Mr. Reginald D. Adams
-61076000F62424-



1/29/2024

PERMIT SET
01.29.2024

PROJECT

WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

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SHEET NO.

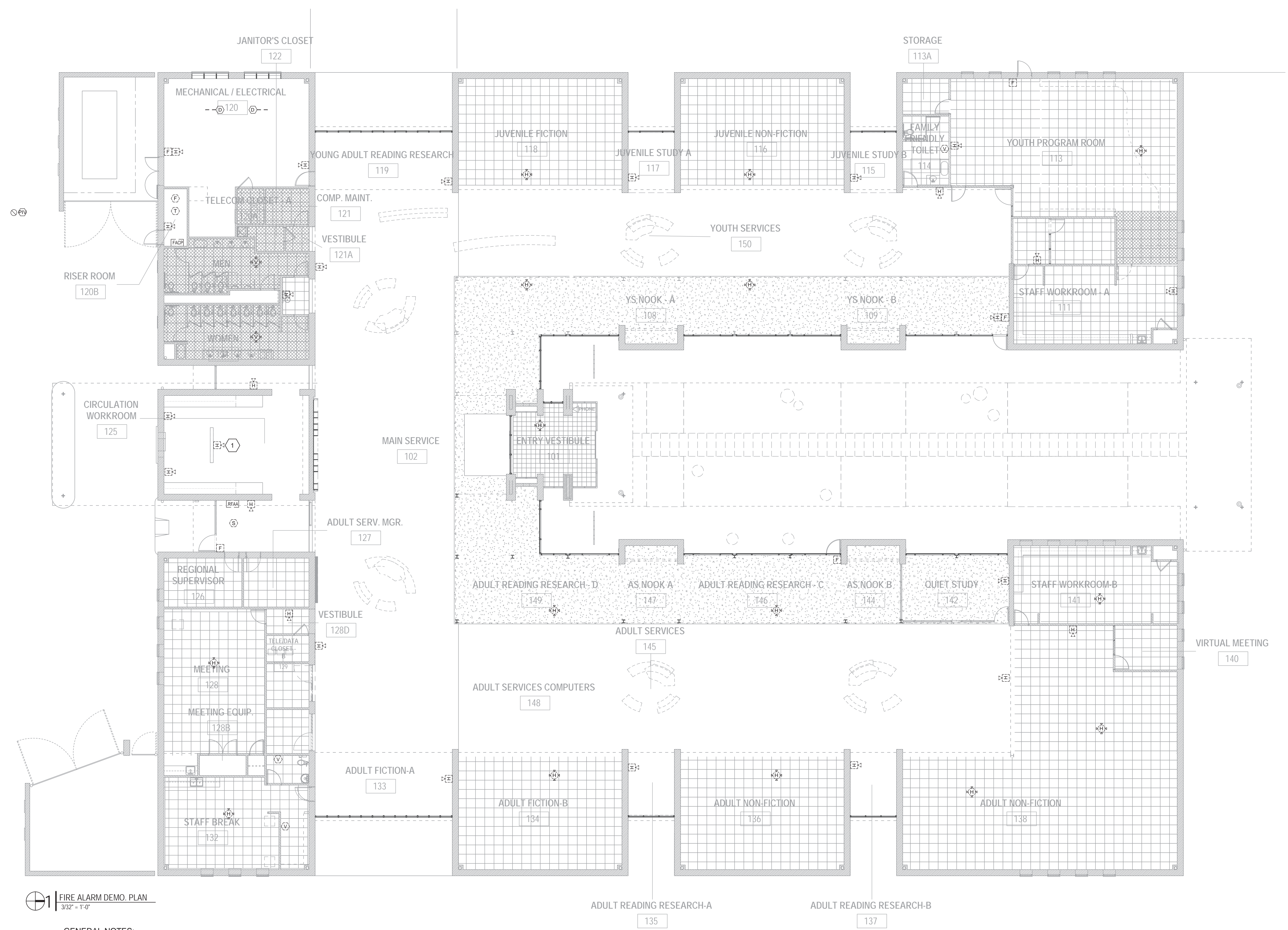
E501

EXISTING PANEL "MDP"											PANEL TYPE: ILINE			MCB or MLO:			MCB SURFACE		
											BUS SIZE: 600A			MOUNTING:			SURFACE		
											VOLTAGE: 480Y/277V			MINIMUM AIC:			42,000		
CKT	LOAD SERVED	TRIP	POLE	WIRE	GND	COND	KVA PER PHASE			KVA	COND	GND	WIRE	POLE	TRIP	LOAD SERVED	CKT		
							A	B	C										
1	SPACE						0.00								SPACE	2			
3	SPACE							0.00							SPACE	4			
5	SPACE								0.00						SPACE	6			
7	SPACE									0.00					SPACE	8			
9	SPACE										0.00				SPACE	10			
11	SPACE											0.00			SPACE	12			
13	SPACE							0.00							SPACE	14			
15	SPACE								0.00						SPACE	16			
17	SPACE									0.00					SPACE	18			
19	SPACE										0.00				SPACE	20			
21	SPACE											0.00			SPACE	22			
23	SPACE												0.00		SPACE	24			
25	TRANS T2/PANEL "FP"	70	3	REFER TO RISER FOR WIRE AND CONDUIT SIZES			8.00	8.00		8.00					SPACE	28			
29							8.00			8.00					SPACE	30			
31							33.08	66.18		33.12	REFER TO RISER FOR WIRE & CONDUIT SIZES				PANEL "ME"	32			
33	TRANS T1/PANEL "PA"	125	3	REFER TO RISER FOR WIRE AND CONDUIT SIZES			32.08			65.18	33.12	REFER TO RISER FOR WIRE & CONDUIT SIZES				34			
35							32.78			65.90	33.12		3	200		36			
37							50.14	50.74		6.00	REFER TO RISER FOR WIRE & CONDUIT SIZES					38			
39	CHILLER ACC-1	225N	3	REFER TO RISER FOR WIRE AND CONDUIT SIZES			50.14			56.14	6.00	REFER TO RISER FOR WIRE & CONDUIT SIZES				40			
41							20.14			24.14	4.00					42			
TOTALS:							130.82	129.32	99.04		DEMAND LOAD (KVA)	NOTES							
							CONNECTED LOAD (KVA)	DF	DEMAND LOAD (KVA)			L-PROVIDE WITH LOCK OUT CLIP							
LIGHTING							19.60	125%	24.50			G-GFCI PROTECTED							
FIRST 10K RECEPTS							81.10	100%	10.00			S-SHUNT TRIP							
REMAINDER RECEIPT							71.10	50%	35.55			*PHASE/NEUTRAL							
LARGEST MOTOR							156.98	125%	196.23			N-NEW BREAKER							
MOTOR							62.80	100%	62.80										
MISC							35.40	80%	28.32										
TOTAL (KVA)							355.88		357.40										
TOTAL AMPS									450										

EXISTING PANEL "LA"											PANEL TYPE: NEHB			MCB or MLO:			MLO SURFACE		
											BUS SIZE: 100A			MOUNTING:			SURFACE		
											VOLTAGE: 480Y/277V			MINIMUM AIC:			18,000		
CKT	LOAD SERVED	TRIP	POLE	WIRE	GND	COND	KVA PER PHASE			KVA	COND	GND	WIRE	POLE	TRIP	LOAD SERVED	CKT		
							A	B	C										
1	EXTERIOR LIGHTING	20	1	#10	#10	3/4"	0.60	1.60		1.60	3/4"	#12	#12	1	20	LIGHTING	2		
3	EXTERIOR LIGHTING	20	1	#10	#10	3/4"	1.00	2.00		1.00	3/4"	#12	#12	1	20	LIGHTING	4		
5		20	1						1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	6		
7	SPARE	20	1							1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	8	
9	SPARE	20	1							1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	10	
11	SPARE	20	1							1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	12	
13	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	14	
15	SPARE	20	1							1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	16	
17	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	18	
19	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	20	
21	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	22	
23	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	24	
25	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	26	
27	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	LIGHTING	28	
29	SPARE	20	1							0.00							30		
31	SPARE	20	1						1.00	1.00	1.00	3/4"	#12	#12	1	20	COL CONTROLS	32	
33	SPARE	20	1							0.00							34		
35	SPARE	20	1							0.00							36		
37	SPARE	20	1						0.00								38		
39	SPARE	20	1							0.00							40		
41	SPARE	20	1							0.00							42		
TOTALS:							6.60	6.00	4.00		DEMAND LOAD (KVA)	NOTES							
							CONNECTED LOAD (KVA)	DF	DEMAND LOAD (KVA)			L-PROVIDE WITH LOCK OUT CLIP							
LIGHTING							16.60	125%	20.75			G-GFCI PROTECTED							
FIRST 10K RECEPTS							0.00	100%	0.00			A/G-COMBINATION AFCI/GFCI							
REMAINDER RECEIPT							0.00	50%	0.00			S-SHUNT TRIP							
LARGEST MOTOR							0.00	100%	0.00			*PHASE/NEUTRAL							
MOTOR							0.00	100%	0.00			N-NEW BREAKER							
MISC							0.00	90%	0.00										
TOTAL (KVA)							16.60		20.75										
TOTAL AMPS							46		58										

EXISTING PANEL "PB"											PANEL TYPE: NO			MCB or MLO:			MLO SURFACE		
											BUS SIZE: 200A			MOUNTING:			SURFACE		
											VOLTAGE: 208Y/120V			MINIMUM AIC:			22,000		
CKT	LOAD SERVED	TRIP	POLE	WIRE	GND	COND	KVA PER PHASE			KVA	COND	GND	WIRE	POLE	TRIP	LOAD SERVED	CKT		
							A	B	C										
1	SPARE	20	1						1.50	1.50	3/4"	#12	#12	1	20	TRACK LIGHTS	2		
3	RECEPTACLE	20	1	#12	#12	3/4"	1.20	2.70		1.50	3/4"	#12	#12	1	20	TRACK LIGHTS	4		
5	RECEPTACLE	20	1	#12	#12	3/4"	1.20	2.16		0.96	3/4"	#12	#12	1	20	RECEPTACLE	6		
7	RECEPTACLE	20	1	#12	#12	3/4"	1.20	2.16		0.96	3/4"	#12	#12	1	20	RECEPTACLE	8		
9	RECEPTACLE	20	1	#12	#12	3/4"	1.20	2.16		0.96	3/4"	#12	#12	1	20	RECEPTACLE	10		
11	RECEPTACLE	20	1	#12	#12	3/4"	1.20	2.16		0.96	3/4"	#12	#12	1	20	RECEPTACLE	12		
13	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.56		0.36	3/4"	#12	#12	1	20	FAMILY ROOM	14		
15	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.56		0.36	3/4"	#12	#12	1	20	EXTERIOR RECEPT.	16		
17	WIREMOLD	20	1	#12	#12	3/4"	2.16	2.16								SPARE	18		
19	WIREMOLD	20	1	#12	#12	3/4"	2.16	2.16								SPARE	20		
21	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	22		
23	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	24		
25	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	26		
27	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	28		
29	EW-4	20	1	#12	#12	3/4"	1.56	1.56								SPARE	30		
31	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	32		
33	EW-1	20	1	#12	#12	3/4"	1.56	1.56								SPARE	34		
35	SPARE	20	1							0.00						SPARE	36		
37	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	38		
39	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	40		
41	RECEPTACLE	20	1	#12	#12	3/4"	1.20	1.20								SPARE	42		
TOTALS:							10.98	11.58	10.44		DEMAND LOAD (KVA)	NOTES							
							CONNECTED LOAD (KVA)	DF	DEMAND LOAD (KVA)			L-PROVIDE WITH LOCK OUT CLIP							
LIGHTING							3.00	125%	3.75			G-GFCI PROTECTED							
FIRST 10K RECEPTS							26.88	100%	10.00			A/G-COMBINATION AFCI/GFCI							
REMAINDER RECEIPT							16.88	50%	8.44			S-SHUNT TRIP							
LARGEST MOTOR								125%	0.00			*PHASE/NEUTRAL							
MOTOR								100%	0.00			N-NEW BREAKER							
MISC							3.12	100%	3.12										
TOTAL (KVA)							33.00		25.31										
TOTAL AMPS							92		70										

EXISTING PANEL "ME"											PANEL TYPE: NEHB			MCB or MLO:			MCB SURFACE		
											BUS SIZE: 200A			MOUNTING:			SURFACE		
											VOLTAGE: 480Y/277V			MINIMUM AIC:			18,000		
CKT	LOAD SERVED	TRIP	POLE	WIRE	GND	COND	KVA PER PHASE			KVA	COND	GND	WIRE	POLE	TRIP	LOAD SERVED	CKT		
							A	B	C										
1	SPARE	20	1				0.00								SPACE	2			
3	SPARE	20	1					0.00							SPACE	4			
5	SPARE	20	1						0.00						SPACE	6			
7	SPARE	20	1							0.00					SPACE	8			
9	SPARE	20	1								0.00				SPACE	10			
11	SPARE	20	1									0.00			SPACE	12			
13	SPARE	20	1				3.00			3.00					EXISTING TO REMAIN	14			
15	SPARE	20	1				3.00			3.00					EXISTING TO REMAIN	16			
17	SPARE	20	1						3.00	3.00					EXISTING TO REMAIN	18			
19	SPARE	20	1				4.43			4.43					EXISTING TO REMAIN	20			
21	SPARE	20	1				4.43			4.43					EXISTING TO REMAIN	22			
23																			



1 FIRE ALARM DEMO PLAN
3/32" = 1'-0"

- GENERAL NOTES:**
- REFER TO SHEET E001 FOR ABBREVIATIONS AND GENERAL NOTES. REFER TO FA200 FOR FIRE ALARM LEGEND.
 - REMOVE ALL EXISTING DEVICES AND WIRING. CONDUIT SYSTEM SHALL REMAIN IN PLACE TO THE EXTENT POSSIBLE FOR USE IN NEW WORK. OWNER HAS RIGHT OF FIRST REFUSAL ON ALL DEMOED MATERIALS.

- KEYED NOTES:**
- REMOVE ASSOCIATED BOX AND CONDUIT TO NEAREST JUNCTION BOX.

SEALS

Designed by:
Mr. Reginald D. Adams
61076008FA2424

1/29/2024

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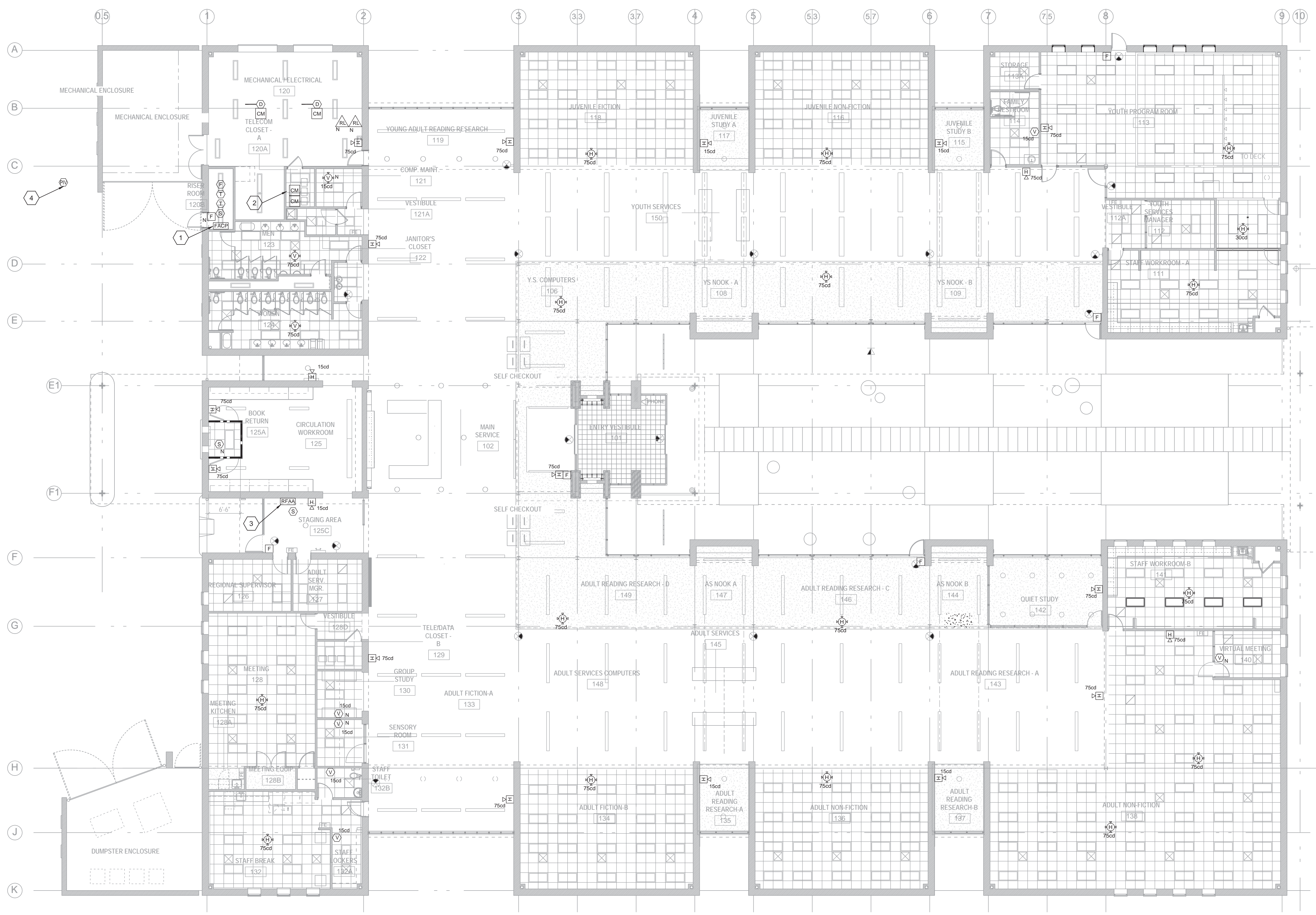
PROJECT
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4000 LOUIS STEPHENS DR.
CARY, NC 27519

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FIRE ALARM DEMOLITION



FIRE ALARM SYMBOLS

- [F] WALL MTD FIRE ALARM PULL STATION
- [FACP] WALL MTD FIRE ALARM CONTROL PANEL
- [RFAA] WALL MTD FIRE ALARM REMOTE PANEL
- [S] SMOKE DETECTOR, CEILING MTD
- [SW] SMOKE DETECTOR, WALL MTD
- [SR] SMOKE DETECTOR, ELEV. RECALL
- [H] HEAT DETECTOR, CEILING OR WALL MTD
- [HC] HEAT DETECTOR, CONVENTIONAL
- [D] DUCT MOUNTED SMOKE DETECTOR
- [F] FLOW SWITCH
- [T] TAMPER SWITCH
- [PIV] POST INDICATOR VALVE
- [TS] TEMP. SENSOR
- [MM] MONITOR MODULE
- [CM] CONTROL MODULE
- [IM] ISOLATION MODULE
- [SS] SURGE PROTECTOR
- [V] FIRE ALARM VISUAL DEVICE
- [H] FIRE ALARM AUDIO/VISUAL DEVICE
- [RL] REMOTE INDICATOR LAMP WITH TEST SWITCH
- [H] 75cd CEILING MOUNTED FIRE ALARM AUDIO/VISUAL DEVICE
- [V] 75cd CEILING MOUNTED FIRE ALARM VISUAL-ONLY DEVICE

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SHEET DATA
FIRE ALARM NEW WORK

SHEET NO.
FA200

FIRE ALARM NEW WORK PLAN
3/32" = 1'-0"

- GENERAL NOTES:**
- REFER TO SHEET E001 FOR ABBREVIATIONS AND GENERAL NOTES.
 - SUBSCRIPT (N) AT DEVICE DENOTES NEW BOX, WIRING AND CONDUIT, ETC. ARE REQUIRED.

- KEYED NOTES:**
- PROVIDE NEW FACP AT LOCATION OF CURRENT FACP. PROVIDE NEW CONDUIT/WIREWAYS AS REQUIRED TO CONNECT TO EXISTING RACEWAY SYSTEMS. PROVIDE FACP DOCUMENT BOX AT NEW FACP.
 - CONTROL MODULES RELATED TO SECURITY PANEL.
 - PROVIDE SURFACE MOUNTED REMOTE ANNUNCIATOR AT LOCATION OF CURRENT RFAA. PROVIDE NEW ZONE MAP AT CURRENT LOCATION. NO SURFACE MOUNTED CONDUIT SHALL BE ALLOWED AT THIS LOCATION.
 - PROVIDE SURGE SUPPRESSION INSIDE RISER ROOM FOR TIE-IN OF PIV WIRING TO FIRE ALARM SYSTEM.

RATED PARTITION WALL LEGEND
1-HR RATED WALL



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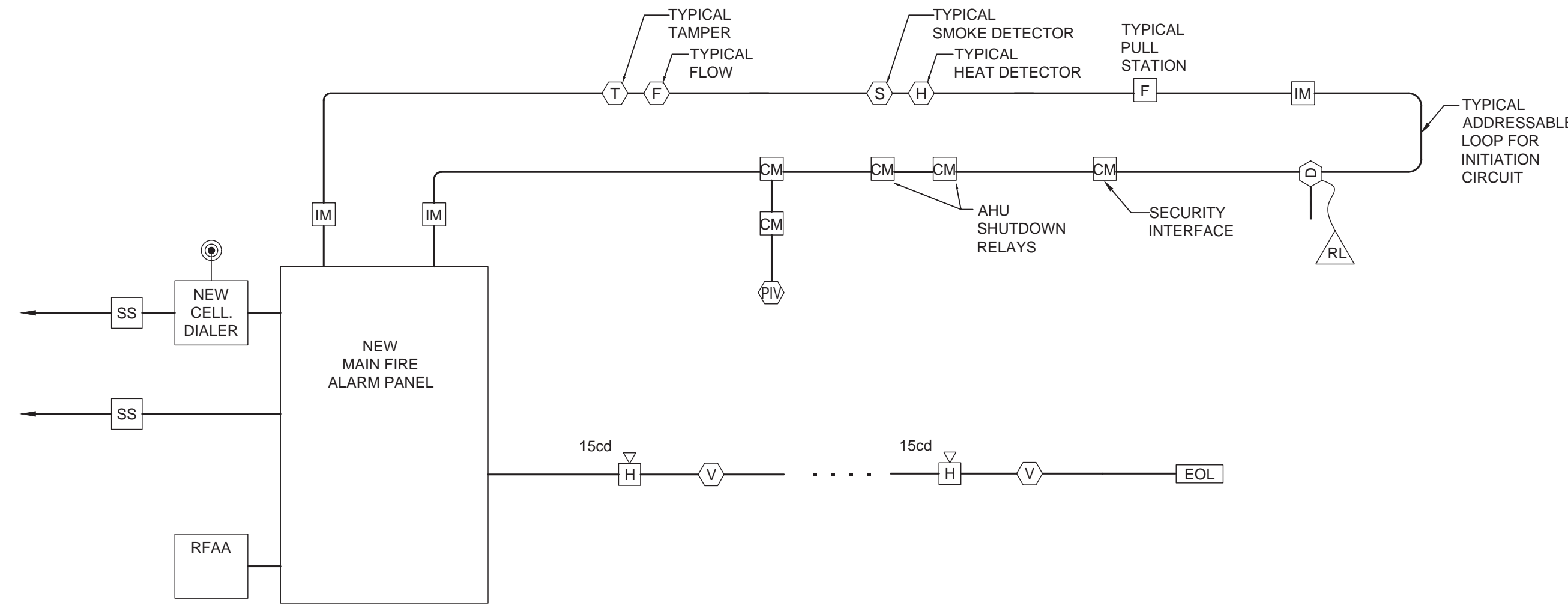
CONSULTANTS

MEP Engineer

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https://www.sigmaes.com/
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Raleigh, NC
919.840.9300
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FIRE ALARM SYMBOLS

- [F] WALL MTD FIRE ALARM PULL STATION
[FA] WALL MTD FIRE ALARM CONTROL PANEL
[FA] CHEM SUPPRESSION PANEL PROVIDED BY DIV. 21
[RA] WALL MTD FIRE ALARM REMOTE PANEL
[S] SMOKE DETECTOR, CEILING MTD
[SW] SMOKE DETECTOR, WALL MTD
[SR] SMOKE DETECTOR, ELEV. RECALL
[H] HEAT DETECTOR, CEILING OR WALL MTD
[HC] HEAT DETECTOR, CONVENTIONAL
[D] DUCT MOUNTED SMOKE DETECTOR
[F] FLOW SWITCH
[T] TAMPER SWITCH
[PIV] POST INDICATOR VALVE
[TS] TEMP. SENSOR
[MM] MONITOR MODULE
[CM] CONTROL MODULE
[IM] ISOLATION MODULE
[SS] SURGE PROTECTOR
[V] FIRE ALARM VISUAL DEVICE
[VH] FIRE ALARM AUDIO/VISUAL DEVICE
[RL] REMOTE INDICATOR LAMP WITH TEST SWITCH
[VH] CEILING MOUNTED FIRE ALARM AUDIO/VISUAL DEVICE 75cd
[V] CEILING MOUNTED FIRE ALARM VISUAL-ONLY DEVICE 75cd

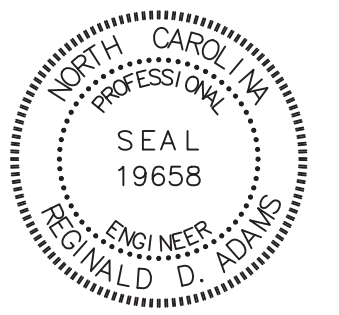


FIRE ALARM SPECIFICATION AND INSTALLATION:

- 1. CONTRACTOR SHALL PROVIDE FIRE ALARM SHOP DRAWINGS TO THE COUNTY FIRE MARSHALL FOR APPROVAL. DO NOT START ANY FIRE ALARM ROUGH-IN WORK UNTIL APPROVED SHOP DRAWINGS ARE RECEIVED FROM THE FIRE MARSHALL
2. THIS DRAWING IS INTENDED TO SHOW ONLY WHICH DEVICES ARE CONNECTED TO WHICH CIRCUIT. THIS DRAWING DOES NOT SHOW THE OPTIMUM PATH FOR THE CIRCUITS. REFER TO FLOOR PLAN FOR SPECIFIC QUANTITIES AND LOCATIONS OF FIRE ALARM DEVICES.
3. ALL NEW FIRE ALARM CABLE SHALL BE IN MINIMUM 3/4" CONDUIT. RACEWAYS CONTAINING FIRE ALARM CONDUCTORS SHALL BE MARKED IN RED FOR READY IDENTIFICATION. UNLESS OTHERWISE NOTED ON THIS RISER.
4. ALL SMOKE DETECTORS SHALL BE PHOTOELECTRIC.
5. ALL ADDRESSABLE LOOP CONTROLLER (INITIATING) CIRCUITS SHALL BE WIRED IN A CLASS 'B' CONFIGURATION WITH NO 'T' TAPS MADE. PROVIDE 20% SPARE ADDRESSES PER CIRCUIT.
6. NOTIFICATION APPLIANCE CIRCUITS (NACs) SHALL BE WIRED CLASS 'B', AND ZONED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. NOT TO EXCEED 80% OF ZONE MODULE RATED OUTPUT. ALL NAC'S SHALL BE EQUIPPED WITH E.O.L. SUPERVISORY RELAYS.
7. FIRE ALARM NOTIFICATION DEVICES SHALL HAVE NOMINAL MOUNTING HEIGHT OF 80" AFF TO BOTTOM OF DEVICE. COORDINATE WITH REFLECTED CEILING PLAN AND ARCHITECT PRIOR TO ROUGH-IN. UNLESS NOTED OTHERWISE ON THE FLOOR PLANS, LIGHT LEVEL AND SOUND OUTPUT LEVELS FOR NEW DEVICES SHALL BE AS FOLLOWS:
-STROBES 75 cd
-HORNS 95 dB
8. ADDITIONAL POWER AMPLIFICATION DEVICES THAT MAY BE NEEDED TO DRIVE NOTIFICATION DEVICES ARE COMPLETELY THE DUTY OF THE E.C./FIRE ALARM VENDOR TO PROVIDE. ANY POWER CIRCUITRY OR ADDITIONAL WIRING NEEDED FOR THIS SYSTEM SHALL BE PROVIDED AS PART OF THE BASE BID ON BID DAY.
9. ALL DEVICES SHALL BE ADA COMPLIANT.
10. INSTALLATION SHALL MEET REQUIREMENTS OF THE LATEST ADOPTED VERSIONS OF THE NFPA 72, NFPA 70 (NEC), AND THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
11. CONTRACTOR SHALL PROVIDE UPDATED FRAMED, PROTECTED ZONE MAP INDICATING LOCATION AND ADDRESS OF ALL INSTALLED DEVICES.
12. AT THE CONCLUSION OF THIS PROJECT, THE FIRE ALARM SYSTEM WILL BE TESTED IN ACCORDANCE WITH THE 2013 EDITION OF THE NFPA 72 SECTION 10.4.1.2.
13. REFER TO CONTRACT DOCUMENT FOR ADDITIONAL INFORMATION REQUIRED FOR SUBMITTALS.
14. THE TECHNICIANS WHO MAKE THE CONNECTIONS TO (PERFORM AND PROGRAMING FOR) THE FIRE ALARM SYSTEM ARE REQUIRED TO BE TRAINED AND INDIVIDUALLY CERTIFIED BY THE MANUFACTURER. FOR THE FACP MODEL/SERIES BEING INSTALLED. THIS TRAINING AND CERTIFICATION MUST HAVE OCCURRED WITHIN THE MOST RECENT 24 MONTHS.
15. AN 100% ACCEPTANCE TEST WILL BE REQUIRED. THIS MUST BE PERFORMED IN THE PRESENCE OF A WAKE COUNTY FIRE MARSHAL.
16. THE FIRE ALARM CONTRACTOR SHALL SUBMIT A COPY OF THE FIRE ALARM SHOP DRAWING FOR REVIEW AND APPROVAL TO THE AUTHORITIES HAVING JURISDICTION PRIOR TO SYSTEM INSTALLATION. SHOP DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL OF THE FOLLOWING:
A. A FLOOR PLAN
B. LOCATION OF ALARM-INITIATING AND NOTIFICATION APPLIANCES
C. ALARM CONTROL AND TROUBLE SIGNALING EQUIPMENT
D. ANNUNCIATION
E. POWER CONNECTION
F. BATTERY CALCULATIONS
G. CONDUCTOR TYPE AND SIZES
H. VOLTAGE DROP CALCULATIONS
I. MANUFACTURERS, MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT, DEVICES AND MATERIALS
J. DETAILS CO CEILING HEIGHT AND CONSTRUCTION
K. THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
17. REFER TO CONTRACT DOCUMENT FOR ADDITIONAL INFORMATION REQUIRED FOR SUBMITTALS.

SEALS

Designed by: Mr. Reginald D. Adams
61079008P42424...



1/29/2024

PERMIT SET
01.29.2024

PROJECT

WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

Table with 3 columns: No., Description, Date. It contains several empty rows for revisions.

PROJECT DATA

DATE: 01.29.2024
DRAWN: RDA
CHECKED: RDA
PROJECT NO.: 2023_0030
PRINTING: PERMIT SET

SHEET DATA

FIRE ALARM RISER AND MATRIX

SHEET NO.

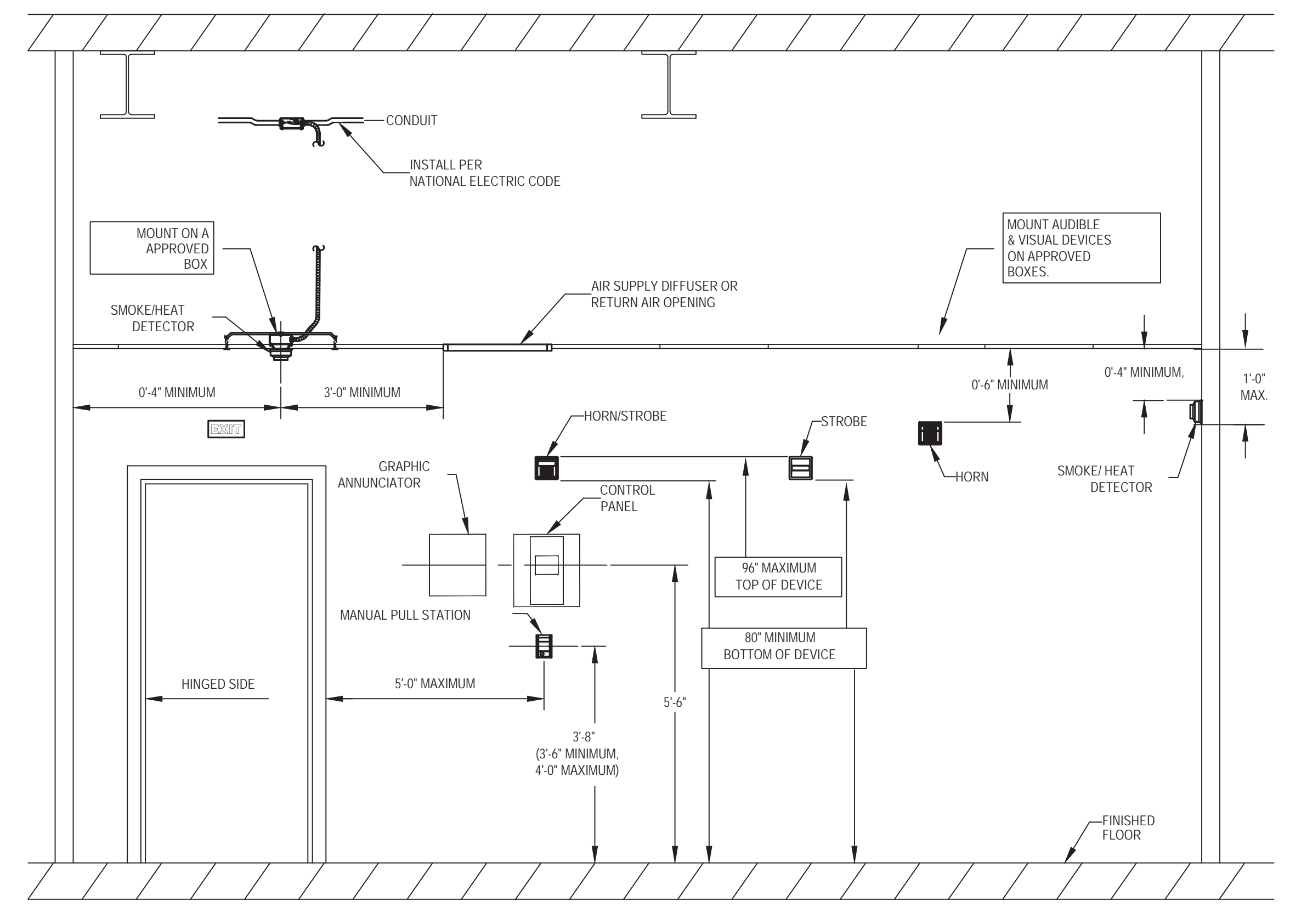
FA400

1 FIRE ALARM RISER
NO SCALE

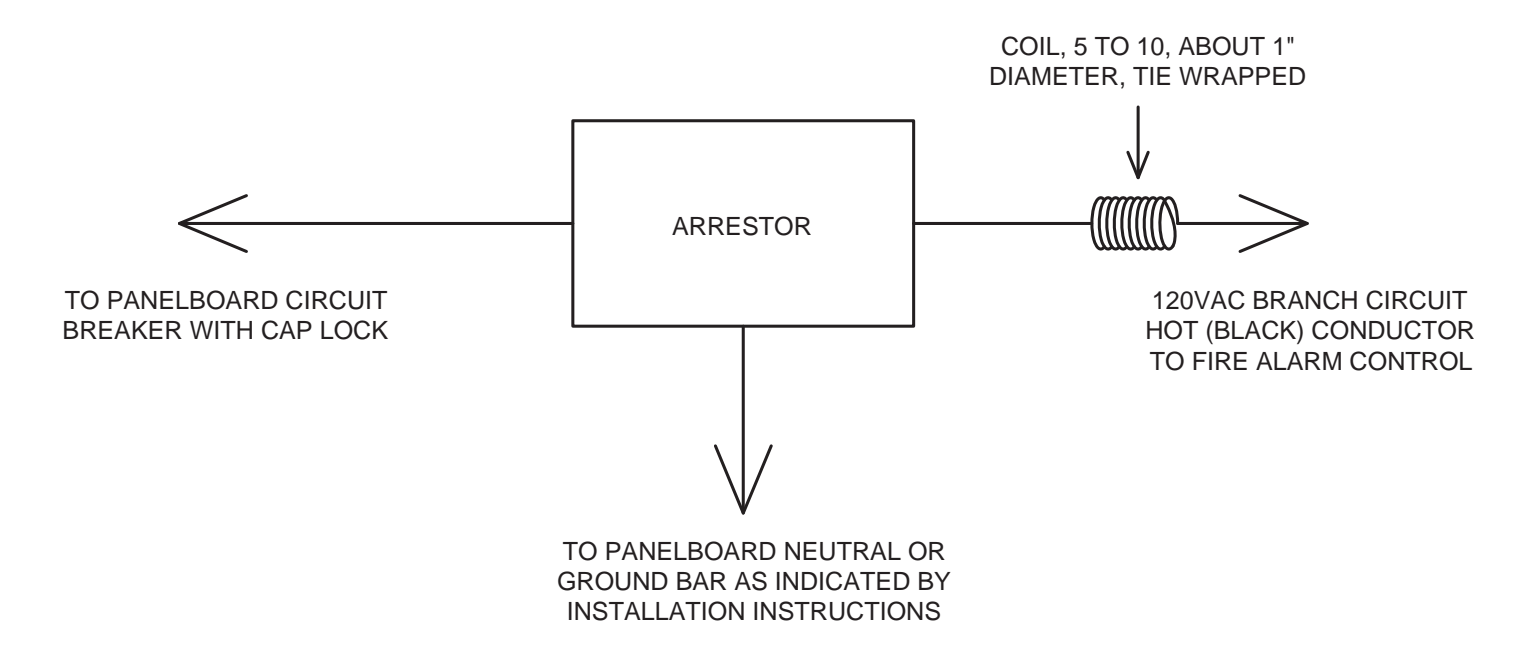
FIRE ALARM SYSTEM RESPONSE MATRIX table with columns for Control Unit Annunciation, Notification, Security, and Safety, and rows for various alarm devices and system events.

2 FIRE ALARM MATRIX
NO SCALE

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS

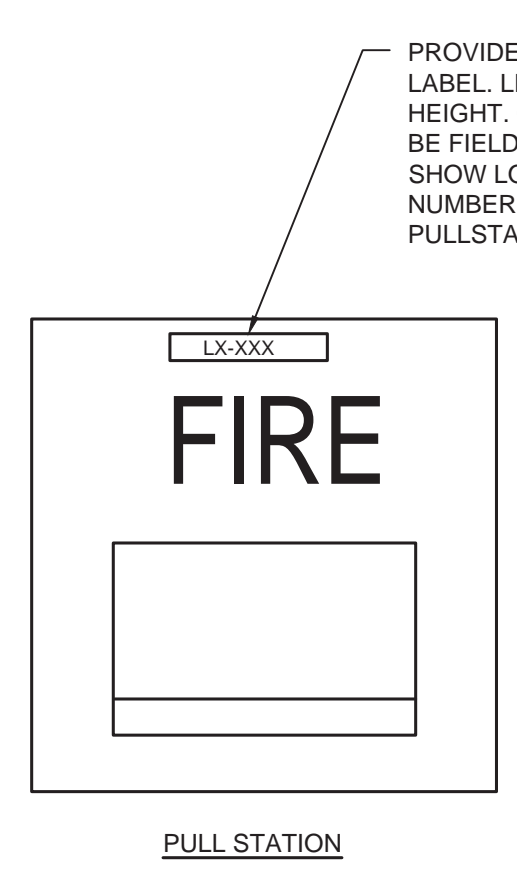


1 | **DEVICE MOUNTING HEIGHTS**
NO SCALE



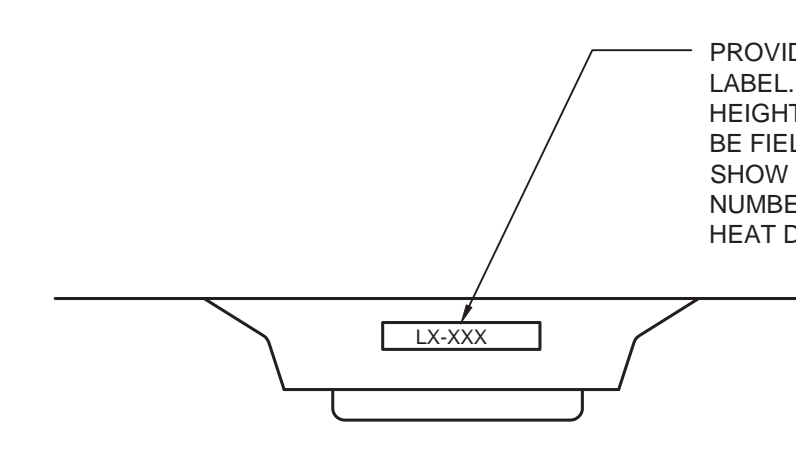
NOTE:
1. SECURELY MOUNT TRANSIENT ARRESTOR IN ACCESSIBLE JUNCTION BOX OR PROPER METAL ENCLOSURE ADJACENT TO THE POWER PANELS. PROVIDE ENGRAVED LABEL INDICATING ITS LOCATION.

2 | **SURGE SUPPRESSION DETAIL**
NO SCALE



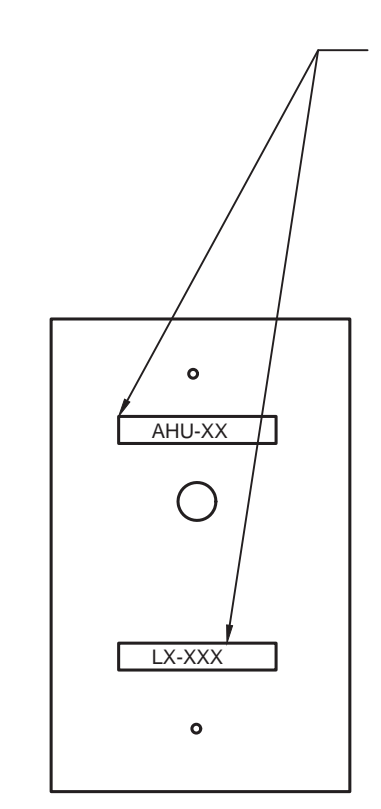
PROVIDE WHITE SELF-ADHESIVE LABEL. LETTERING TO BE 1/2" IN HEIGHT. COLOR OF LABELING TO BE FIELD VERIFIED. LABEL TO SHOW LOOP AND DEVICE NUMBER. TYPICAL ALL PULLSTATIONS.

PULL STATION



PROVIDE WHITE SELF-ADHESIVE LABEL. LETTERING TO BE 1/2" IN HEIGHT. COLOR OF LABELING TO BE FIELD VERIFIED. LABEL TO SHOW LOOP AND DEVICE NUMBER. TYPICAL ALL SMOKE OR HEAT DETECTORS.

CEILING MOUNTED DETECTOR



PROVIDE WHITE SELF-ADHESIVE LABEL. LETTERING TO BE 1/2" IN HEIGHT. COLOR OF LABELING TO BE FIELD VERIFIED. TOP LABEL TO SHOW DEVICE BEING CONTROLLED OR MONITORED. BOTTOM LABEL TO SHOW LOOP AND DEVICE NUMBER. TYPICAL ADDRESSABLE MODULES OR TEST SWITCHES.

FIRE ALARM MODULE OR TEST SWITCH

3 | **LABELING DETAILS**
NO SCALE

CONSULTANTS

MEP Engineer

Sigma Engineered Solutions, PC
https://www.sigmas.com/
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Raleigh, NC
919.840.9300
C-2490

SEALS

DocuSigned by:
Mr. Reginald D. Adams
61D76008FA2424



1/29/2024

PERMIT SET
01.29.2024

PROJECT

WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

REVISIONS

No.	Description	Date

PROJECT DATA

DATE: 01.29.2024
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PROJECT NO.: 2023_0030
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SHEET DATA

FIRE ALARM DETAILS

SHEET NO.

FA401

REVISIONS

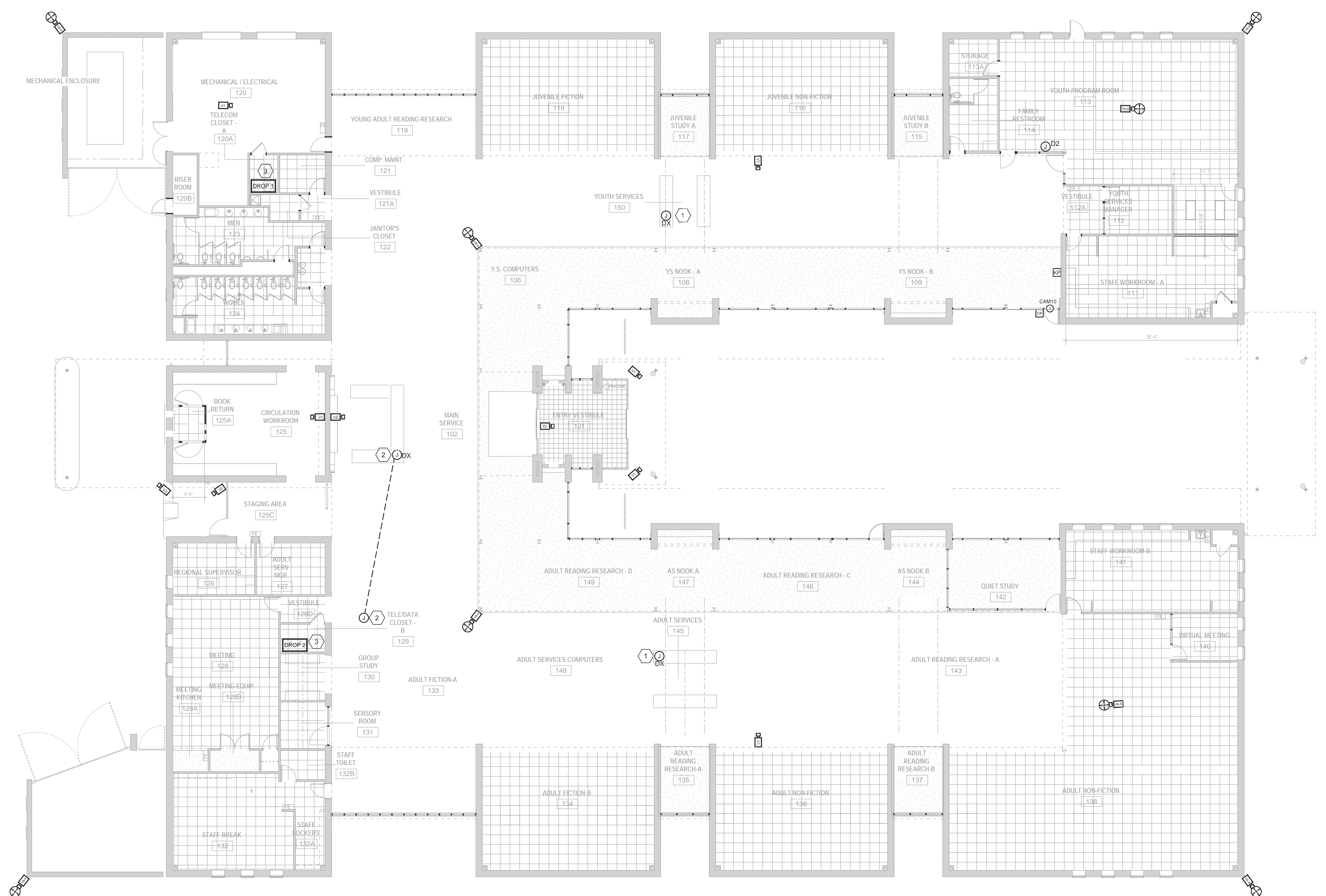
No.	Description	Date

PROJECT DATA
DATE: 01.29.2024
DRAWN: RDA
CHECKED: RDA
PROJECT NO: 2023_0030
PRINTING: PERMIT SET

SHEET DATA
SECURITY NEW WORK

SHEET NO.

SEC200



- GENERAL NOTES:**
- REFER TO SHEET E001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES. REFERENCE SEC400 FOR RISER INFORMATION.
 - DIVISION 26 CONTRACTOR IS RESPONSIBLE FOR POWER AND CONDUIT ONLY. INSTALLATION OF WIRING AND DEVICES WILL BE BY THE DIVISION 27 CONTRACTOR. TO THE EXTENT POSSIBLE, ALL CONDUIT SHALL BE CONCEALED. WHERE IT IS NECESSARY TO PROVIDE CONDUIT IN OPEN CEILING AREAS, CONDUIT SHALL BE INSTALLED ABOVE OR ADJACENT TO EXISTING SPIRAL HVAC DUCT WORK. "ADJACENT" SIDE SHALL BE DETERMINED IN FIELD WITH DESIGNER.**
 - ALL CAMERA ROUGH-IN LOCATIONS WILL BE FIELD COORDINATED WITH THE DESIGNER PRIOR TO BEGINNING ROUGH-IN.**

- KEYED NOTES:**
- REFERENCE KEYNOTE #9, E101. RE-WORK EXISTING DURESS BUTTON CONDUIT. PROVIDE STUB-UP AT LOCATION DESIGNATED BY DIVISION 27 SECURITY CONTRACTOR.
 - RE-WORK EXISTING DURESS BUTTON CONDUIT NOTED IN KEYNOTE #11, E101. PROVIDE STUB-UP AT LOCATION DESIGNATED BY DIVISION 27 SECURITY CONTRACTOR.
 - LOCATIONS OF EXISTING TELECOM. ROOMS. ROUTE CONDUITS TO THOSE SPACES AS SHOWN ON SHEET SEC400.

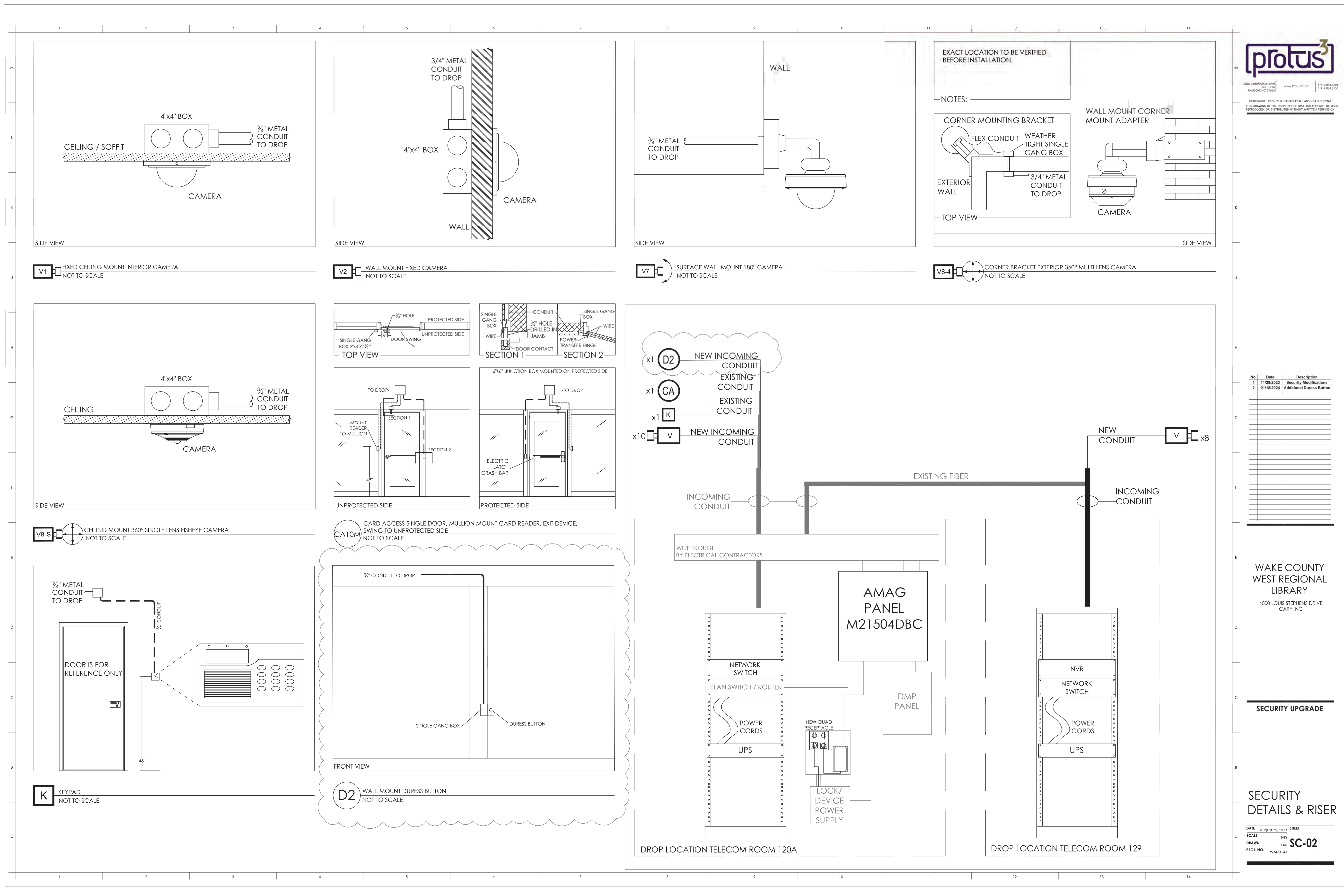
CAMERA ID	TYPE	MODEL	VIEW	Device Description	LOCATION	DROP	NOTES
C1	V8-4	P3727-PL	360	Corner mount-Mult Sensor	Exterior-NW Corner	120A	
C2	V8-5	M-4318-PLVE	Fisheye	Ceiling-Fisheye	Youth Program Room	120A	
C3	V7	P3807-PVE	180	Wall mount-180	Juvenile Study A	120A	
C4	V8-4	P3727-PL	360	Corner mount-Mult Sensor	Youth Side Computers	120A	
C5	V1	P3167-LV	Fixed	Ceiling mount - Fixed	Exterior- Main Entrance Youth side	120A	
C6	V2	P3167-LV	Fixed	Wall mount- Fixed	Vestibule Entrance	120A	
C7	V2	P3167-LV	Fixed	Wall mount- Fixed	Main Reception Desk	120A	
C8	V1	P3267-LV	Fixed	Ceiling mount - Fixed	Circulation Workroom	120A	
C9	V1	P3267-LV	Fixed	Ceiling mount - Fixed	Mechanical/Electrical	120A	
C10	V8-4	P3727-PL	360	Corner mount-Mult Sensor	Exterior-SW Corner	120A	
C11	V2	P3167-LV	Fixed	Wall mount- Fixed	Back entrance door	129	
C12	V2	P3167-LV	Fixed	Wall mount- Fixed	Exterior-Vehicle drop off	129	
C13	V8-4	P3727-PL	360	Corner mount-Mult Sensor	Exterior-SE Corner	129	
C14	V8-4	P3727-PL	360	Corner mount-Mult Sensor	Interior-Adult Fiction-A	129	
C15	V1	P3167-LV	Fixed	Ceiling mount - Fixed	Exterior- Main Entrance Adult side	129	
C16	V7	P3807-PVE	180	Wall mount- 180	Adult Reading/Research-A	129	
C17	V8-5	M-4318-PLVE	Fisheye	Ceiling-Fisheye	Adult Non-Fiction	129	
C18	V8-4	P3727-PL	360	Corner mount-Mult Sensor	Exterior-NE Corner	129	

 SECURITY NEW WORK PLAN
NO SCALE



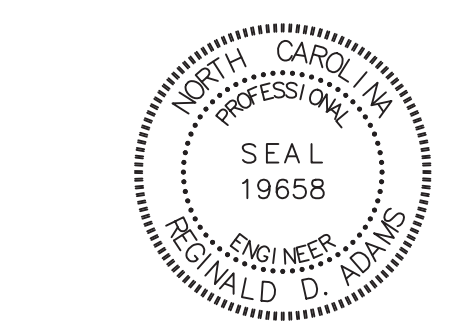
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No.	Date	Description
1	11/29/2023	Security Modifications
2	01/18/2024	Additional Duress Button

SEALS
DocuSigned by:
Mr. Reginald D. Adams
61076008FA2424



1/29/2024
PERMIT SET
01.29.2024

WAKE COUNTY WEST REGIONAL LIBRARY
4000 LOUIS STEPHENS DRIVE
CARY, NC

PROJECT
WEST REGIONAL LIBRARY RENOVATION
4000 LOUIS STEPHENS DR.
CARY, NC 27519

SECURITY UPGRADE

REVISIONS

No.	Description	Date

SECURITY DETAILS & RISER
DATE August 25, 2023 SHEET
SCALE NTS
DRAWN EXP SC-02
PROJ. NO. WAK07150

PROJECT DATA
DATE: 01.29.2024
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PROJECT NO.: 2023_0030
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SHEET DATA
SECURITY DETAILS

SHEET NO.

SEC400