

# PARTIAL RENOVATION AND HVAC UPFIT TO PORTIONS OF THE COMMUNITY SERVICES BUILDING TRANSYLVANIA COUNTY BOARD OF COMMISSIONERS BREVARD, NORTH CAROLINA

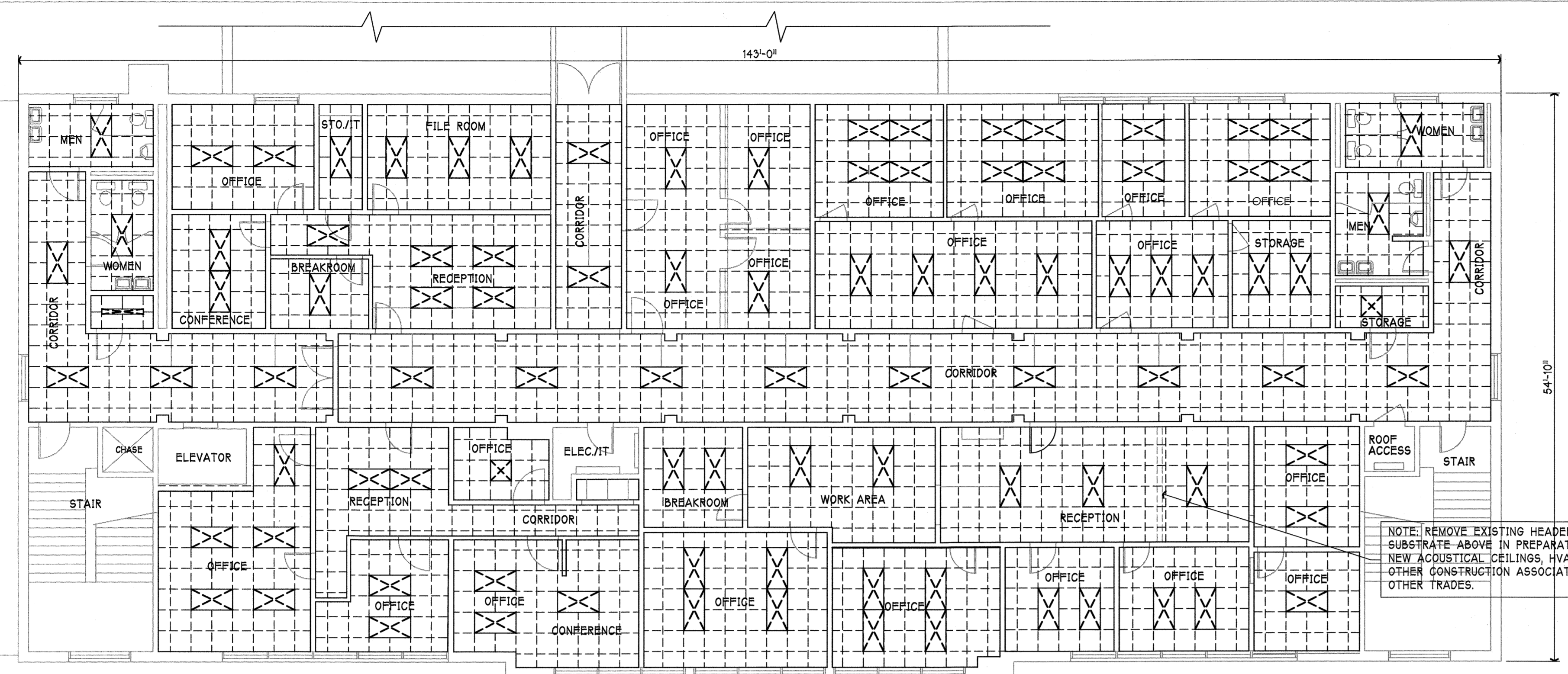
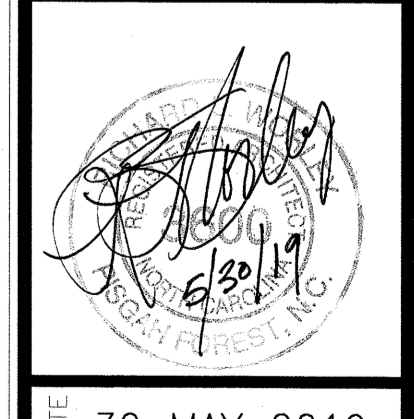
## GENERAL NOTES

1. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS. CONSULT ARCHITECT FOR ANY CONFLICTS. DIMENSIONS ARE CRITICAL IN MANY AREAS AND SHOULD BE VERIFIED WITH OWNER AND ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.
2. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE DELIVERING OF MATERIALS AND THE WORK OF ALL SUBCONTRACTORS. IN ADDITION, ACCESS TO THE BUILDING 2ND FLOOR IS LIMITED WITH RESPECT TO WORKER AND MATERIAL ACCESS.
3. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY BARRIERS/PARTITIONS AS REQUIRED TO PROTECT THE EXISTING BUILDING AND OCCUPANTS FROM CONSTRUCTION CONTAMINATES, FIRE, ETC.
4. CONTRACTOR IS TO LAYOUT ALL MEP WORK IN ACCORDANCE WITH MECH. PLANS PRIOR TO INSTALLING ANY WORK IN ORDER TO CONFIRM THAT EXISTING MEP AND GENERAL CONSTRUCTION COMPONENTS DO NOT CONFLICT WITH PROPOSED LAYOUTS AND INSTALLATION OF SUCH COMPONENTS. ANY CONFLICT TO BE BROUGHT TO THE ARCHITECT AND OWNERS ATTENTION IMMEDIATELY.
5. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL FURNITURE, EQUIPMENT, ETC. FROM DUST, DIRT AND DAMAGE DURING CONSTRUCTION. PROVIDE ACCEPTABLE COVERING TO PROTECT OWNER'S PROPERTY.
6. IT IS NOTED THAT THE PROJECT WILL REQUIRE PHASED CONSTRUCTION, WORKING WEEKEND AND EVENINGS/NIGHTS TO ALLOW FOR FULL OPERATION OF GOVERNMENT AND COUNTY BUSINESS DURING NORMAL OPERATING HOURS.
7. PME DRAWINGS NOTED AS "REFERENCE ONLY" ARE OLD ORIGINAL CONSTRUCTION DRAWINGS AND ARE NOT INTENDED TO BE AN ACCURATE REPRESENTATION OF EXISTING CONDITIONS. PRIOR TO BIDDING, THE GENERAL CONTRACTOR AND ALL TRADES ARE TO VISIT THE SITE AND INVESTIGATE EXISTING CONDITIONS IN ORDER TO FAMILIARIZE THEMSELVES WITH THE DEFINED SCOPE OF WORK.

## INDEX

TS	TITLE SHEET
D-1	CEILING DEMOLITION PLANS
A-1	MAIN LEVEL REFLECTED CEILING PLAN
A-2	UPPER LEVEL REFLECTED CEILING PLAN
A-3	MECHANICAL PAD AND FENCE DETAILS
A-4	FINISH SCHEDULE AND CEILING SYSTEM DETAILS
M1	HVAC - LOWER/MAIN LEVEL PLAN
M2	HVAC - UPPER LEVEL PLAN
M3	HVAC - LOWER/MAIN AND UPPER LEVEL FRESH AIR PLAN
M4	HVAC - ROOF PLAN DEMOLITION
M5	HVAC - LOWER/MAIN LEVEL HVAC SCHEMATIC PLAN
M6	HVAC - UPPER LEVEL HVAC SCHEMATIC PLAN
M7	HVAC - SCHEDULES AND DETAILS
M8	HVAC - SCHEDULES AND DETAILS
M9	HVAC - SCHEDULES AND DETAILS
M10	HVAC - LOWER/MAIN LEVEL EXISTING HVAC PLANS (For Reference Only)
M11	HVAC - UPPER LEVEL EXISTING HVAC PLANS (For Reference Only)
M12	EXISTING HVAC SCHEDULES & DETAILS (For Reference Only)
E1	LOWER/MAIN AND UPPER LEVEL LIGHTING PLAN
E2	LOWER/MAIN LEVEL HVAC POWER PLAN
E3	UPPER LEVEL HVAC POWER PLAN
E4	ELECTRICAL SCHEDULES & DETAILS





## UPPER LEVEL CEILING DEMOLITION PLAN

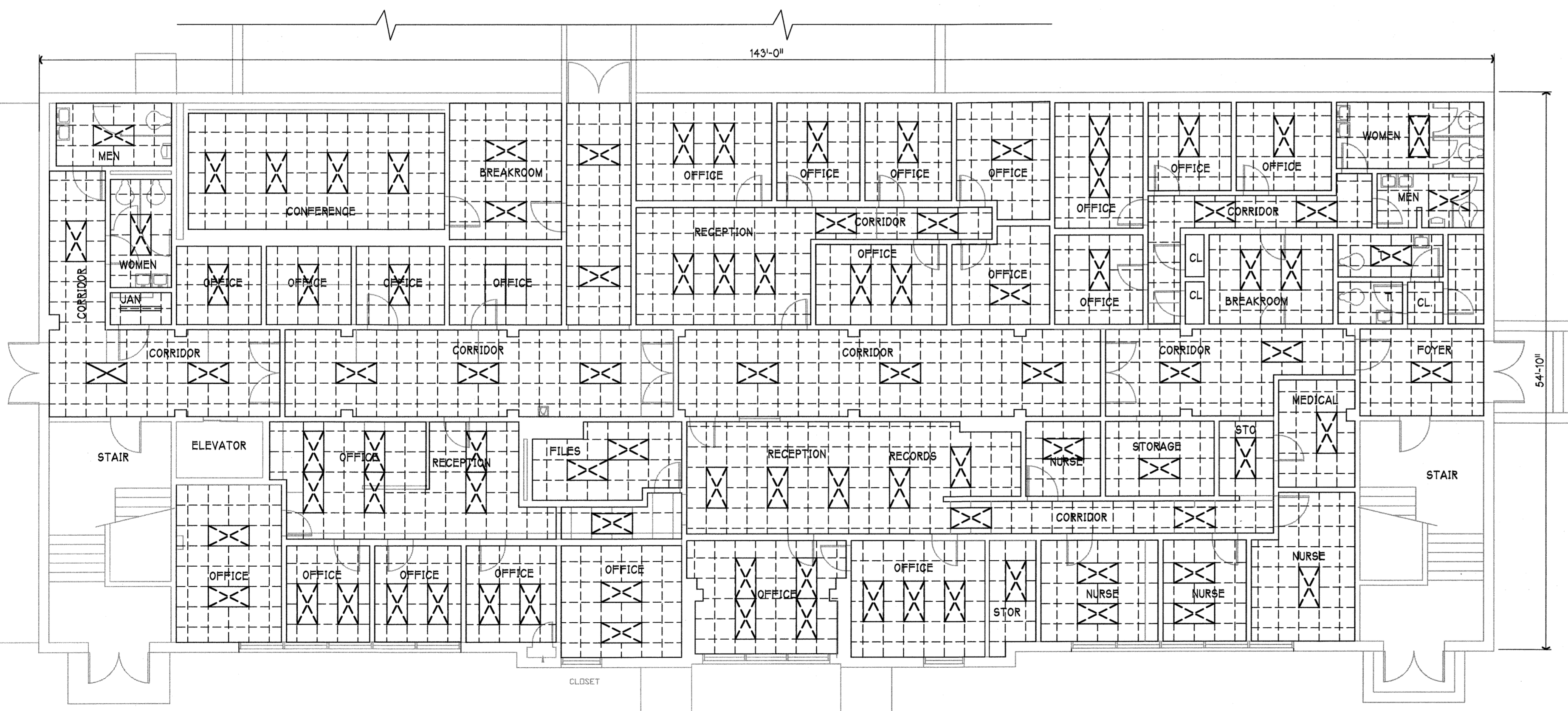
SCALE: 1/8" = 1'-0"

### DEMOLITION NOTES:

- REMOVE ALL EXISTING LAY-IN ACOUSTICAL CEILING SYSTEMS AS INDICATED ON THE DEMOLITION PLAN INCLUDED BUT NOT LIMITED TO TILES, GRID, WALL ANGLES, UNUSED HANGERS, ETC. IN ADDITION, REMOVE ALL FIBERGLASS BATT INSULATION FROM ALL CEILINGS AND ENCLOSED SPACES ABOVE EXISTING ACOUSTICAL CEILING SYSTEM.
- REMOVE ALL EXISTING DUCTWORK ON MAIN LEVEL THAT IS NOT TO BE REUSED IN NEW HVAC SYSTEM DESIGN. REMOVE ALL OUTDOOR UNITS, LINE SETS, CONDUIT, ETC. ASSOCIATED WITH OUTDOOR UNITS THAT ARE BEING REMOVED. REFER TO OLD MECH. DWGS AND NEW PME DRAWINGS FOR EXTENT AND SPECIFIC REQUIREMENTS.
- CONTRACTOR IS TO TAKE EVERY PRECAUTION DURING DEMOLITION TO PROTECT ALL EXISTING MATERIALS THAT ARE TO REMAIN. ANY DAMAGE TO SUCH MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR TO REMOVE PLASTER CEILING SYSTEM ABOVE THE NEW MECHANICAL PLATFORMS AND ANY REMAINING PLASTER THAT IS NOT SECURELY ATTACHED TO THE EXISTING SUBSTRATE.
- REFER TO PME DEMOLITION PLANS AND NOTES FOR ADDITIONAL DEMOLITION INFORMATION.
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION REGARDING DEMOLITION AND PROPER DISPOSAL OF DEMOLITION MATERIALS.
- CONTRACTOR IS REQUIRED TO CONFIRM THAT ALL EXISTING LIGHTING FIXTURES ARE ADEQUATELY SECURED TO THE SUBSTRATE PRIOR TO REMOVE OLD ACOUSTICAL GRID SYSTEM. PROPERLY SUPPORT ANY EXISTING FIXTURES THAT ARE NOT SECURED. EXISTING FIXTURES ARE TO BE INSTALLED IN NEW CEILING SYSTEM IN ACCORDANCE WITH REFLECTED CEILING PLAN. PRIOR TO VERIFYING EXISTING FIXTURES ARE PROPERLY SECURED DURING CONSTRUCTION, CONTRACTOR IS TO TAKE INVENTORY WITH THE OWNER OF EXISTING FIXTURES WITH RESPECT TO THEIR CONDITION, QUANTITY AND APPEARANCE. ALL ISSUES WITH THE EXISTING FIXTURES ARE TO LISTED AND SUBMITTED FOR CONFIRMATION OF ANY DAMAGED OR NON-WORKING FIXTURES WITH OWNER PRIOR TO THE START OF DEMOLITION.
- EXISTING HVAC, ELECTRICAL AND PLUMBING MATERIALS THAT ARE NOT BEING REUSED ARE TO BE REMOVED AND DISPOSED OF PROPERLY UNLESS OTHERWISE NOTED TO BE RETURNED TO THE OWNER. REFER TO PROJECT MANUAL AND PME DRAWINGS FOR ADDITIONAL INFORMATION REGARDING THIS DEMOLITION.
- PATCH AND REPAIR ALL EXISTING OPENINGS AND OPENINGS CREATED BY THE REMOVAL OF PME EQUIPMENT AND MATERIALS THROUGH THE CORRIDOR WALLS (CORRIDOR SIDE ONLY). ALL OPENINGS TO BE SEALED WITH 5/8" GYPSUM BOARD SECURELY FASTENED AND ADHERED TO EXISTING CORRIDOR FINISH. LEVEL TWO FINISH REQUIRED FOR THIS GYPSUM BOARD INSTALLATION.
- EXISTING EXHAUST GRILLES ON THE EXTERIOR OF THE BUILDING THAT ARE TO BE ABANDON ARE TO HAVE OPENING PATCHED AND REPAIRED TO MATCH EXISTING. SEE PME DRAWINGS.

### LEGEND

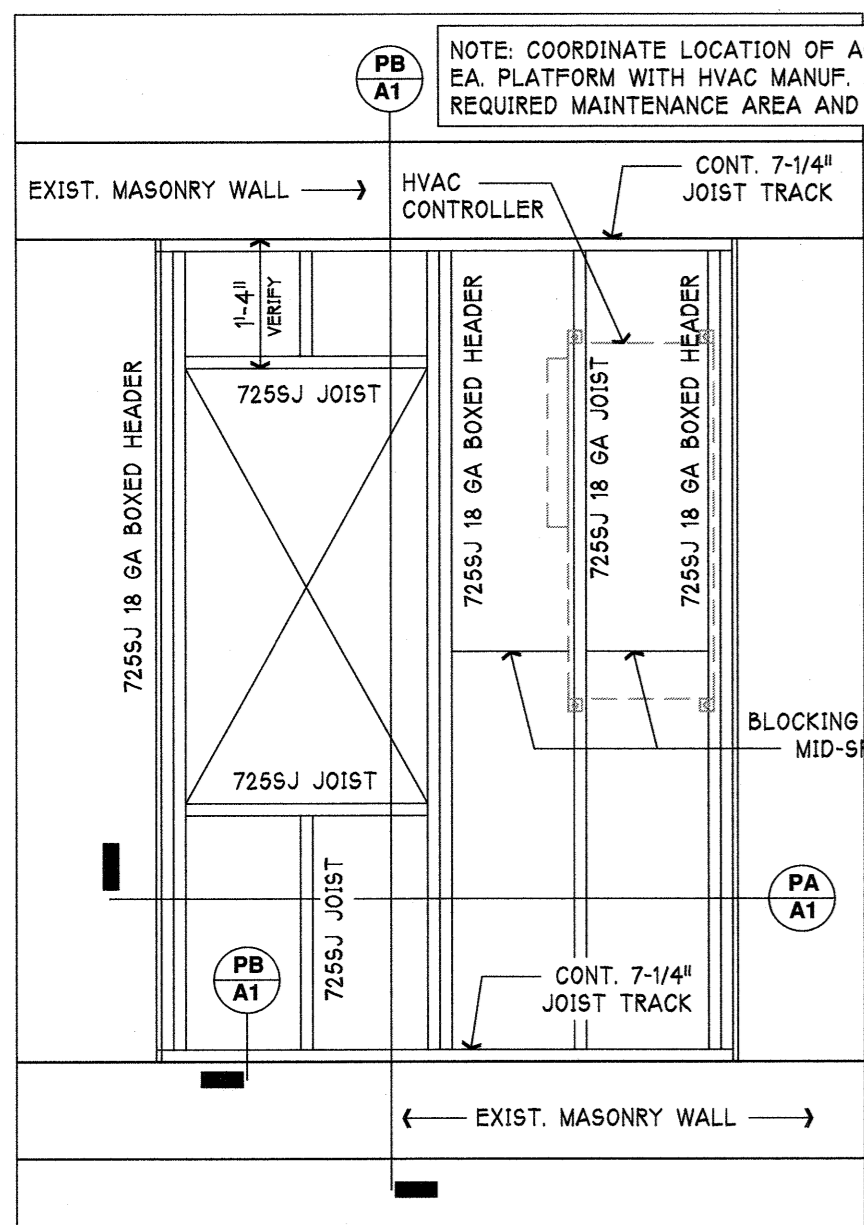
- EXISTING 2'x4' ACOUSTICAL LAY-IN CEILING TILES AND GRID SYSTEM TO BE REMOVED AND PROPERLY DISPOSED OF IN ACCORDANCE WITH PROJECT MANUAL.
- EXISTING 2'x2' LED FIXTURES TO BE SECURELY ATTACHED TO EXISTING SUBSTRATE AS CEILING AND GRID SYSTEM IS REMOVED. RE-POSITION FIXTURES IN ACCORDANCE WITH REFLECTED CEILING PLAN IN NEW CEILING GRID.
- EXISTING 2'x4' LED FIXTURES TO BE SECURELY ATTACHED TO EXISTING SUBSTRATE AS CEILING AND GRID SYSTEM IS REMOVED. RE-POSITION FIXTURES IN ACCORDANCE WITH REFLECTED CEILING PLAN IN NEW CEILING GRID.
- EXISTING 48" UTILITY FIXTURES TO BE REMOVED, PROPERLY STORED IN SECURE AREA AND RE-INSTALLED IN ACCORDANCE WITH REFLECTED CEILING PLAN.



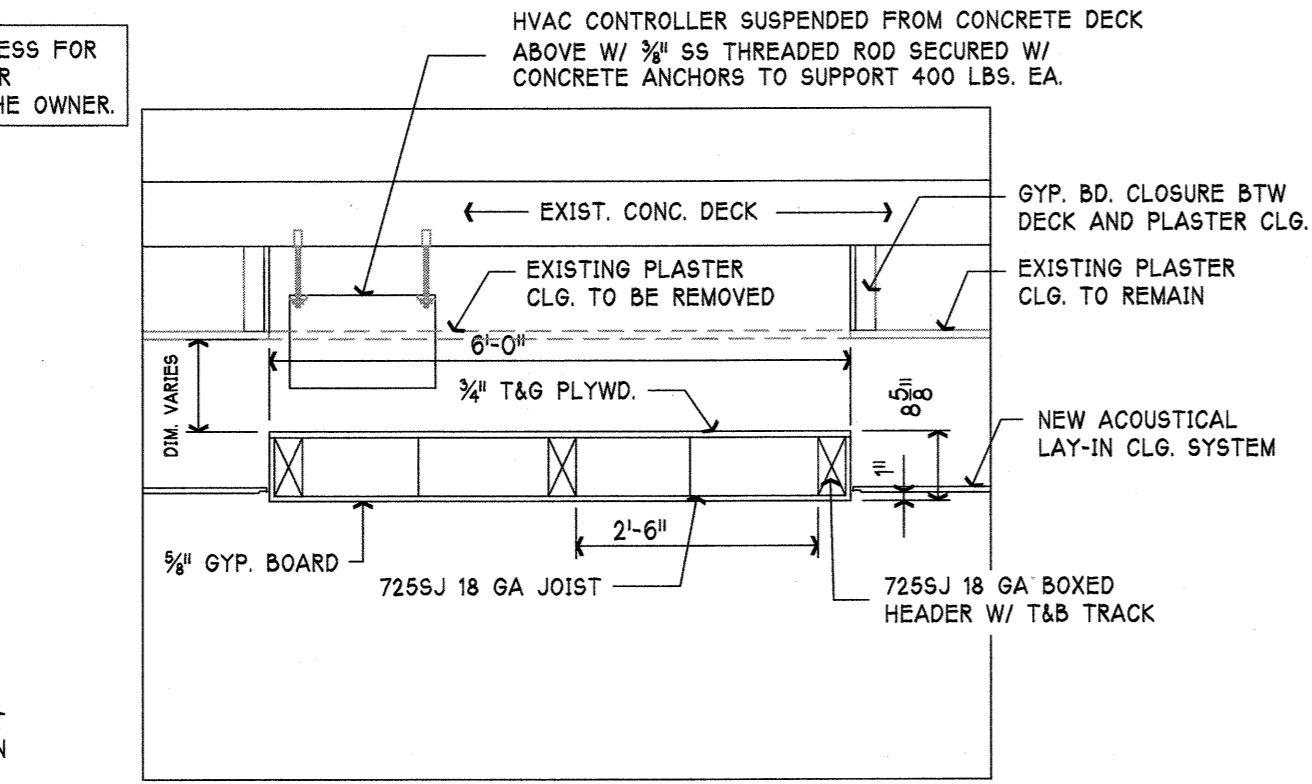
## MAIN LEVEL CEILING DEMOLITION PLAN

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

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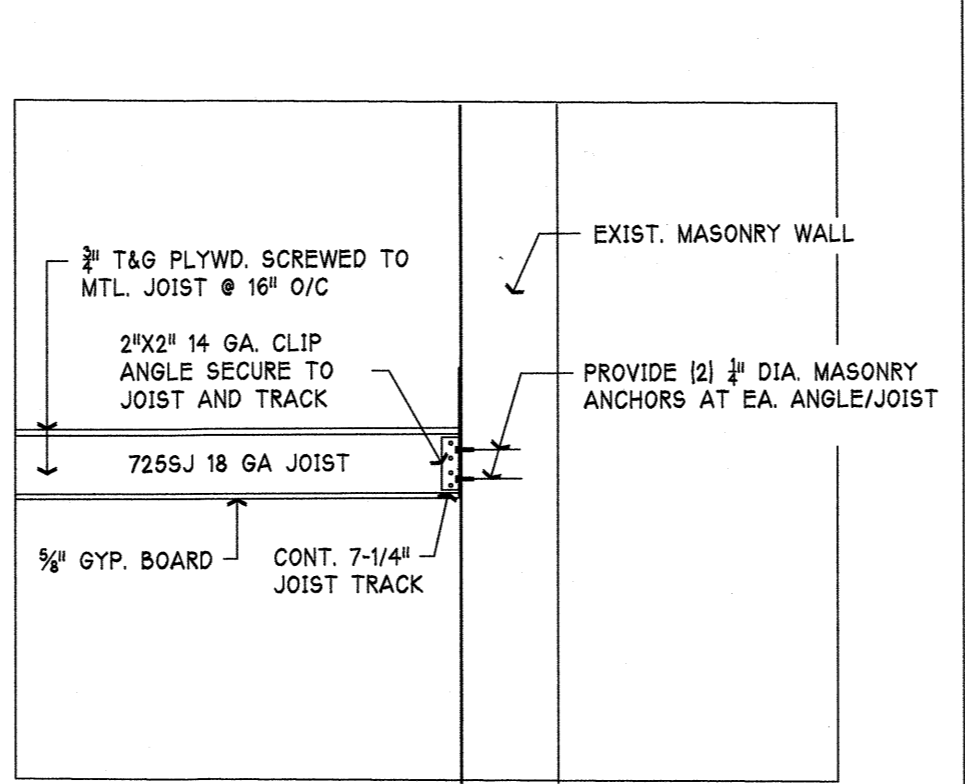


**PXA1 TYP. FRAMING PLAN**  
SCALE: 1/2" = 1'-0" (8 PLATFORM REQ'S)



**PA A1 PLATFORM SECTION**  
SCALE: 1/2" = 1'-0" PERP. TO FRAMING

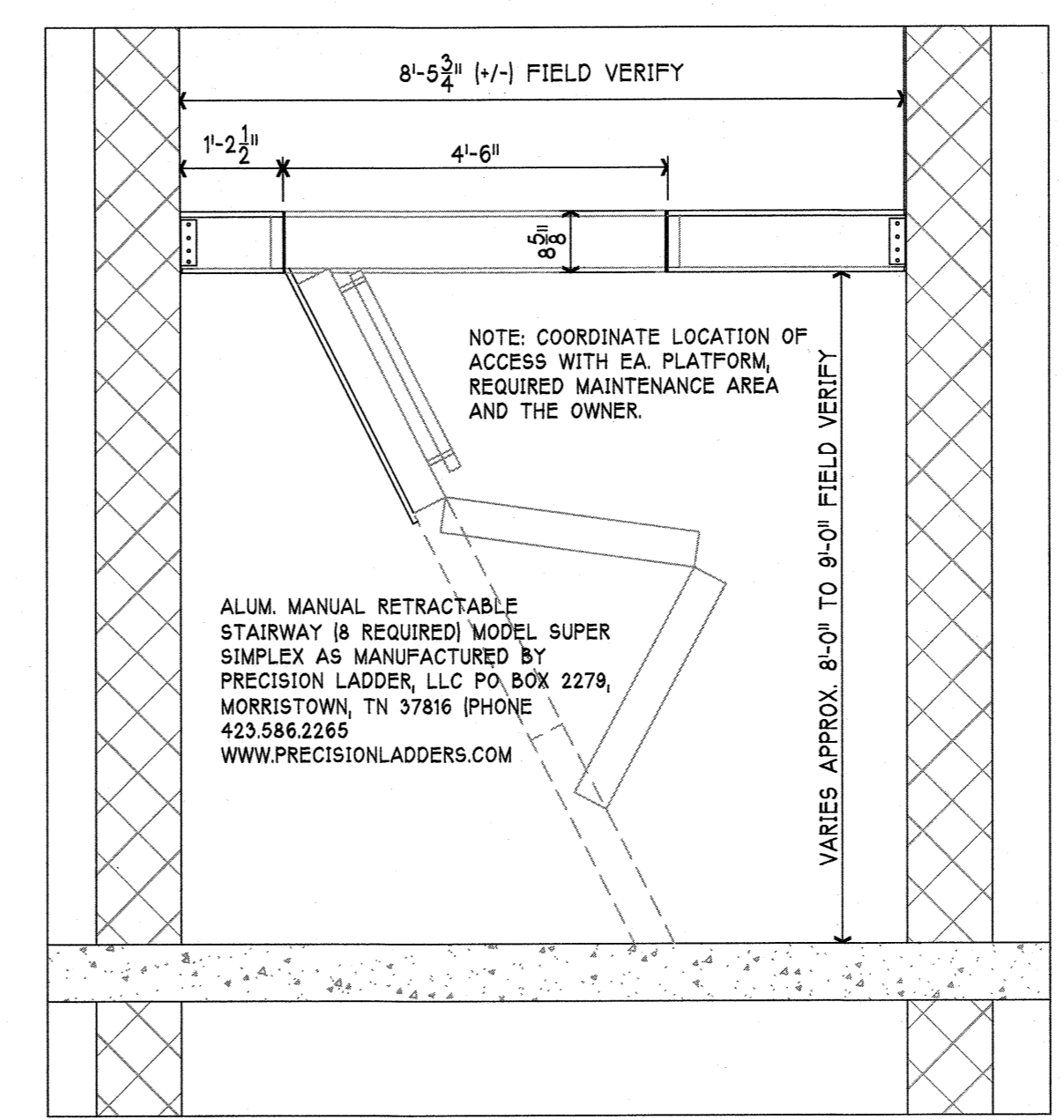
- NOTES:
- COORDINATE EXACT DIMENSIONS FOR ACCESS LADDER WITH MANUFACTURER'S REQUIREMENTS AND OTHER TRADES PROVIDING EASY ACCESS FOR SERVICING EQUIPMENT. PROVIDE SHOP DRAWINGS FOR FINAL APPROVAL.
  - NOTE THAT EXISTING CONDITIONS WILL PROVIDE SOME VARIATION TO EXACT FRAMING. CONSULT ARCHITECT WITH SUCH VARIATIONS BEFORE PROCEEDING W/ FRAMING.



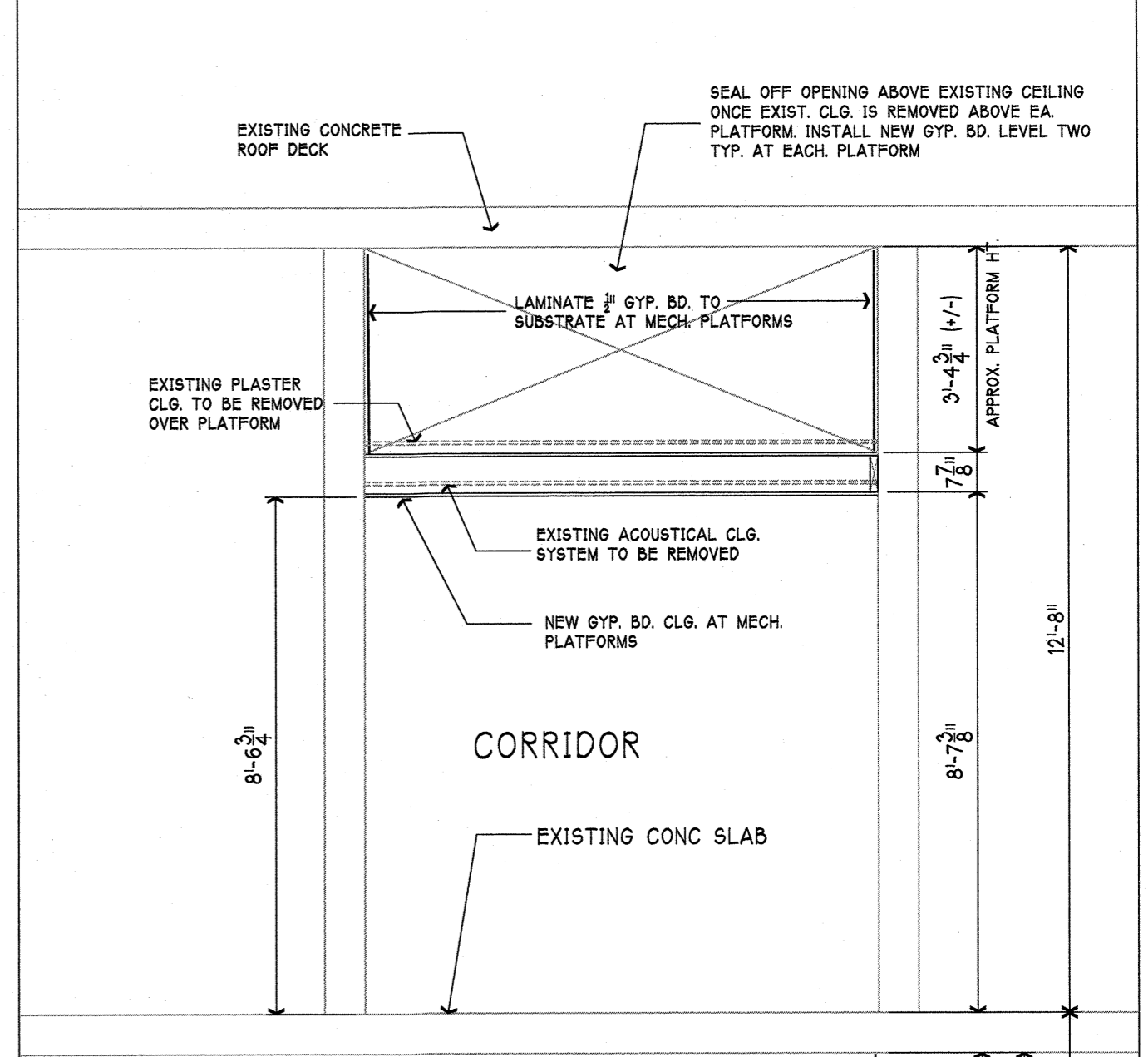
**PB A1 PLATFORM ANCHOR**  
SCALE: 1/2" = 1'-0" AT JOIST SUPPORT

**ALTERNATE #1:**  
IN LIEU OF THE SPECIFIED PLATFORM LADDER, PROVIDE AN ACCESS DOOR W/ DRYWALL FLANGE 24 X 24 #BA-AHD-GYP PRIMED 16 GA. W/ DRYWALL CORNER BEAD FLANGE WITH LOCK.

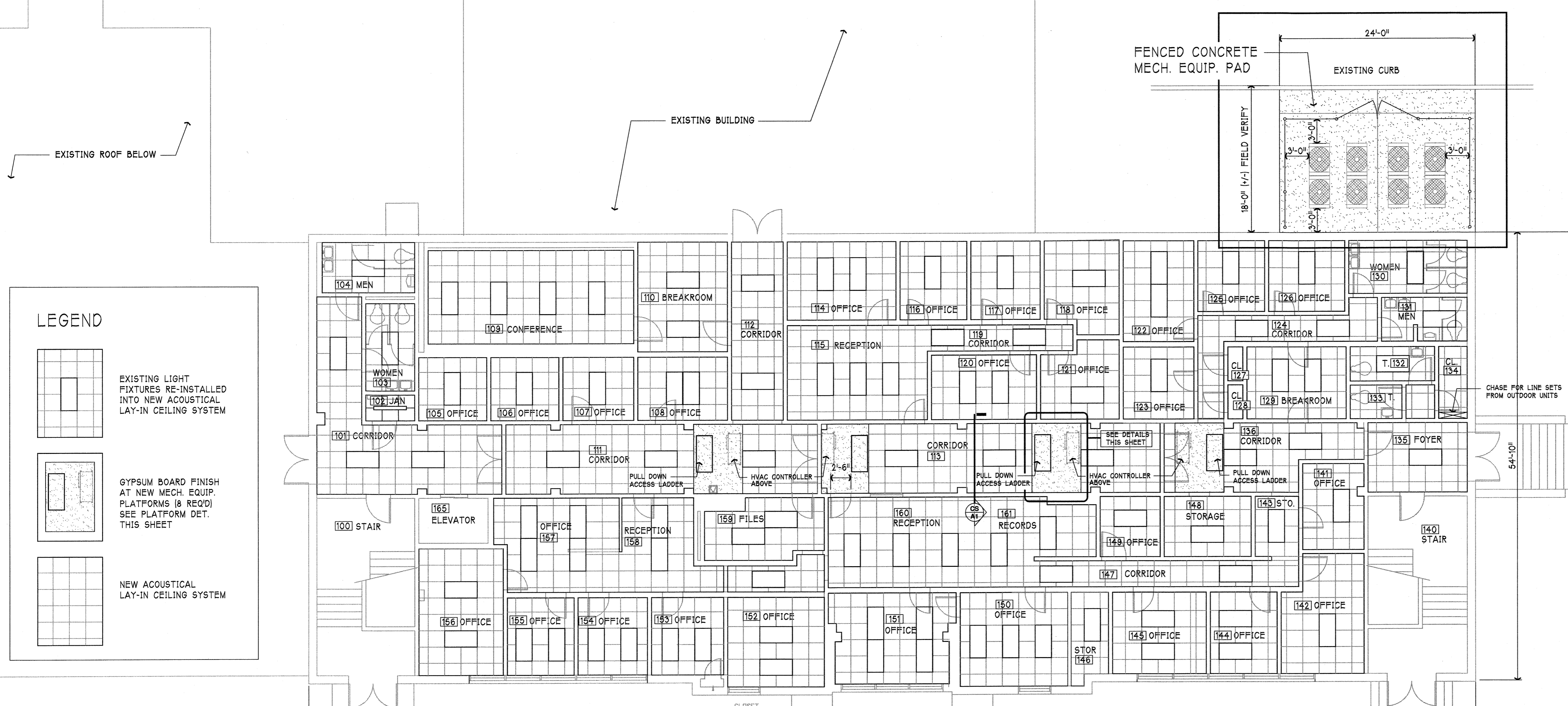
**TYPICAL PLATFORM FRAMING PLAN, SECTION & DETAILS**  
SCALE: 1/2" = 1'-0"



**PCA1 PLATFORM LADDER SECTION**  
SCALE: 1/2" = 1'-0"



**CS A1 A2 CORRIDOR SECTION**  
SCALE: 3/8" = 1'-0"



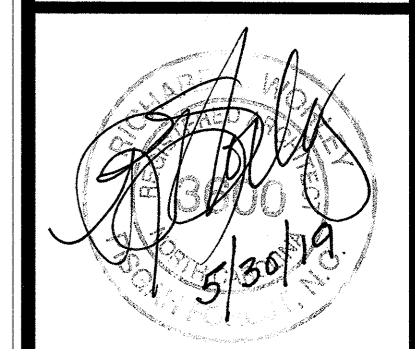
**MAIN LEVEL REFLECTED CEILING PLAN**  
SCALE: 1/8" = 1'-0"

**LEGEND**

- EXISTING LIGHT FIXTURES RE-INSTALLED INTO NEW ACOUSTICAL LAY-IN CEILING SYSTEM
- GYP. BOARD FINISH AT NEW MECH. EQUIP. PLATFORMS (B REQ'D) SEE PLATFORM DET. THIS SHEET
- NEW ACOUSTICAL LAY-IN CEILING SYSTEM

EXISTING DIGITAL PLANS ARE A GENERAL REPRESENTATION OF THE BUILDING AND HAVE BEEN DEVELOPED FROM OLD EXISTING DRAWINGS WITH MINIMAL SITE OBSERVATIONS. THESE DRAWINGS/FILES ARE NOT INTENDED TO BE A PRECISE REPRESENTATION OF THE EXISTING CONSTRUCTION. FIELD VERIFY EXISTING CONDITIONS OF ANY AREAS THAT ARE CRITICAL TO ALL RENOVATIONS, ADDITIONS AND FUTURE DESIGN OF THIS BUILDING.

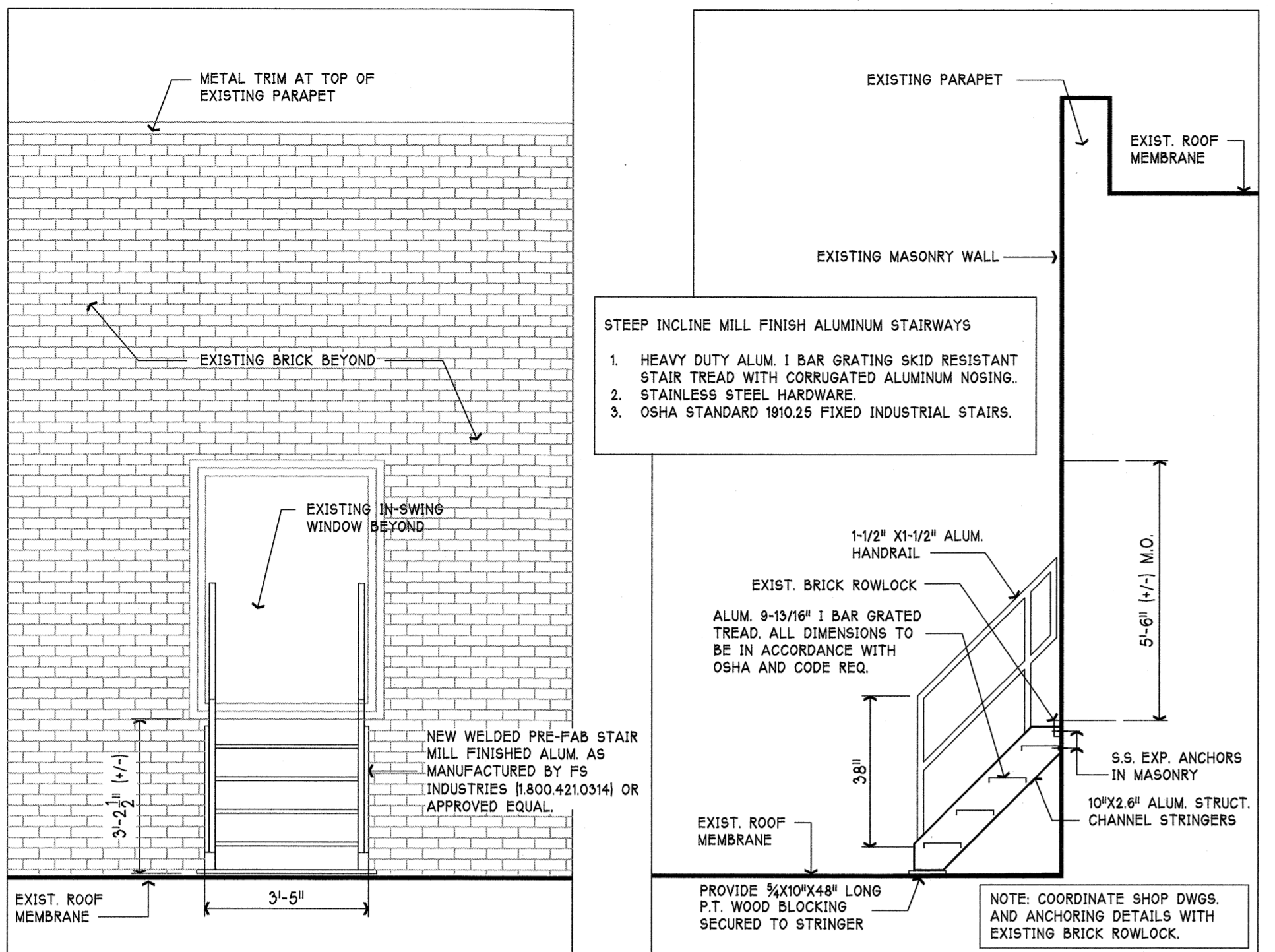
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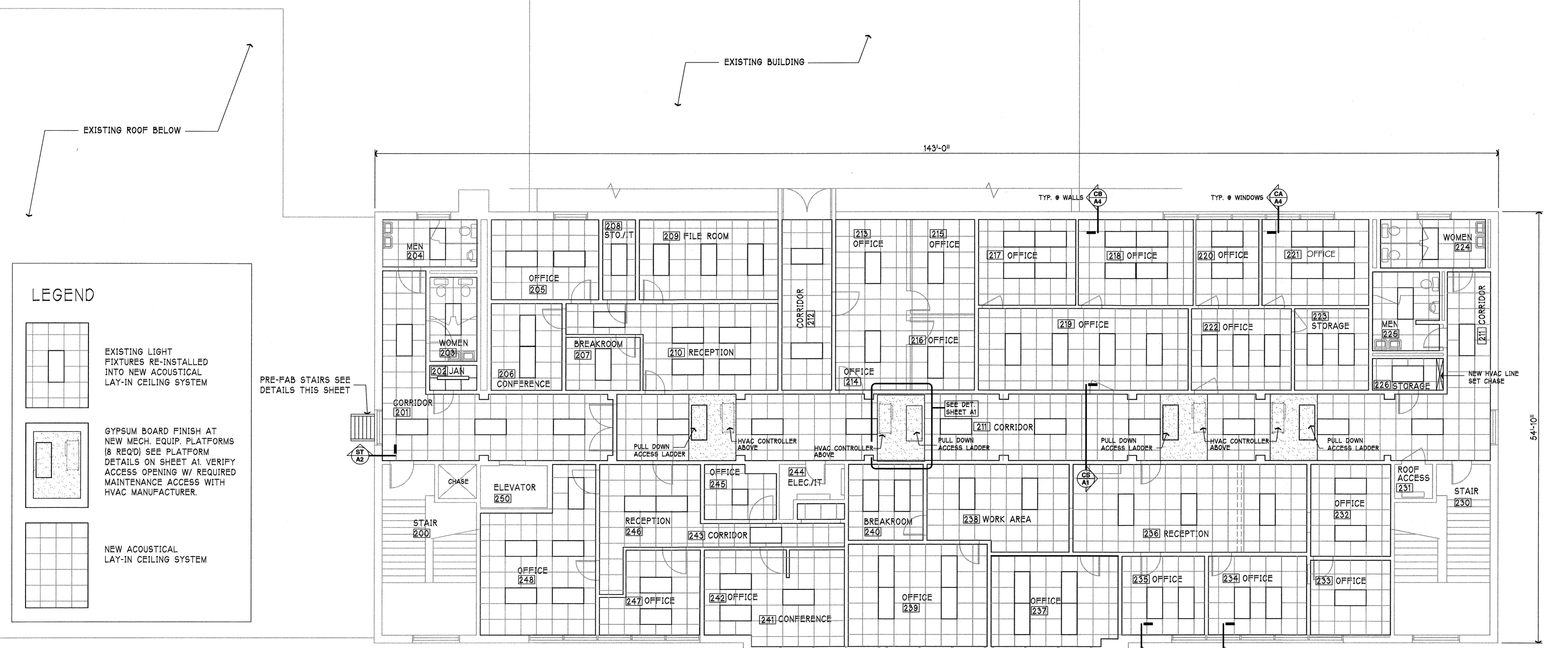
DATE: 30 MAY 2019

SHEET: **A1**

FILE NAME: RLW98.dwg



**ST A2** PRE-FAB STAIR  
SCALE: 3/8" = 1'-0"



**UPPER LEVEL REFLECTED CEILING PLAN**  
SCALE: 1/8" = 1'-0"

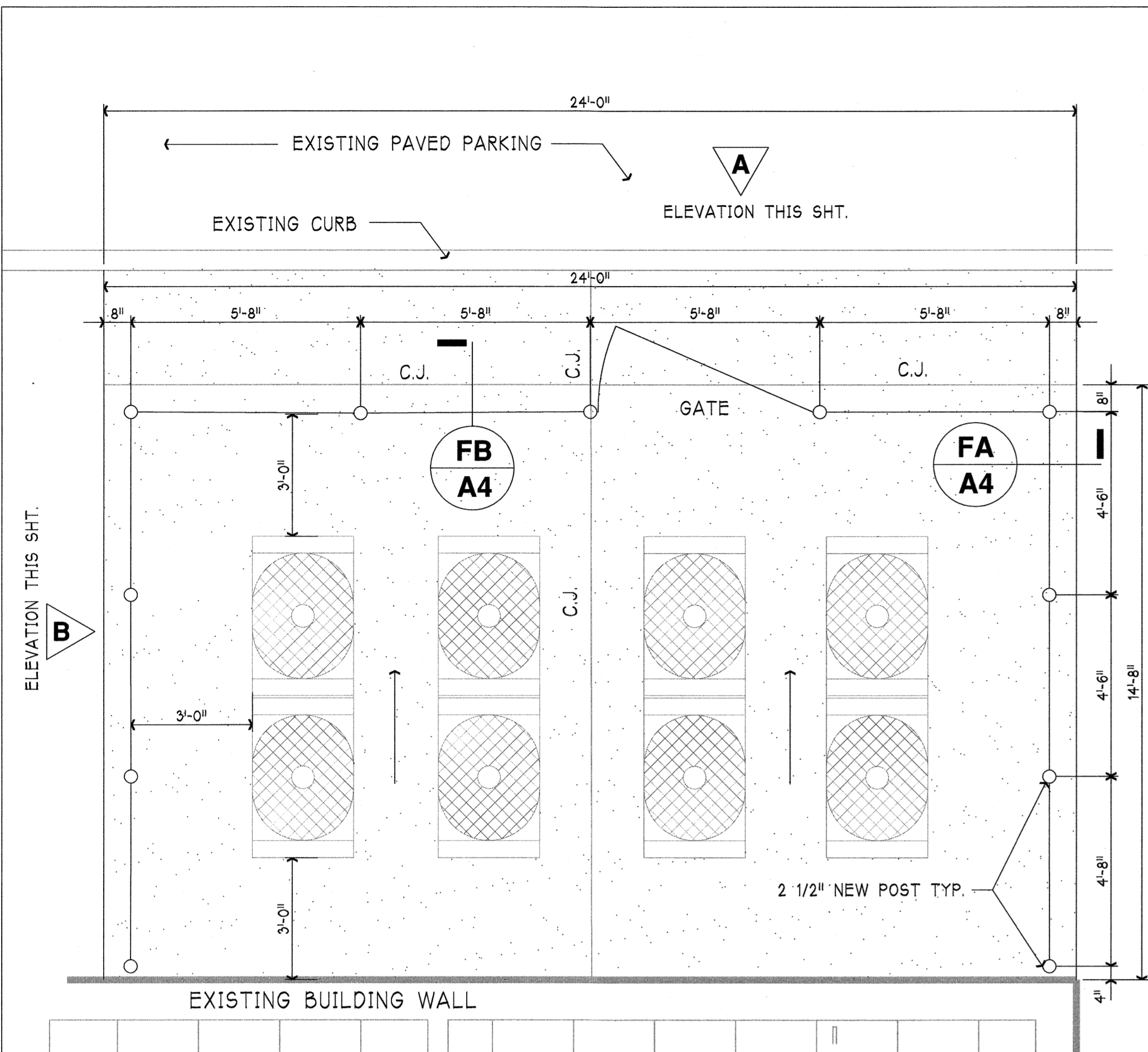
EXISTING DIGITAL PLANS ARE A GENERAL REPRESENTATION OF THE BUILDING AND HAVE BEEN DEVELOPED FROM OLD EXISTING DRAWINGS WITH MINIMAL SITE OBSERVATIONS. THESE DRAWINGS/FILES ARE NOT INTENDED TO BE A PRECISE REPRESENTATION OF THE EXISTING CONSTRUCTION. FIELD VERIFY EXISTING CONDITIONS OF ANY AREAS THAT ARE CRITICAL TO ALL RENOVATIONS SPECIFICALLY THE PROPOSED GRID LAYOUT OF NEW ACOUSTICAL LAY-IN CEILING SYSTEMS. SEE PROJECT MANUAL FOR SPECIFICATIONS.

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DATE 30 MAY 2019

SHEET **A2**



### MECH. PAD/FENCE PLAN

SCALE: 3/8" = 1'-0"

#### NOTES:

1. INSTALL NEW CHAIN LINK FABRIC TO NEW POST AND EXISTING (SEE SPEC). PROVIDE NEW GATE AS INDICATED.
2. PROVIDE POSITIVE DRAINAGE SLOPE TOWARD PARKING/PAVING. COORDINATE SLOPE WITH HVAC INSTALLERS/MANUFACTURER TO INSURE POSITIVE DRAINAGE AND ACCEPTABLE SLOPE REQUIREMENTS FOR HVAC EQUIPMENT.
3. VERIFY ALL DIMENSIONS AND COORDINATE WITH EXISTING CONDITIONS, OTHER TRADES AND CLEARANCES FOR ALL HVAC EQUIPMENT. AND CHANGES TO BE INCLUDED IN SHOP DRAWING SUBMITTAL FOR APPROVAL BY OWNER.
4. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

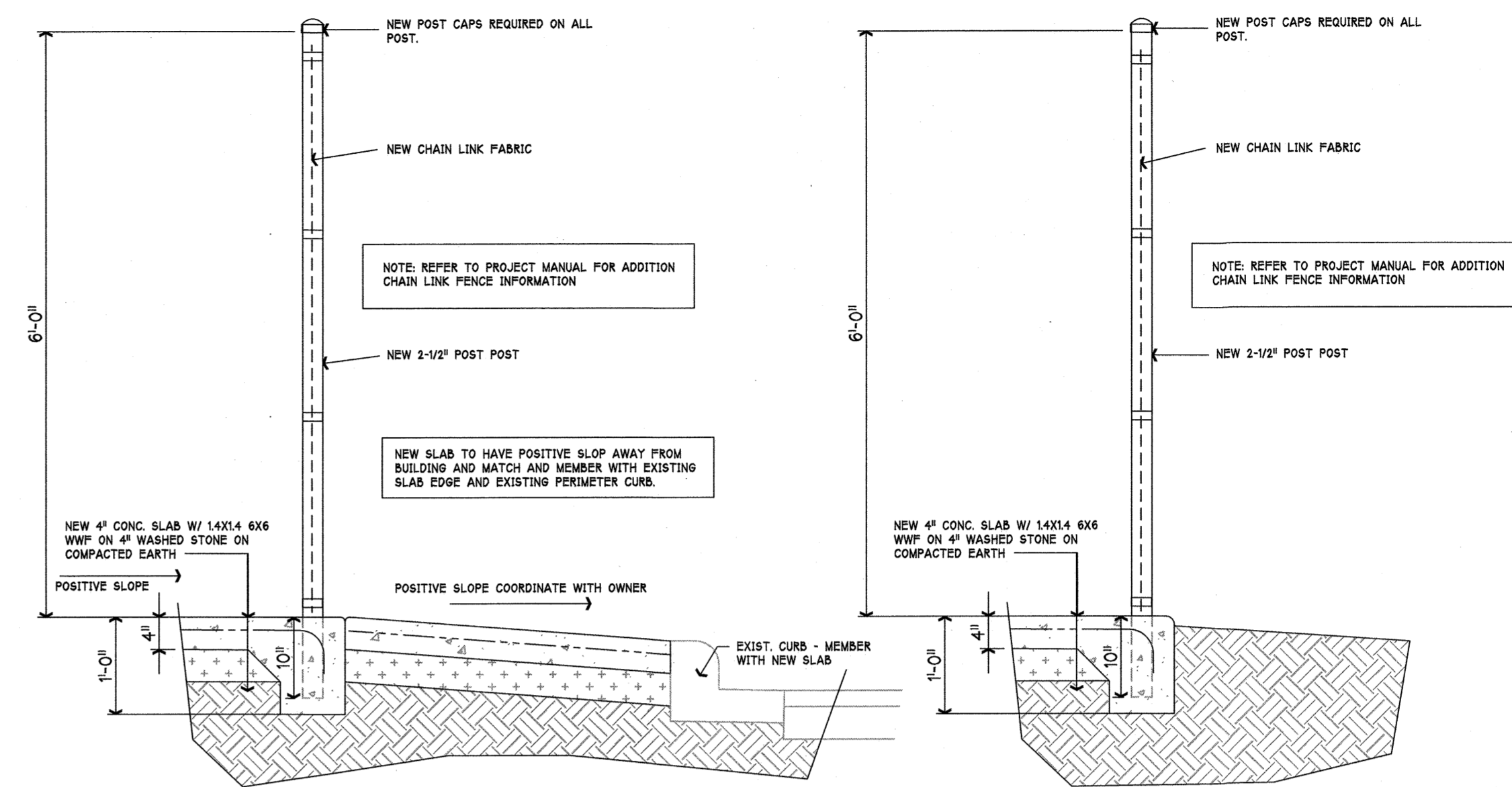
#### STRUCTURAL NOTES

- A. CAST-IN-PLACE CONCRETE**
1. CAST-IN-PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3500 PSI, U.O.N., SEE SPECIFICATIONS.
  2. ALL CONCRETE WHICH IS EXPOSED TO OUTSIDE WEATHER SHALL CONTAIN ENTRAINED AIR.
  3. ADDITION OF WATER TO THE CONCRETE AT THE JOB SITE FOR THE PURPOSE OF INCREASING THE SLUMP OR FOR RETEMPERING THE CONCRETE WHICH HAS BEGUN TO SET IS PROHIBITED.
  4. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ANCHOR BOLTS, CLIPS, INSERTS, CONNECTION PLATES, SLEEVES, SLOTS, AND OTHER REQUIRED ITEMS IN ACCORDANCE WITH THE CONTRACT DRAWINGS, AND IN COOPERATION WITH OTHER TRADES PRIOR TO PLACING THE CONCRETE.
  5. GRADE SLABS SHALL BE 4" THICK REINFORCED WITH 14X14 6X6 WWF, U.O.N.

- B. REINFORCING STEEL**
1. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. LAP ONE FULL MESH PLUS 2" AT SPLICES.
  3. ALL REINFORCING STEEL SHALL BE ACCURATELY AND SECURELY TIED AND ANCHORED IN PLACE TO PREVENT DISLOCATION DURING THE PLACING OPERATION. WWF SHALL BE PLACED IN THE TOP THIRD OF THE SLAB BUT NO MORE THAN 1-1/2" BELOW THE TOP SURFACE.

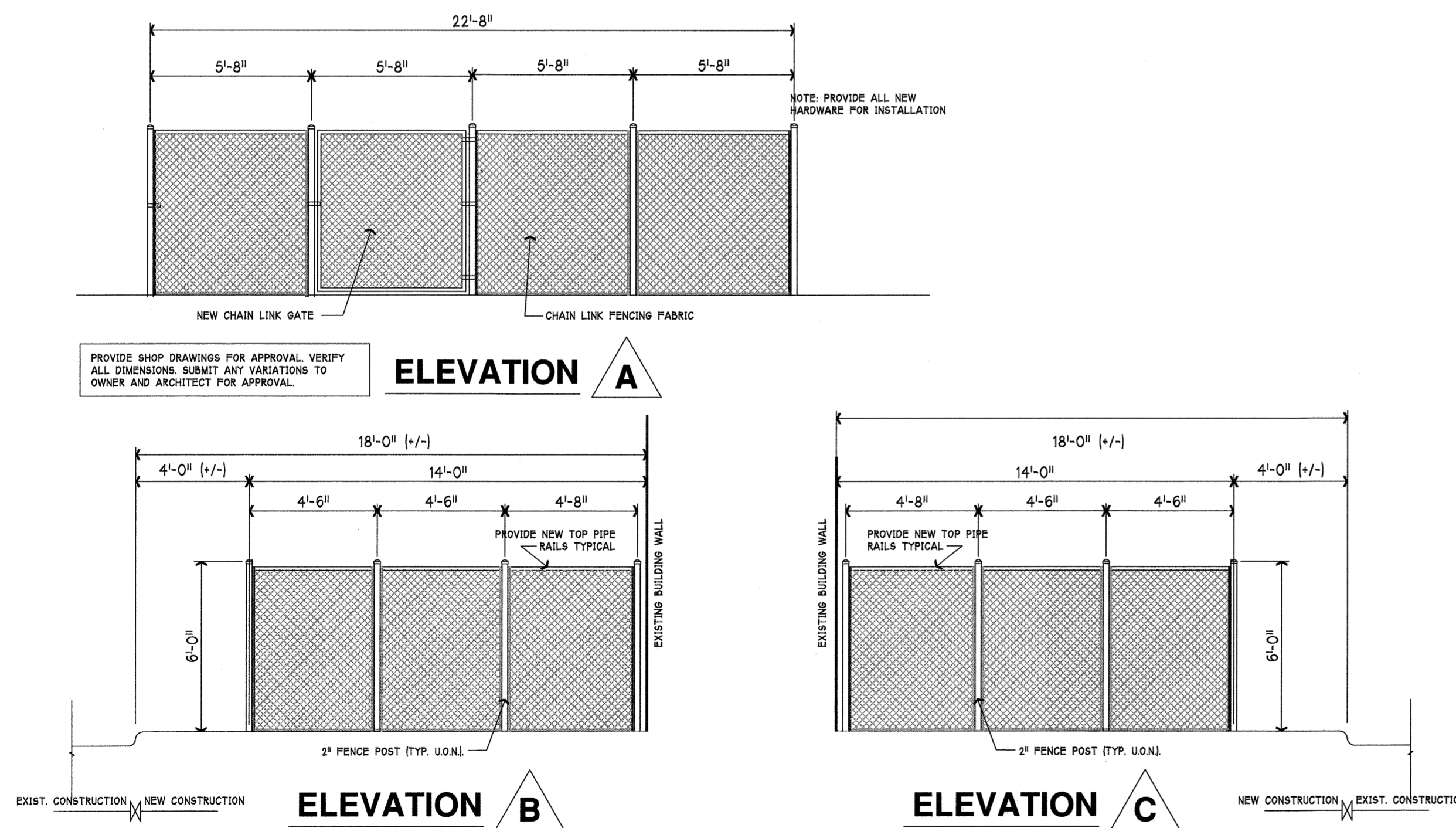
#### C. WOOD/LUMBER NOTES

- PLYWOOD: APA RATED SHEATHING, EXT. GLUE STURD-I-FLOOR, INT-APA, 3/4", T & G.



### PAD/FENCE SECTIONS

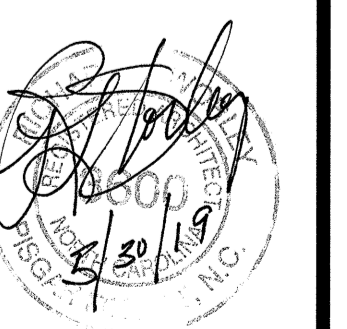
SCALE: 3/4" = 1'-0"



### FENCE ELEVATIONS

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

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DATE: 30 MAY 2019

SHEET: **A3**

FINISH SCHEDULE — MAIN LEVEL						
SPECIAL NOTES	SPACE	CLG	WSC'T	REMARKS		APPROX. CEILING HT. (SEE NOTE 1)
	SPACE NUMBER	NAMES OF EXISTING SPACE	PAINTED GYPSUM BR.	ACOUSTICAL LAY-IN TILE	FRP MATCH EXIST?	EXISTING TO REMAIN
	100	STAIR				EXIST.
	101	CORRIDOR	1	2		MATCH
	102	JANITOR	2			MATCH
	103	WOMEN	2			MATCH
	104	MEN	2			MATCH
	105	OFFICE	2			MATCH
	106	OFFICE	2			MATCH
	107	OFFICE	2			MATCH
	108	OFFICE	2			MATCH
	109	CONFERENCE ROOM	2			MATCH
	110	BREAK ROOM	2			MATCH
	111	CORRIDOR	1	2		MATCH
	112	CORRIDOR	2			MATCH
	113	CORRIDOR	1	2		MATCH
	114	OFFICE	2			MATCH
	115	RECEPTION	2			MATCH
	116	OFFICE	2			MATCH
	117	OFFICE	2			MATCH
	118	OFFICE	2			MATCH
	119	CORRIDOR	2			MATCH
	120	OFFICE	2			MATCH
	121	OFFICE	2			MATCH
	122	OFFICE	2			MATCH
	123	OFFICE	2			MATCH
	124	CORRIDOR	2			MATCH
	125	OFFICE	2			MATCH
	126	OFFICE	2			MATCH
	127	CLOSET	2			MATCH
	128	CLOSET	2			MATCH
	129	BREAKROOM	2			MATCH
	130	WOMEN	2			MATCH
	131	MEN	2			MATCH
	132	TOILET ROOM	2			MATCH
	133	TOILET ROOM	2			MATCH
	134	CLOSET	2			MATCH
	135	FDYER	2			MATCH
	136	CORRIDOR	1	2		MATCH
	140	STAIR			4	EXIST.
	141	OFFICE	2			MATCH
	142	OFFICE	2			MATCH
	143	STORAGE	2			MATCH
	144	OFFICE	2			MATCH
	145	OFFICE	2			MATCH
	146	STORAGE	2			MATCH
	147	CORRIDOR	2			MATCH
	148	STORAGE	2			MATCH
	149	OFFICE	2			MATCH
	150	OFFICE	2			MATCH
	149	OFFICE	2			MATCH
	150	FILE ROOM	2			MATCH
	151	OFFICE	2			MATCH
	152	OFFICE	2			MATCH
	153	OFFICE	2			MATCH
	154	OFFICE	2			MATCH
	155	OFFICE	2			MATCH
	156	OFFICE	2			MATCH
	157	OFFICE	2			MATCH
	158	RECEPTION	2			MATCH
	159	FILES	2			MATCH
	160	OFFICE	2			MATCH
	161	OFFICE	2			MATCH
	165	ELEVATOR	2			EXIST.

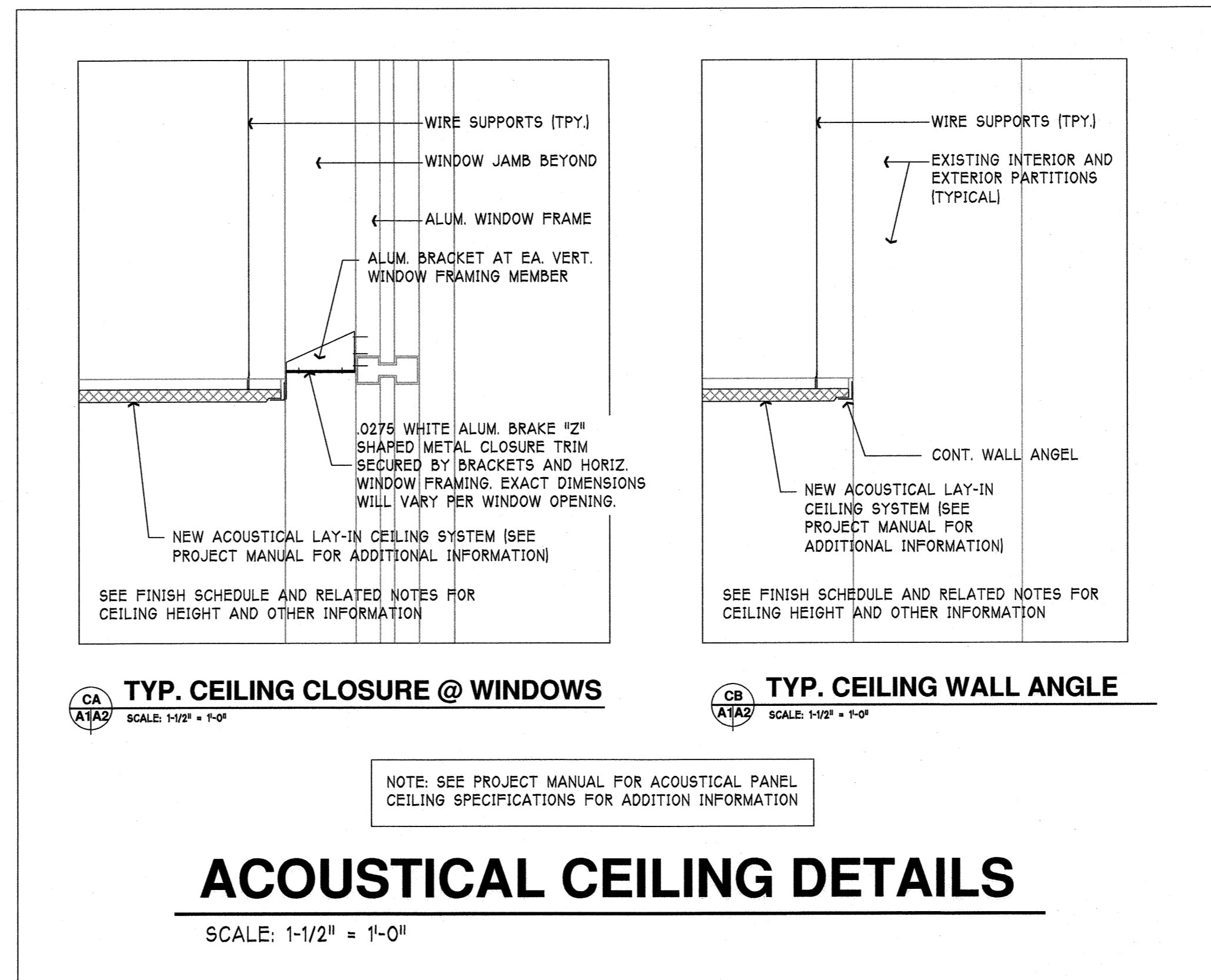
FINISH SCHEDULE — UPPER LEVEL						
SPECIAL NOTES	SPACE	CLG	REMARKS			APPROX. CEILING HEIGHT
	SPACE NUMBER	NAMES OF EXISTING SPACE	PAINTED GYPSUM BR.	ACOUSTICAL LAY-IN TILE	FRP MATCH EXIST?	EXISTING TO REMAIN
	200	STAIR				EXIST.
	201	CORRIDOR	2			MATCH
	202	JANITOR	2			MATCH
	203	WOMEN	2			MATCH
	204	MEN	2			MATCH
	205	OFFICE	2			MATCH
	206	CONFERENCE	2			MATCH
	207	BREAKROOM	2			MATCH
	208	STORAGE/IT	2			MATCH
	209	FILE ROOM	2			MATCH
	210	RECEPTION	2			MATCH
	211	CORRIDOR	1	2		MATCH
	212	CORRIDOR	2			MATCH
	213	OFFICE	2			MATCH
	214	OFFICE	2			MATCH
	215	OFFICE	2			MATCH
	216	OFFICE	2			MATCH
	217	OFFICE	2			MATCH
	218	OFFICE	2			MATCH
	219	OFFICE	2			MATCH
	220	OFFICE	2			MATCH
	221	OFFICE	2			MATCH
	222	OFFICE	2			MATCH
	223	STORAGE	2			MATCH
	224	WOMEN	2			MATCH
	225	MEN	2			MATCH
	226	STORAGE	2			MATCH
	230	STAIR	2			MATCH
	231	ROOF ACCESS			4	EXIST.
	232	OFFICE	2			MATCH
	233	OFFICE	2			MATCH
	234	OFFICE	2			MATCH
	235	OFFICE	2			MATCH
	236	RECEPTION	2			MATCH
	237	OFFICE	2			MATCH
	238	WORK AREA	2			MATCH
	239	OFFICE	2			MATCH
	240	BREAKROOM	2			MATCH
	241	CONFERENCE	2			MATCH
	242	OFFICE	2			MATCH
	243	CORRIDOR	2			MATCH
	244	ELEC./IT	2			MATCH
	245	OFFICE	2			MATCH
	246	RECEPTION	2			MATCH
	247	OFFICE	2			MATCH
	248	OFFICE	2			MATCH
	250	ELEVATOR			4	EXIST.

**GENERAL FINISH SCHEDULE NOTES:**

- ALL CEILING HEIGHTS DESIGNATED AS "MATCH" ARE BASICALLY INTENDED TO MATCH EXISTING CEILING HEIGHTS. ALL CEILING HEIGHTS ARE TO BE VERIFIED WITH OWNER AFTER CONTRACTOR HAS COORDINATED WITH ALL TRADES AND EXISTING CONDITIONS NOTED ON THE CONSTRUCTION DRAWINGS. DO NOT PROCEED WITH INSTALLATION UNTIL SUCH APPROVE IS GIVEN FOR EACH SPACE.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING CONSTRUCTION FINISHES (FLOORS, CEILINGS, WALLS, WINDOWS, ETC.) THAT ARE TO REMAIN. ANY DAMAGE OF SUCH MATERIALS AND/OR DEFACTING EXISTING FINISHES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. REVIEW EACH SPACE WITH OWNER AND NOTE IN WRITING ANY EXISTING DAMAGE PRIOR TO PROCEEDING WITH THE WORK.
- CONTRACTOR IS RESPONSIBLE FOR MOVING OFFICE FURNITURE IN EACH SPACE AND REPLACING AFTER EACH WORK SESSION IN PREPARATION FOR OWNER'S USE OF THE OFFICE IN ACCORDANCE WITH OWNER'S SCHEDULE. REVIEW EACH SPACE WITH OWNER AND NOTE IN WRITING ANY EXISTING DAMAGE OF FURNITURE AND EQUIPMENT PRIOR TO PROCEEDING WITH THE WORK.

**SPECIAL NOTES:**

- EXISTING STAIR CEILING TO REMAIN. NO WORK ON THESE CEILING IS REQUIRED.
- THE DESIGN INTENT FOR NEW ACOUSTICAL LAY-IN CEILING SYSTEM HT. IS TO MATCH EXISTING TO ELIMINATE REPAINTING OF EXISTING CORRIDOR WALLS. THE NEW GYPSUM BOARD CEILINGS AT MECHANICAL PLATFORMS ARE TO BE APPROX. 1" BELOW NEW ACOUSTICAL LAY-IN CEILING HEIGHT.
- THE DESIGN INTENT IS FOR ALL NEW ACOUSTICAL LAY-IN CEILING SYSTEMS TO MATCH EXISTING CEILING HEIGHTS TO ELIMINATE REPAINTING OF EXISTING WALLS IN EACH SPACE. COORDINATE EXACT HT. WITH OWNER AND REVIEW EXISTING CONDITION PRIOR TO DETERMINING FINAL HEIGHT IN EACH ROOM. ROOMS WITH EXTERIOR WINDOWS HAVE A SPECIFIC MULLION HEIGHT THAT NEW CEILING CLOSURE TRIM WILL BE REQUIRED. SEE DETAILS FOR MORE SPECIFIC INFORMATION REGARDING THIS CLOSURE AND COORDINATION.
- EXISTING CEILING TO REMAIN. NO WORK ON THIS CEILING IS REQUIRED.



**ACOUSTICAL CEILING DETAILS**

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

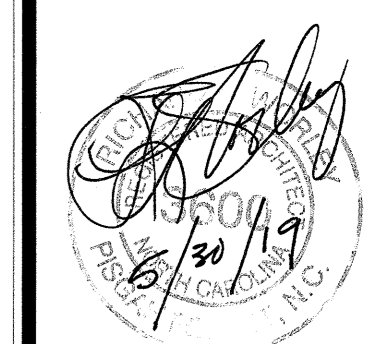
NOTE: SEE PROJECT MANUAL FOR ACOUSTICAL PANEL CEILING SPECIFICATIONS FOR ADDITION INFORMATION

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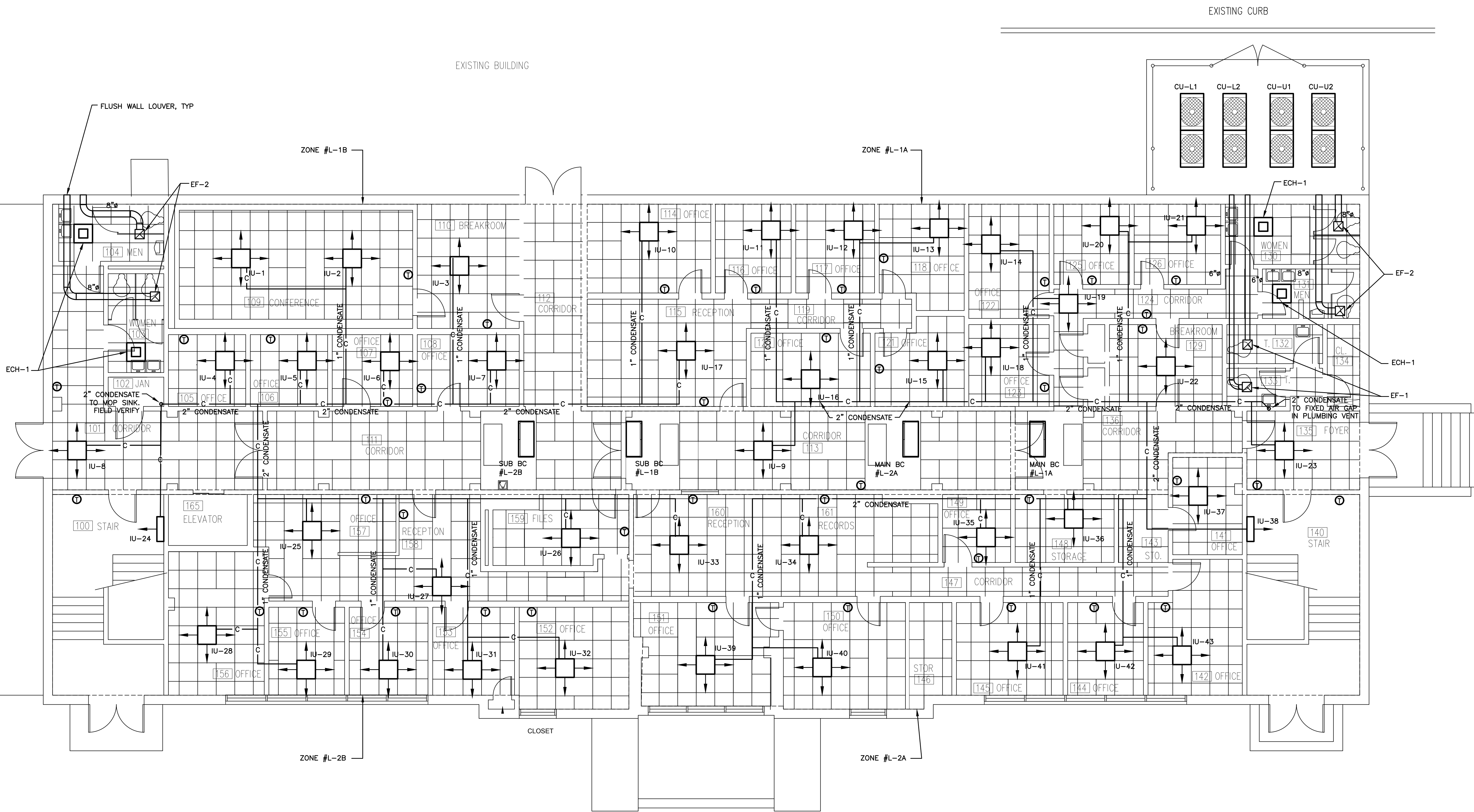
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PARTIAL RENOVATION & HVAC UPFIT  
TO THE TRANSYLVANIA COUNTY COMMUNITY SERVICES BUILDING  
**TRANSYLVANIA COUNTY BOARD OF COMMISSIONERS**  
BREVARD, NC



DATE: 30 MAY 2019

SHEET: **A4**



1 LOWER LEVEL PLAN - HVAC  
 M1 SCALE: 3/16" = 1'-0"

- HVAC DEMOLITION & SEQUENCE OF INSTALLATION NOTES:
1. THE VAST MAJORITY OF WORK WILL BE PERFORMED OUTSIDE OF REGULAR OFFICE HOURS ON NIGHTS AND WEEKENDS UNLESS OTHERWISE INSTRUCTED BY THE OWNER/GENERAL CONTRACTOR
  2. DEMOLITION & INSTALLATION WILL BE PERFORMED IN PHASES THAT COORDINATE WITH THE ZONES SHOWN ABOVE. SUGGESTED ORDER OF DEMOLITION: ZONE L-1A, L-1B, L-2A, L-2B
  3. ALL AREAS WILL REMAIN IN USE DURING REGULAR OFFICE HOURS AND WILL REQUIRE CONDITIONING AT ALL TIMES.
  4. SEQUENCE OF DEMOLITION/INSTALLATION FOR EACH INDIVIDUAL ZONE (TO MINIMIZE EMPLOYEE DISRUPTION):
    - A. CEILING GRID TO BE REMOVED IN THE CURRENT ZONE OF WORK.
    - B. EXISTING SUPPLY AND RETURN GRILLES TO BE REMOVED IN THE CURRENT ZONE OF WORK. SEE ORIGINAL MECHANICAL PLANS ATTACHED AS SHEETS M10 & M11 FOR REFERENCE ONLY. HEAVY FIELD VERIFICATION IS REQUIRED.
    - C. ALL RUN-OUTS AND BRANCH DUCTS TO BE REMOVED IN THE CURRENT ZONE OF WORK.
    - D. EXISTING SUPPLY AND RETURN TRUNK DUCTS TO REMAIN TO PROVIDE CONDITIONING TO THE CURRENT ZONE OF WORK.
    - E. NEW CU & DUCTLESS AHU'S TO BE INSTALLED IN THE CURRENT ZONE OF WORK AS SHOWN ABOVE
    - F. EXISTING AHU AND DUCTWORK SERVING THE CURRENT ZONE OF WORK TO BE REMOVED ONCE NEW SYSTEM IS READY FOR PARTIAL START-UP
    - G. NEW SYSTEM SERVING THE CURRENT ZONE OF WORK TO BE STARTED UP AND OPERATING BEFORE MOVING TO NEXT ZONE OF WORK.
  5. SEE ARCHITECTURAL PROJECT MANUAL FOR DETAILED INSTRUCTIONS

derek@simsgroup.com  
 5/5/19

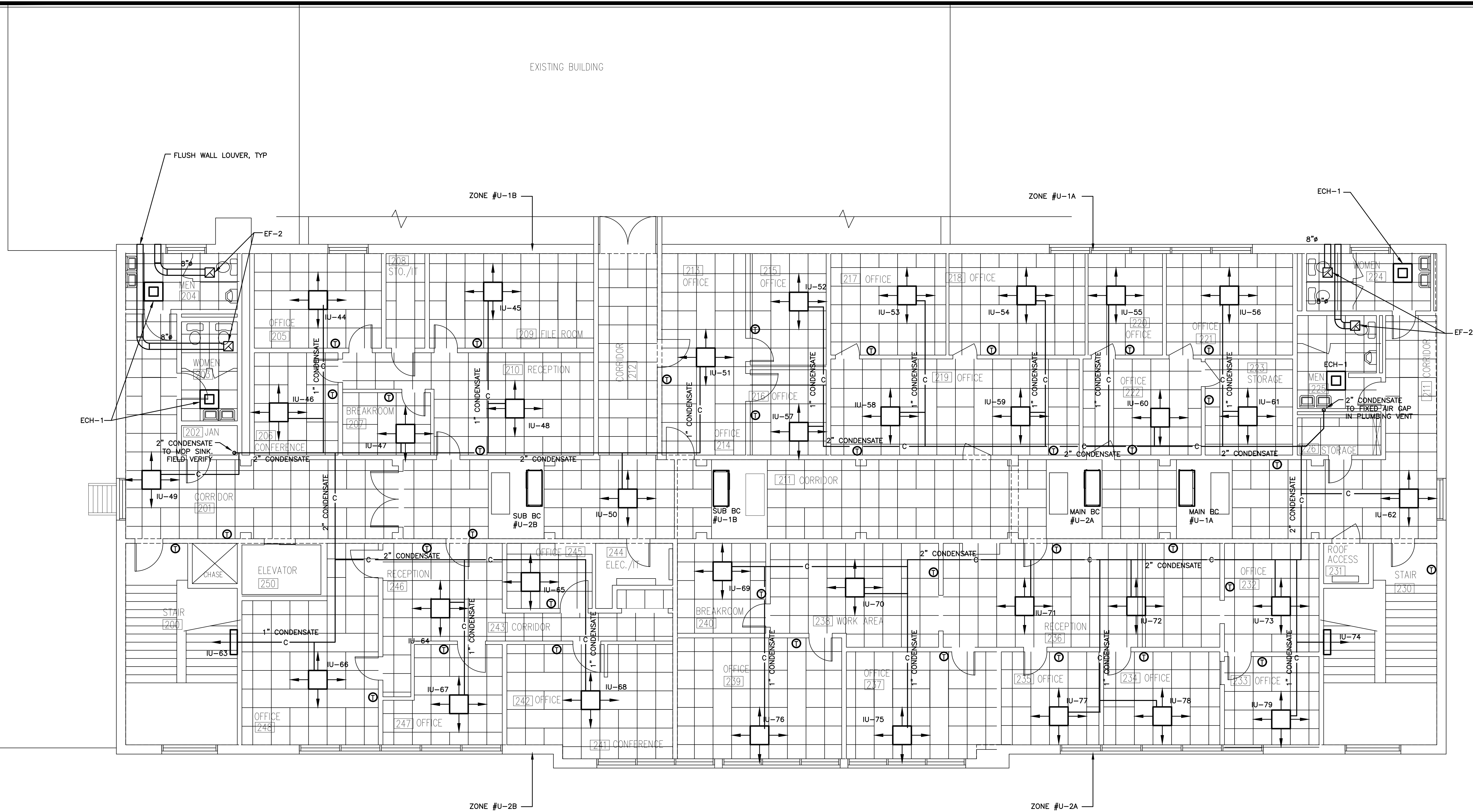
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PARTIAL RENOVATION & HVAC UPFIT  
 TO THE TRANSYLVANIA COUNTY COMMUNITY SERVICES BUILDING  
 TRANSYLVANIA COUNTY BOARD OF COMMISSIONERS  
 BREVARD, NC

DATE: 30 MAY 2019  
 SHEET: **M1**



**1** UPPER LEVEL PLAN - HVAC  
 M2 SCALE: 3/16" = 1'-0"

- HVAC DEMOLITION & SEQUENCE OF INSTALLATION NOTES:
1. THE VAST MAJORITY OF WORK WILL BE PERFORMED OUTSIDE OF REGULAR OFFICE HOURS ON NIGHTS AND WEEKENDS UNLESS OTHERWISE INSTRUCTED BY THE OWNER/GENERAL CONTRACTOR
  2. DEMOLITION & INSTALLATION WILL BE PERFORMED IN PHASES THAT COORDINATE WITH THE ZONES SHOWN ABOVE. SUGGESTED ORDER OF DEMOLITION: ZONE U-1A, U1-B, U-2A, U-2B
  3. ALL AREAS WILL REMAIN IN USE DURING REGULAR OFFICE HOURS AND WILL REQUIRE CONDITIONING AT ALL TIMES.
  4. SEQUENCE OF DEMOLITION/INSTALLATION FOR EACH INDIVIDUAL ZONE (TO MINIMIZE EMPLOYEE DISRUPTION):
    - A. CEILING GRID TO BE REMOVED IN THE CURRENT ZONE OF WORK.
    - B. EXISTING SUPPLY AND RETURN GRILLES TO BE REMOVED IN THE CURRENT ZONE OF WORK. SEE ORIGINAL MECHANICAL PLANS ATTACHED AS SHEETS M10 & M12 FOR REFERENCE ONLY. HEAVY FIELD VERIFICATION IS REQUIRED.
    - C. ALL RUN-OUTS AND BRANCH DUCTS TO BE REMOVED IN THE CURRENT ZONE OF WORK.
    - D. EXISTING SUPPLY AND RETURN TRUNK DUCTS TO REMAIN TO PROVIDE CONDITIONING TO THE CURRENT ZONE OF WORK.
    - E. NEW CU & DUCTLESS AHU'S TO BE INSTALLED IN THE CURRENT ZONE OF WORK AS SHOWN ABOVE
    - F. EXISTING AHU AND DUCTWORK SERVING THE CURRENT ZONE OF WORK TO BE REMOVED ONCE NEW SYSTEM IS READY FOR PARTIAL START-UP
    - G. NEW SYSTEM SERVING THE CURRENT ZONE OF WORK TO BE STARTED UP AND OPERATING BEFORE MOVING TO NEXT ZONE OF WORK.
  5. SEE ARCHITECTURAL PROJECT MANUAL FOR DETAILED INSTRUCTIONS

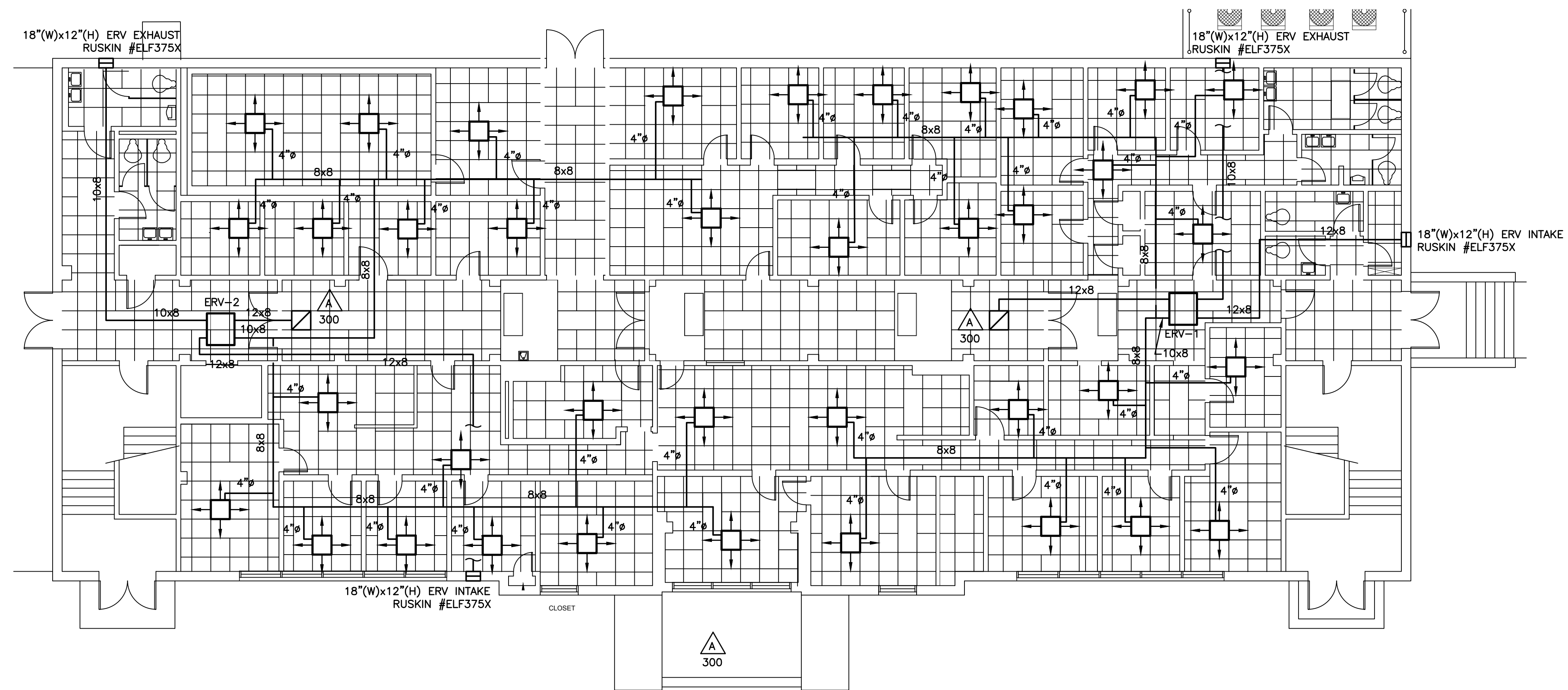


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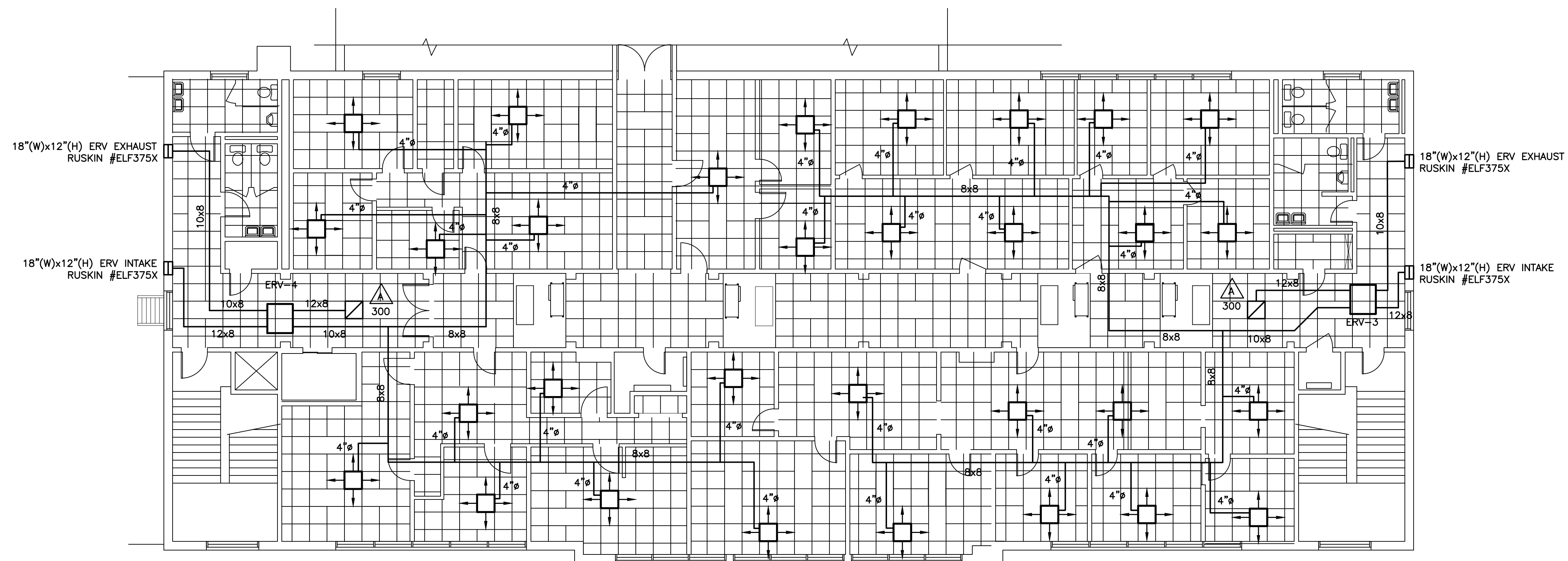
DATE 30 MAY 2019

SHEET **M2**

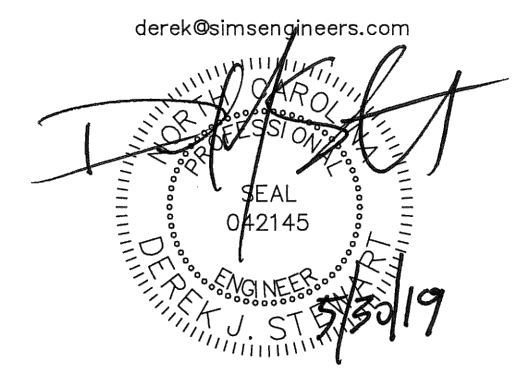




1 LOWER LEVEL PLAN - FRESH AIR  
 M3 SCALE: 1/8" = 1'-0"

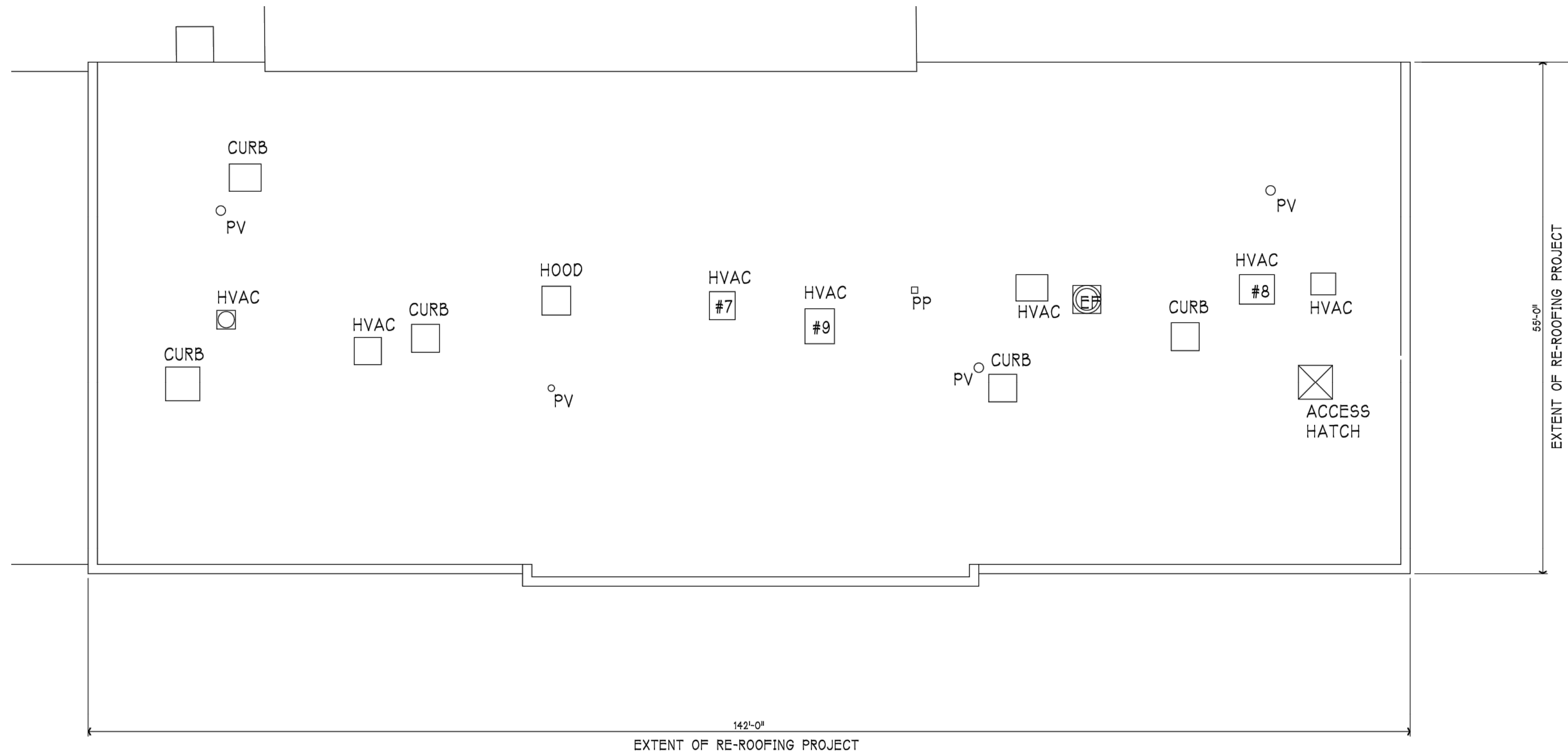


2 UPPER LEVEL PLAN - FRESH AIR  
 M3 SCALE: 1/8" = 1'-0"



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1 ROOF PLAN – HVAC DEMOLITION  
 M4 SCALE: 3/16" = 1'-0"

- NOTES:
- ALL EXISTING HVAC EQUIPMENT LOCATED ON THE ROOF WILL BE REMOVED AS IT IS MADE OBSOLETE BY SCOPE OF WORK SHOWN ON SHEETS M1 & M2.
  - HEAT PUMP/CONDENSING UNITS:  
 REMOVE UNIT AND CUT REFRIGERANT LINES, ELECTRICAL WIRING, AND ANY SUPPORT STRUCTURES ASSOCIATED WITH UNITS FLUSH TO TOP OF PITCH POCKET. PITCH POCKETS TO BE SEALED WEATHER TIGHT.
  - EXHUAUST FAN & INTAKE HOOD:  
 EXHAUST FAN – REMOVE FROM CURB. CURB TO REMAIN, BUT MUST BE COVERED WITH A STRUCTURALLY SOUND MATERIAL, SINGLE PLY ROOFING MATERIAL TO MATCH EXISTING, AND SEALED WEATHER TIGHT. REMOVE ELECTRICAL WIRING AND ANY SUPPORT STRUCTURES ASSOCIATED WITH UNIT FLUSH TO TOP OF PITCH POCKET. PITCH POCKET TO BE SEALED WEATHER TIGHT.  
 INTAKE HOOD – REMOVE FROM CURB. CURB TO REMAIN, BUT MUST BE COVERED WITH A STRUCTURALLY SOUND MATERIAL, SINGLE PLY ROOFING MATERIAL TO MATCH EXISTING, AND SEALED WEATHER TIGHT.
  - THERE WILL BE NO HVAC EQUIPMENT LEFT ON THE ROOF AFTER THE PROJECT IS COMPLETE.

derek@simsgroup.com

DATE 30 MAY 2019

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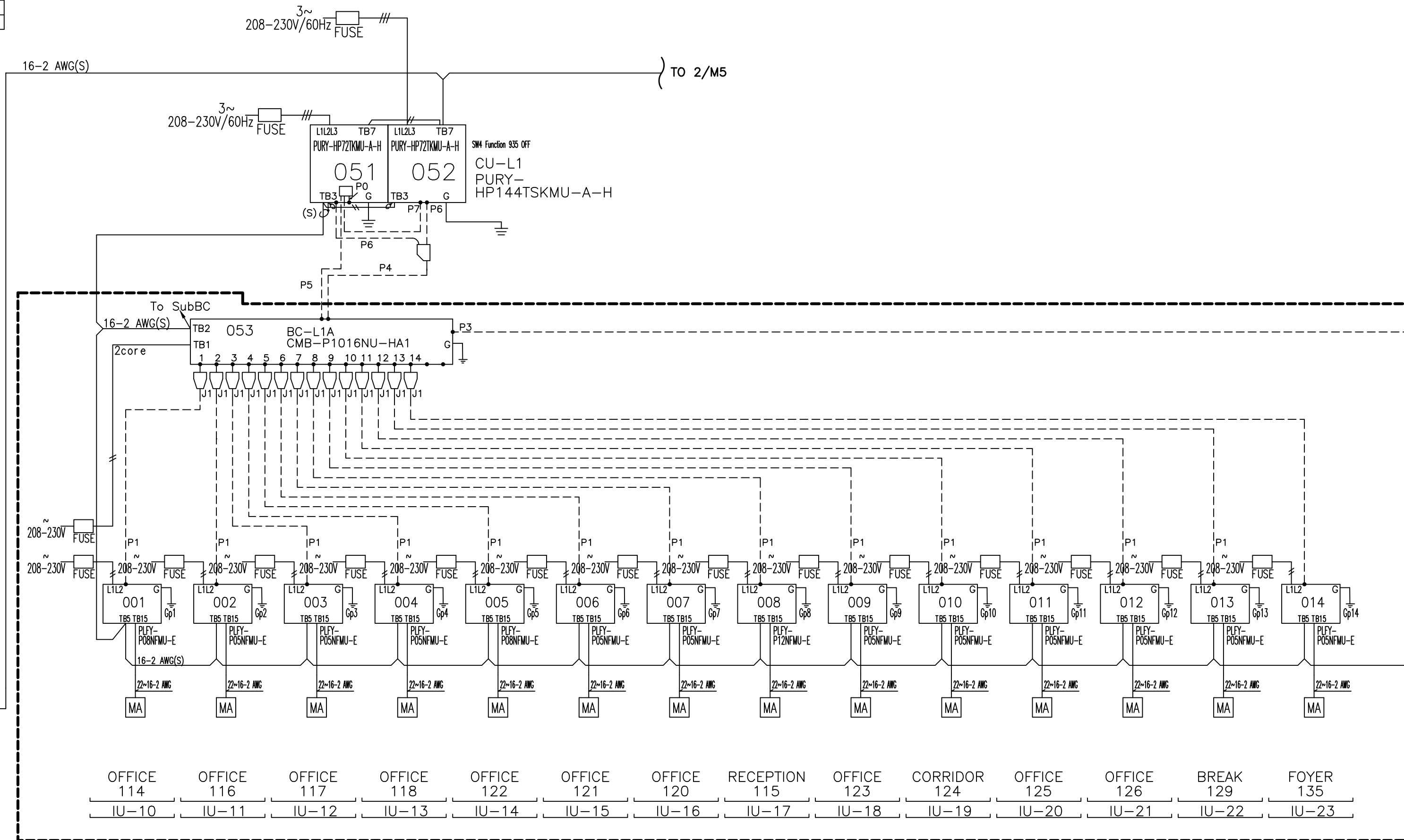
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Transylvania County Community Services Building	
DIAGRAM SYMBOL LEGEND	(CONT.No) PAGE
—	DESCRIPTION
—	POWER WIRE
—	CONTROL WIRE
—	REF. PIPE

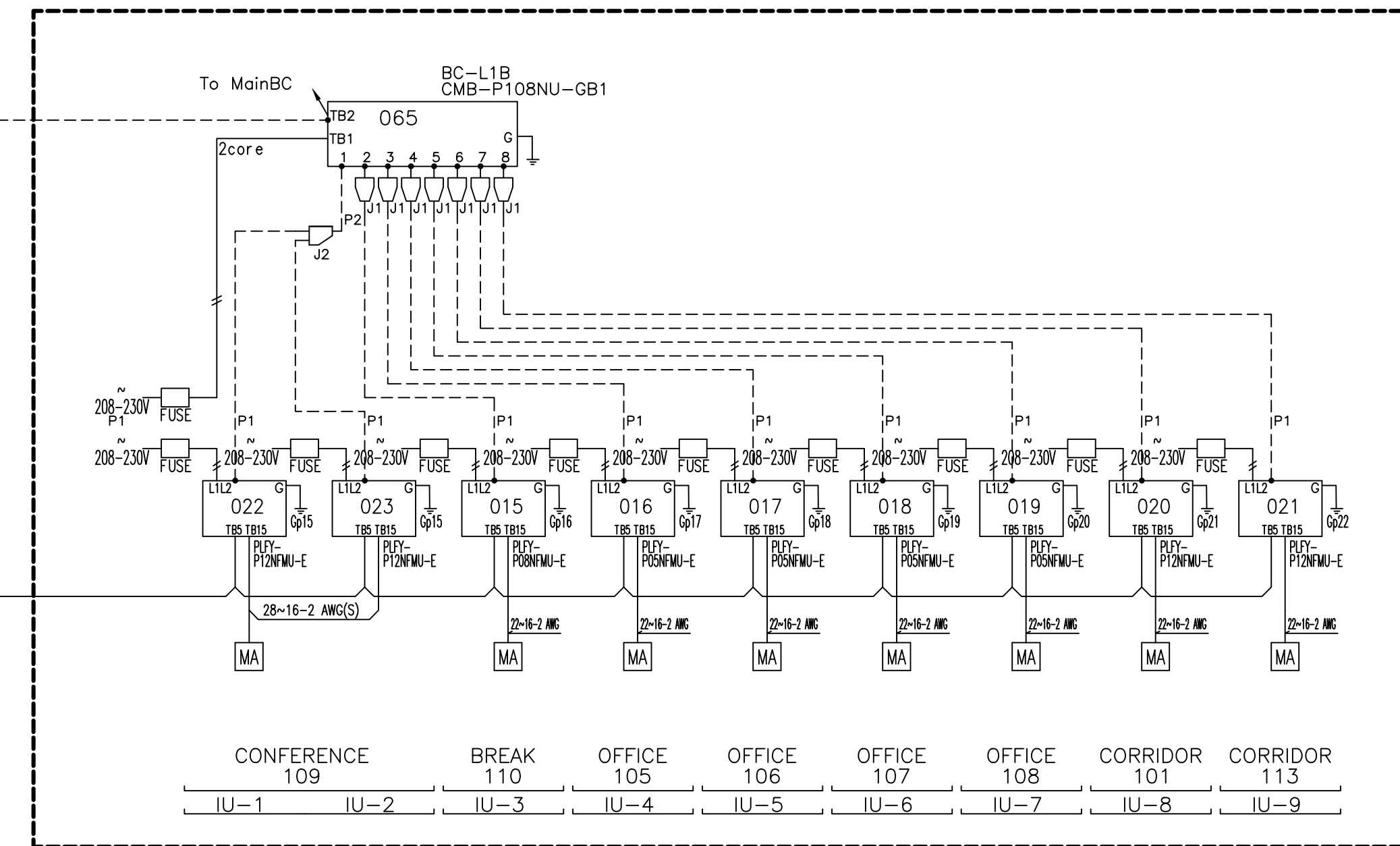
CITY MULTI  
SYSTEM SCHEMATIC DWG.

Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.  
1.25mm(16 AWG) : 1.25mm(16 AWG) or more. 0.75mm(20 AWG) : between 0.5mm(24 AWG) and 0.75mm(20 AWG).

PIPING AND CONTROLS	
SYMBOL	BRANCH PIPE WOOD NAME
J1	Reducer
J2	CUV-Y102SS-G2
SYMBOL LEGEND	
P1	1/4" / 1/2"
P2	3/8" / 3/4" / 7/8"
P3	3/8" / 3/4" / 7/8"
P4	7/8" / 1-1/8"
P5	5/8" / 3/4" / 7/8"
P6	3/8" / 3/4" / 7/8"
P7	3/8" / 3/4" / 7/8"
P8	3/8" / 3/4" / 7/8"
SYMBOL LEGEND	
MA	WOOD NUMBER
MA	PIPE-SMA-J
MHH/MCH	MKT

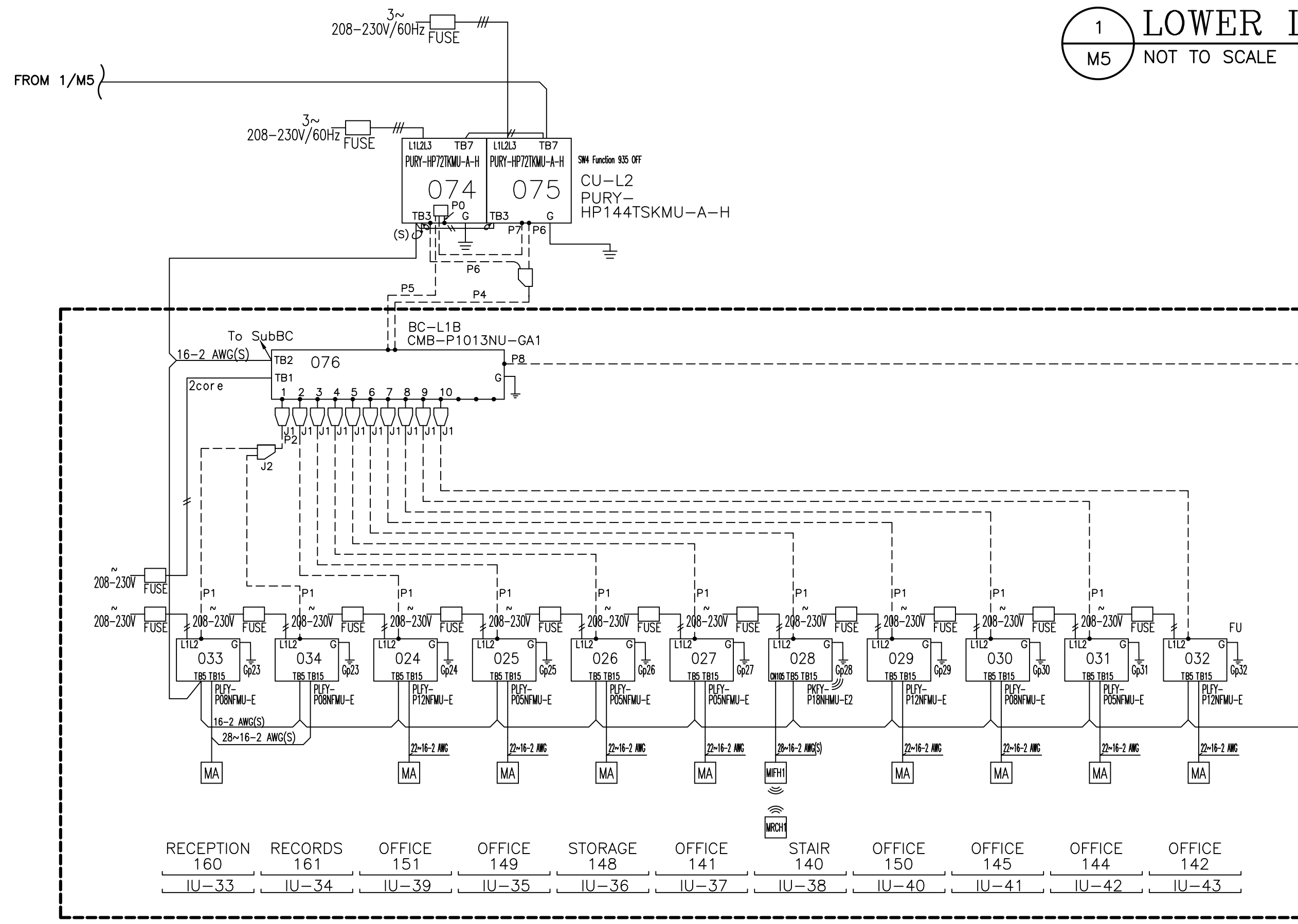


ZONE #L-1A

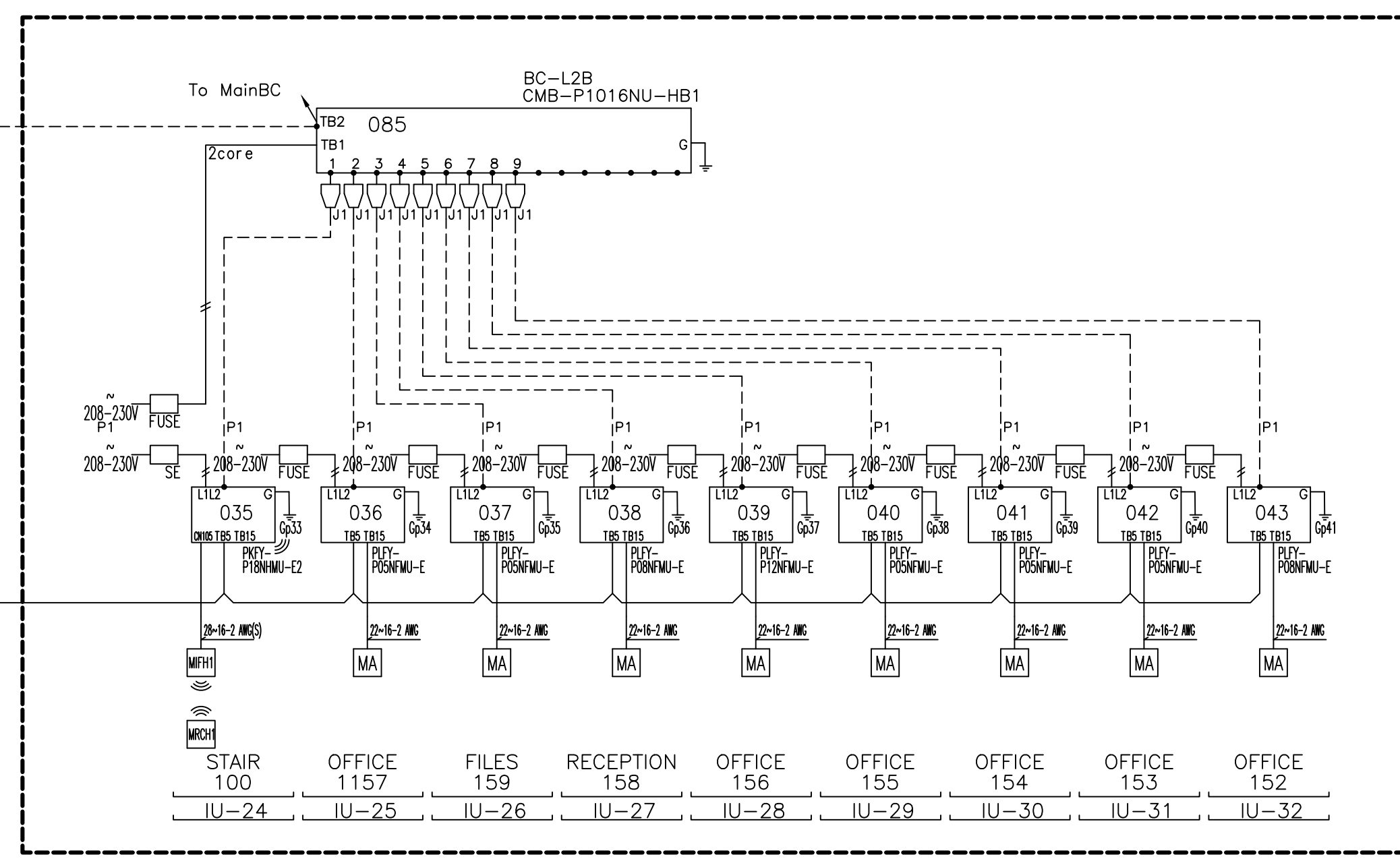


ZONE #L-1B

1 LOWER LEVEL CU-L1 PIPING SCHEMATIC  
M5 NOT TO SCALE

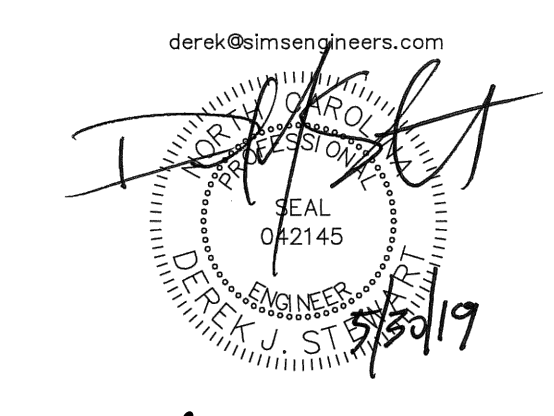


ZONE #L-2A



ZONE #L-2B

2 LOWER LEVEL CU-L2 PIPING SCHEMATIC  
M5 NOT TO SCALE



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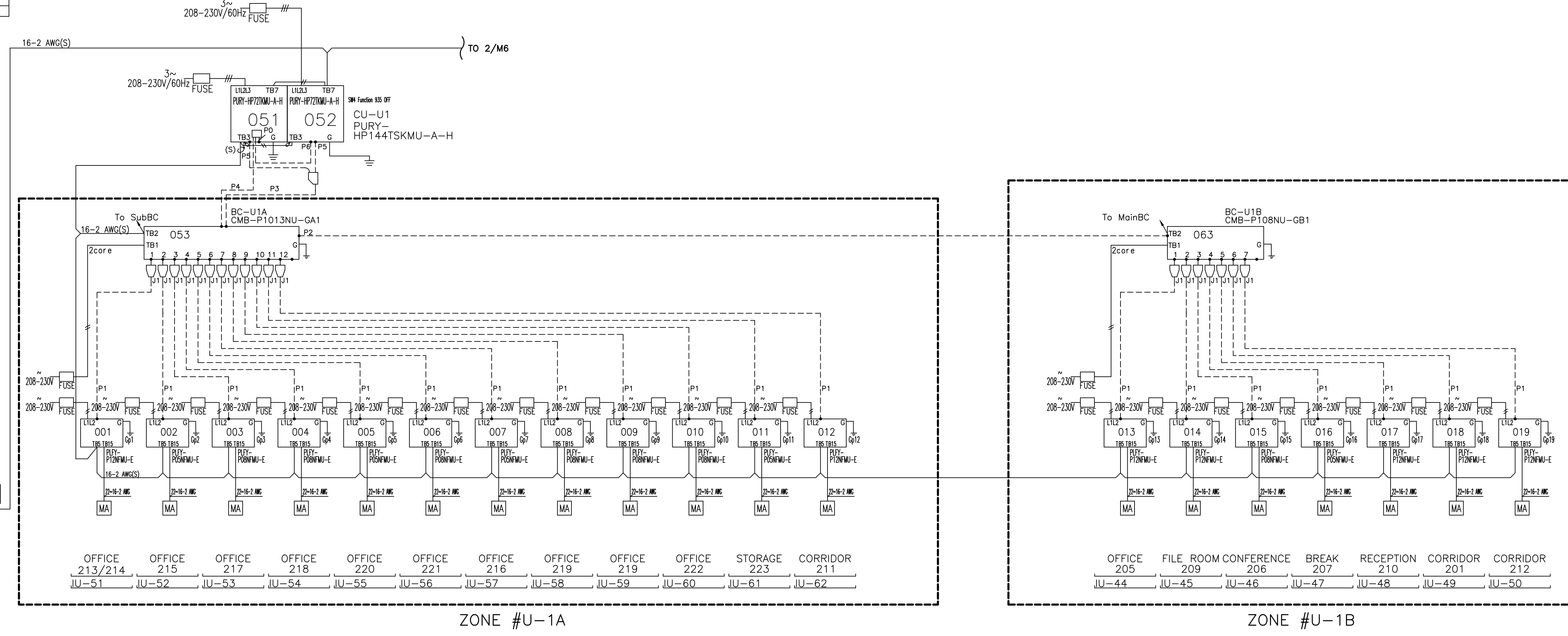
DATE 30 MAY 2019  
SHEET **M5**

Transylvania County Community Services Building	
DIAGRAM SYMBOL LEGEND	CONT.No
DISPLAY DESCRIPTION	PAGE
--- POWER WIRE	
--- CONTROL WIRE	
--- REF. PIPE	

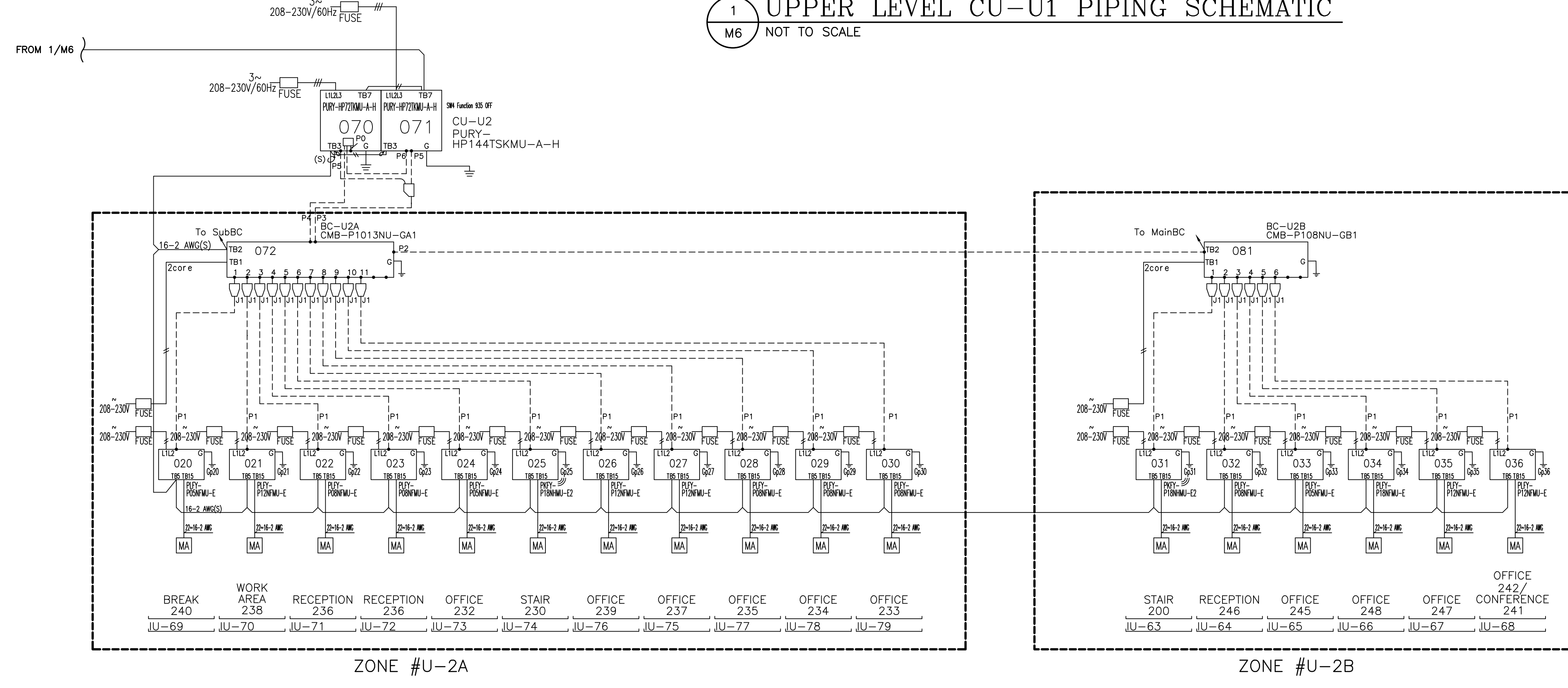
CITY MULTI  
SYSTEM SCHEMATIC DWG.

Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.  
1.25mm(1/8 AWG) : 1.25mm(1/8 AWG) or more. 0.75mm(3/32 AWG) : between 0.5mm(24 AWG) and 0.75mm(20 AWG).

SYMBOL	BRANCH PIPE MODEL NAME
U1	Reducer
SYMBOL	PIPE / GAS PIPE SIZE
P1	1/4" / 1/2"
P2	3/8" / 3/4" / 1/2"
P3	7/8" / 1-1/8"
P4	5/8" / 3/4"
SYMBOL	MODEL NUMBER
MA	PAR-SMAA-1



1 UPPER LEVEL CU-U1 PIPING SCHEMATIC  
M6 NOT TO SCALE



2 UPPER LEVEL CU-U2 PIPING SCHEMATIC  
M6 NOT TO SCALE



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DATE 30 MAY 2019

SHEET **M6**

HVAC LEGEND	
MARK	DESCRIPTION
	DIFFUSER,  DENOTES TYPE (SEE SCHEDULE) "350" DENOTES CFM, MAY USE FIVE FEET OF FLEX DUCT TO CONNECT TO TRUNK
	RETURN REGISTER,  DENOTES TYPE (SEE SCHEDULE), "350" DENOTES CFM
	EXHAUST REGISTER, "75" DENOTES CFM. 8x8 DENOTES FACE AREA.
	THERMOSTAT, PROGRAMABLE FOR 5-1-1 DAY WEEKS, NIGHT SET BACK, AUTO HEAT TO COOL, "1" DENOTES UNIT CONTROLLED, PROVIDE THERMOSTAT FOR EACH HVAC SYSTEM, COORDINATE LOCATION WITH ARCHITECT.
	RECTANGULAR DUCTWORK, GALVANIZED; "12" DENOTES WIDTH, "6" DENOTES DEPTH. DIMENSIONS SHOWN ARE FREE AND CLEAR.
	DUCTWORK, ROUND, SPIRAL WOUND, UNLOCK JOINTS, PAINT GRIP FINISH. MANUFACTURER'S FITTINGS.
	DUCTWORK, ROUND, GALVANIZED
	DUCTWORK, FLAT OVAL, SPIRAL WOUND, UNLOCK JOINTS, PAINT GRIP FINISH. MANUFACTURER'S FITTINGS.
	DUCT TEE, BEND, ELBOW, RADIUS NOT LESS 1.5 C/L WIDTH OR PROVIDE RECTANGULAR ELBOWS WITH AIR FOIL TURNING VANES.
	SPLITTER DAMPER
	EXHAUST FAN, "1" DENOTES NUMBER (SEE SCHEDULE), COORDINATE CURB INSTALLATION WITH ROOF INSTALLATION
	SIDE TAKE OFF WITH VOLUME CONTROL DAMPER TYPICAL ALL TAKE OFFS.
	REFRIGERANT LINE SET, SIZE PER MFG. INSTRUCTIONS, INSULATE SUCTION LINE WITH ARMAFLEX. PAINT AND SEAL ARMAFLEX EXPOSED TO WEATHER.
	CONDENSATE PIPING, SCHEDULE 40 PVC

RETURN REGISTER SCHEDULE		
MARK	THROAT	DESCRIPTION
A	22x22	1/2x1/2x1 CUBE LOUVER, ALUMINUM WITH FRAME, LAYIN, OPPOSED BLADE DAMPER, BAKED OFF-WHITE FINISH, NAILOR 4260AA

CEILING HEAT SCHEDULE					
MARK	CFM	WATTS	FLA	VOLTS	DESCRIPTION
ECH-1	150	1500	12.5	120	GREENHECK #EFF1500

EXHAUST FAN SCHEDULE						
MARK	CFM	SP	FLA	RPM	VOLTS	DESCRIPTION
EF-1	75	0.25	0.58	950	120	GREENHECK #SP-A110
EF-2	150	0.25	1.30	1400	120	GREENHECK #SP-A190

1. DAMPER FANS TO REQUIRED CFM.
2. PROVIDE MOUNTING SUPPORTS.

MITSUBISHI CITY MULTI VRF OUTDOOR UNIT SCHEDULE						
System Tag		CU-L1	CU-L2	CU-U1	CU-U2	
Tag Reference		CU-L1	CU-L2	CU-U1	CU-U2	
Nominal Data	M-Net Address	51, 52	74, 75	51, 52	70, 71	
	Model Number	PURY-HP144TSKMU-A-H	PURY-HP144TSKMU-A-H	PURY-HP144TSKMU-A-H	PURY-HP144TSKMU-A-H	
	Modules	HP72, HP72	HP72, HP72	HP72, HP72	HP72, HP72	
	Nominal Cooling Capacity (BTU/h)	144,000.0	144,000.0	144,000.0	144,000.0	
	Nominal Heating Capacity (BTU/h)	160,000.0	160,000.0	160,000.0	160,000.0	
	Cooling Efficiency IEER/EER (SEER)	17.1 / 12.6	17.1 / 12.6	17.1 / 12.6	17.1 / 12.6	
Design Conditions	Design Cooling Outdoor Temp DB (°F)	89.0	89.0	89.0	89.0	
	Design Heating Outdoor Temp WB (°F)	8.8	8.8	8.8	8.8	
	Refrig Pipe Dim High/Low Pressure (inch) (See Note 4)	7/8 / 1 1/8	7/8 / 1 1/8	7/8 / 1 1/8	7/8 / 1 1/8	
	Corrected Cooling Total Capacity (BTU/h)	151,681.0	153,854.0	153,001.3	155,493.5	
Performance Data	Corrected Heating Capacity (BTU/h)	146,972.4	147,204.4	147,113.5	147,378.3	
	Sound Pressure (dBA)	61	61	61	61	
	Electrical Data	Voltage / Phase	208/230V / 3-phase 3-wire	208/230V / 3-phase 3-wire	208/230V / 3-phase 3-wire	208/230V / 3-phase 3-wire
		MCA 208/230 or 1460V	44/40, 44/40	44/40, 44/40	44/40, 44/40	44/40, 44/40
Electrical Data	Recommended Fuse Size (RFS)	50, 50	50, 50	50, 50	50, 50	
	MOCF	60/60, 60/60	60/60, 60/60	60/60, 60/60	60/60, 60/60	
	Applicable System Notes - See Notes Below	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	

- Notes & Options:
1. Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), outdoor of 95°F (DB)
  2. Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
  3. Efficiency values for EER, IEER, COP are based on AHRI 1230 test method for mixture of ducted & non-ducted indoor units.
  4. For systems with multiple modules, refrigerant pipe dimensions indicate total system combined piping downstream of module twinning.
  5. Added field charge listed is in addition to factory charge, this must be updated based upon final as-built piping layout.

VRF HEAT RECOVERY BRANCH CIRCUIT CONTROLLER									
System Tag		CU-L1	CU-L1	CU-L2	CU-L2	CU-U1	CU-U1	CU-U2	CU-U2
Tag Reference		BC-L1A	BC-L1B	BC-L2A	BC-L2B	BC-U1A	BC-U1B	BC-U2A	BC-U2B
Nominal Data	M-Net Address	53	65	76	85	53	63	72	81
	Model Number	CMB-P1016NU-HA	CMB-P108NU-GB	CMB-P1013NU-GA	CMB-P1016NU-HA	CMB-P1013NU-GA	CMB-P108NU-GB	CMB-P1013NU-GA	CMB-P108NU-GB
	Type (double / Main / Sub)	Main	Sub	Main	Sub	Main	Sub	Main	Sub
	Number of Ports	16,000	8,000	13,000	16,000	13,000	8,000	13,000	8,000
	Connected Capacity to BC	159,000.0	76,000.0	169,000.0	71,000.0	165,000.0	73,000.0	177,000.0	73,000.0
	Electrical Data	Voltage / Phase	208/230V / 1-phase	208/230V / 1-phase	208/230V / 1-phase	208/230V / 1-phase	208/230V / 1-phase	208/230V / 1-phase	208/230V / 1-phase
Power Cooling 208V/230V (kW)		0.274/0.353	0.106	0.178	0.314	0.178	0.106	0.178	0.106
Power Heating 208V/230V (kW)		0.137/0.177	0.053	0.086	0.157	0.086	0.053	0.086	0.053
MCA 208/230		1.65/1.93	0.64/0.58	1.08/0.97	1.46/1.71	1.08/0.97	0.64/0.58	1.08/0.97	0.64/0.58
Electrical Data	Applicable System Notes - See Notes Below	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2
	Notes & Options:	<ol style="list-style-type: none"> <li>1. Include Diamondback Ball Valves BV-Series, 700PSIG working pressure, full port, 410A rated.</li> <li>2. For sub BC controller CMB-P-NU-GB1 or -GB, the total connectable indoor unit capacity can be 126,000 BTUs or less. If two sub BC controllers are used, the total indoor unit capacity connected to BOTH sub BC controllers also cannot exceed 126,000 BTUs. For sub BC controller CMB-P1016NU-HB1 the total connectable indoor unit capacity can be 126,000 BTUs or less. However, if two sub controllers are used, and one of them is CMB-1016NU-HB1, the total indoor unit capacity connected to BOTH sub controllers must NOT exceed 168,000 BTUs.</li> </ol>							

ERV SCHEDULE				
MARK	CFM	FLA	VOLTS	DESCRIPTION
ERV-1	300	2.5	208/1	LOSSNAY #LGH-F300RX5-E
ERV-2	300	2.5	208/1	LOSSNAY #LGH-F300RX5-E
ERV-3	300	2.5	208/1	LOSSNAY #LGH-F300RX5-E
ERV-4	300	2.5	208/1	LOSSNAY #LGH-F300RX5-E

1. ERV-1,2,3,4 TO BE INTEGRATED INTO MITSUBISHI VRF SYSTEM CENTRAL CONTROLLER

derek@simsgroup.com

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 BREVARD, NC

DATE: 30 MAY 2019  
 SHEET: **M7**

MITSUBISHI CITY MULTI VRF INDOOR UNIT SCHEDULE table with columns for System Tag, Tag Reference, Room Name, M-Net Address, Mode, Type, Nominal Cooling Capacity, Nominal Heating Capacity, Cooling Design Entering Temp, Heating Design Entering Temp, Cooling Diversity, Heating Diversity, Refrig Pipe Dim Liquid/Suction, Cooling Total Capacity, Cooling Sensible Capacity, Heating Capacity, Peak Fan Airflow, Max Fan ESP Setting, Sound Pressure Per Fan Speed, Voltage / Phase, Power Cooling, Power Heating, Electrical MCAMFS, and Applicable System Notes.

- 1. Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DBWB), outdoor of 95°F (DB)
2. Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
3. See outdoor unit schedule for outdoor ambient conditions, connected capacity, and other factors associated with corrected capacities
4. See schematic piping/control diagram for indication of required indoor unit remote controllers, system controllers, and integration devices
5. Full demand corrected capacity includes de-rate associated with indoor vs. outdoor connected capacity indicated on outdoor unit schedule for associated system. Partial corrected capacity assumes sufficient diversity exists such that the connected capacity de-rate does not apply. It is the designer's responsibility to ensure "Diamond System Builder" is set in the appropriate output capacity setting (full demand/partial demand) prior to generating this schedule.
6. It is recommended to always base heating corrected capacity on full demand.

MITSUBISHI CITY MULTI VRF INDOOR UNIT SCHEDULE table with columns for System Tag, Tag Reference, Room Name, M-Net Address, Mode, Type, Nominal Cooling Capacity, Nominal Heating Capacity, Cooling Design Entering Temp, Heating Design Entering Temp, Cooling Diversity, Heating Diversity, Refrig Pipe Dim Liquid/Suction, Cooling Total Capacity, Cooling Sensible Capacity, Heating Capacity, Peak Fan Airflow, Max Fan ESP Setting, Sound Pressure Per Fan Speed, Voltage / Phase, Power Cooling, Power Heating, Electrical MCAMFS, and Applicable System Notes.

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NC FIRM LICENSE #C-4284

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PARTIAL RENOVATION & HVAC UPFIT TO THE TRANSYLVANIA COUNTY COMMUNITY SERVICES BUILDING TRANSYLVANIA COUNTY BOARD OF COMMISSIONERS BREVARD, NC

DATE 30 MAY 2019

SHEET M8

MITSUBISHI CITY MULTI VRF INDOOR UNIT SCHEDULE table with columns for System Tag (CU-U1), Tag Reference, Room Name, Model, Type, and various capacity and design condition rows.

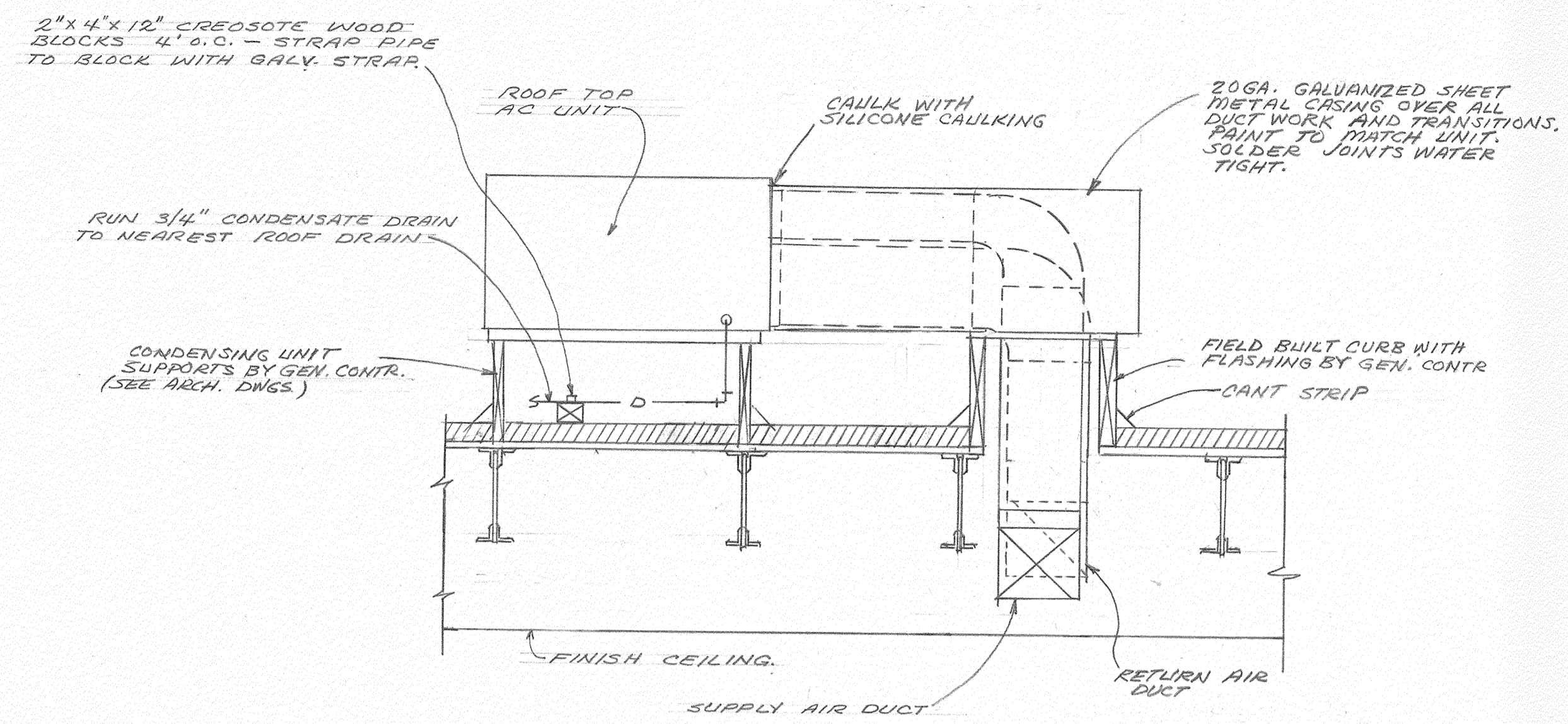
MITSUBISHI CITY MULTI VRF INDOOR UNIT SCHEDULE table with columns for System Tag (CU-U2), Tag Reference, Room Name, Model, Type, and various capacity and design condition rows.



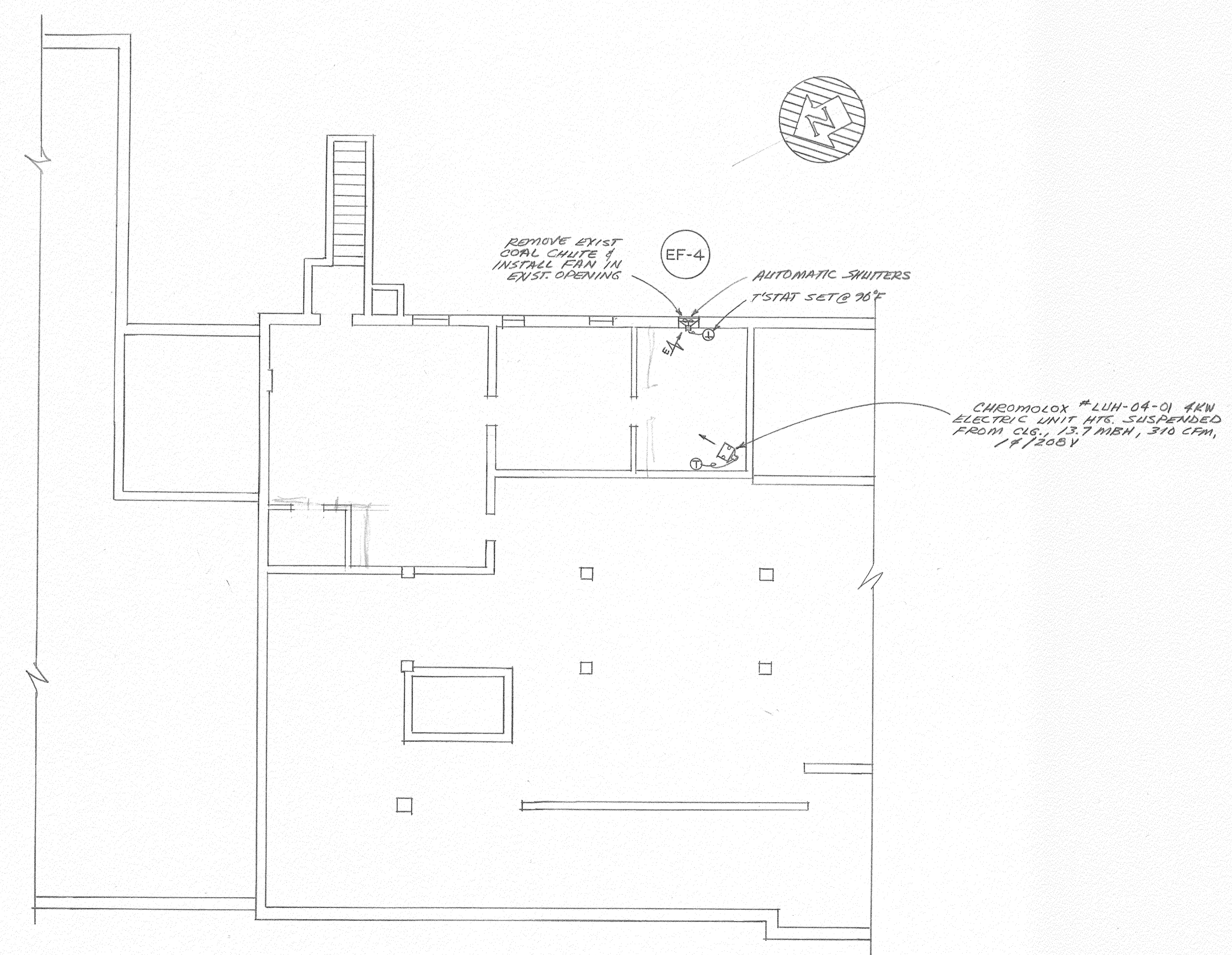
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DATE 30 MAY 2019

SHEET M9



**ROOF TOP UNIT DETAIL**  
NO SCALE

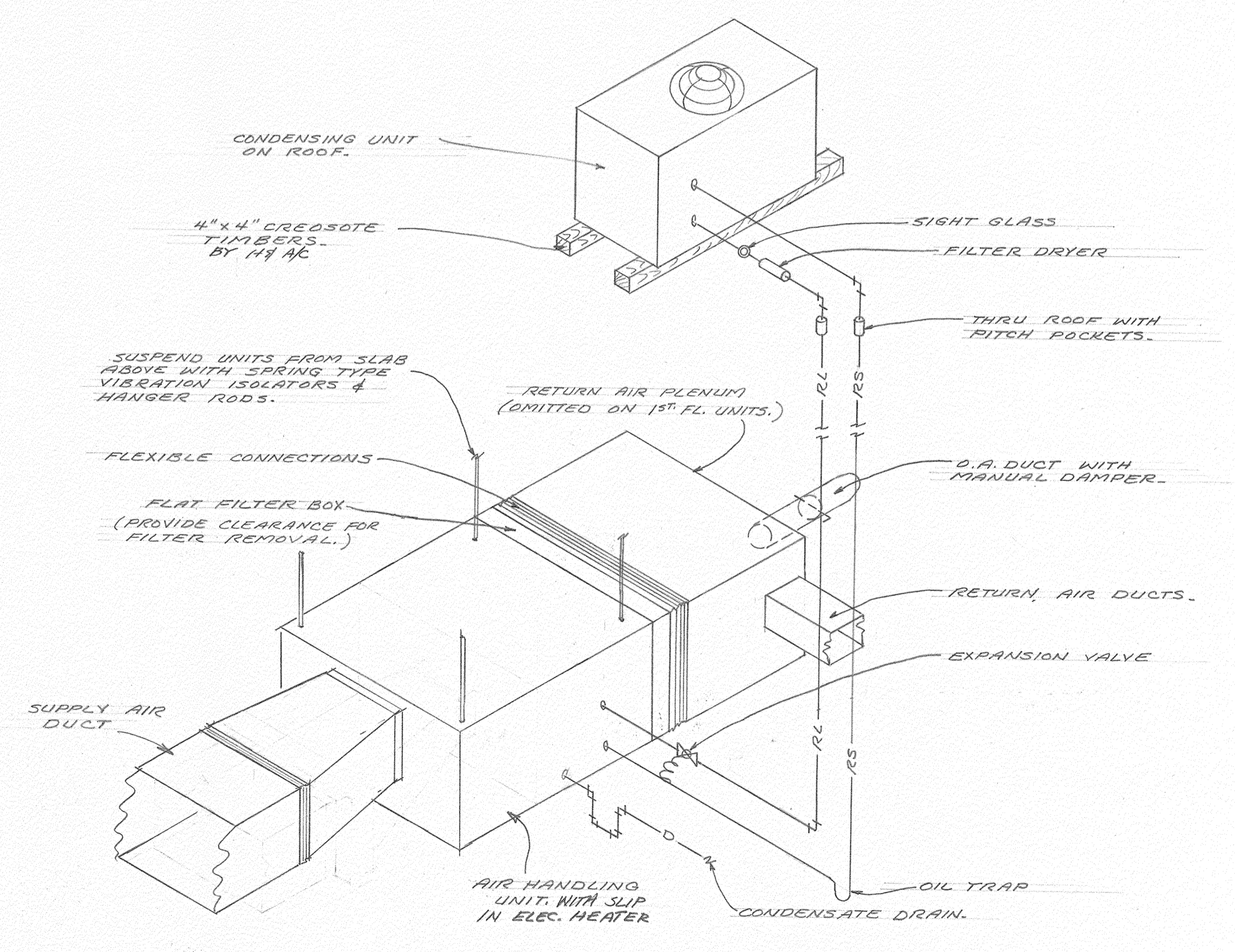


**PARTIAL BASEMENT FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

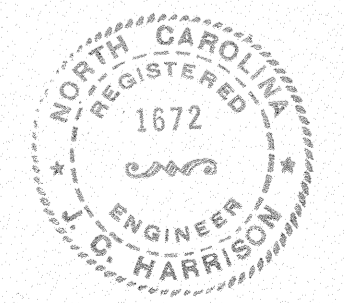
### AIR CONDITIONING UNIT SCHEDULE

UNIT NO.	CFM	CFM O.A.	E.S.P.	H.P.	RPM	COOLING					HEATING				MODEL NO. & MAKE
						ENT. AIR		COND. TEMP.	S.H.	T.H.	KW	MBH	NO. STAGES	TEMP. RISE	
						DB	WB								
AC-1	3000	—	.45	1	593	80	64	95°	72.3	83.3	22.4	76.5	3	24°F	GE. #BSWA090 COND.; #Z1WE090C EVAP.
AC-2	1600	—	.40	1/2	1075	78	63		35.6	44.1	15.0	51.0	2	27.5°	#BGWAB48 COND.; #Z1WE048C EVAP.
AC-3	2000	—	.45	3/4	1725	78	64		45.4	57.1	15.0	51.0	2	24°	#BGWAB60 COND.; #Z1WE060C EVAP.
AC-4	3000	850	.45	1	593	80	67		64.1	87.7	22.4	76.5	3	24°	#BSWA090 COND.; #Z1WE090C EVAP.
AC-5	2000	—	.45	3/4	1725	78	64		39.2	47.8	15.0	51.0	2	24°	#BSWA348 COND.; #Z1WE060C EVAP.
AC-6	2000	100	.50	3/4	1725	76	63		43.6	55.1	15.0	51.0	2	24°	#BSWA860 COND.; #Z1WE060C EVAP.
AC-7	3000	600	.45	1	593	78	65		63.2	82.1	22.4	76.5	3	24°	#BSWA090 COND.; #Z1WE090C EVAP.
AC-8	2000	100	.45	3/4	1725	76	63		43.6	55.1	15.0	51.0	2	24°	#BGWAB60 COND.; #Z1WE060C EVAP.
AC-9	2700	100	.45	1	571	76	63		61.3	79.8	22.4	76.5	3	26°	#BSWA090 COND.; #Z1WE090C EVAP.
AC-10	2000	100	.45	3/4	1725	76	63		43.6	55.1	15.0	51.0	2	24°	#BGWAB60 COND.; #Z1WE060C EVAP.
AC-11	1600	300	.40	1/2	1075	78	65		35.0	45.6	22.4	76.5	3	44°	#BGW048 ROOF TOP
AC-12	1600	250	.40	1/2	1075	78	65		35.0	45.6	15.0	51.0	2	27.5°	#BGW048 ROOF TOP
AC-13	1600	200	.40	1/2	1075	78	65		35.0	45.6	15.0	51.0	2	27.5°	#BGW048 ROOF TOP

NOTE:  
1) ALL UNITS SHALL BE HEAT-PUMPS.



**SPLIT SYSTEM DETAIL**  
NO SCALE



EXISTING PLAN PROVIDED FOR DEMOLITION REFERENCE ONLY  
NOT FOR CONSTRUCTION

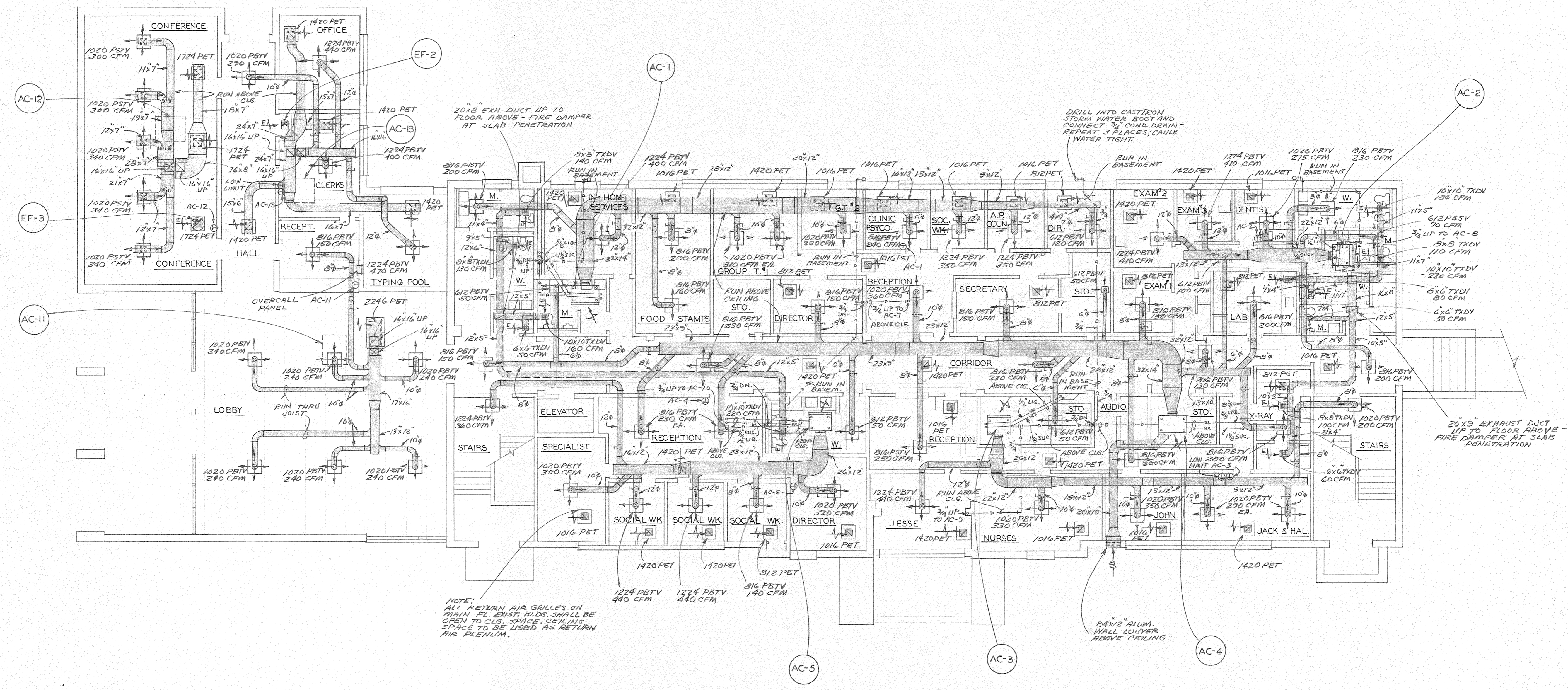


## SYMBOLS

RS	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
D	CONDENSATE DRAIN
⊖	THERMOSTAT
→	SUPPLY AIR
←	RETURN AIR
↗	EXHAUST AIR
↘	OUTSIDE AIR
⊥	MANUAL DAMPER

## GENERAL NOTES

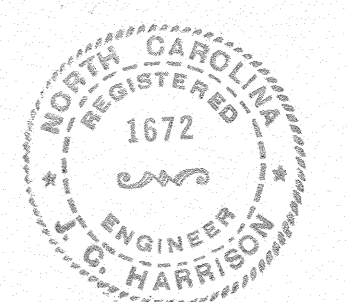
- 1) ALL WORK SHALL COMPLY WITH N.C. STATE BUILDING CODE.
- 2) DUCT DIMENSIONS SHOWN ARE NET INSIDE FREE AREA. CONTRACTOR SHALL ADD FOR INSULATION LINER. ROUND DUCTS SHALL BE WRAPPED.
- 3) COORDINATE INSTALLATION OF H V AC SYSTEM WITH GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS.
- 4) REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS, CONSTRUCTION DETAILS, INTERFERENCES, ETC.
- 5) CONTRACTOR SHALL VISIT JOB SITE & BE FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BID DATE.
- 6) H V AC CONTRACTOR SHALL NOT CUT ANY BEAMS OR JOISTS.



NOTE:  
 ALL RETURN AIR GRILLES ON MAIN FL. EXIST. BLDG. SHALL BE OPEN TO OUG. SPACE. CEILING SPACE TO BE USED AS RETURN AIR PLENUM.

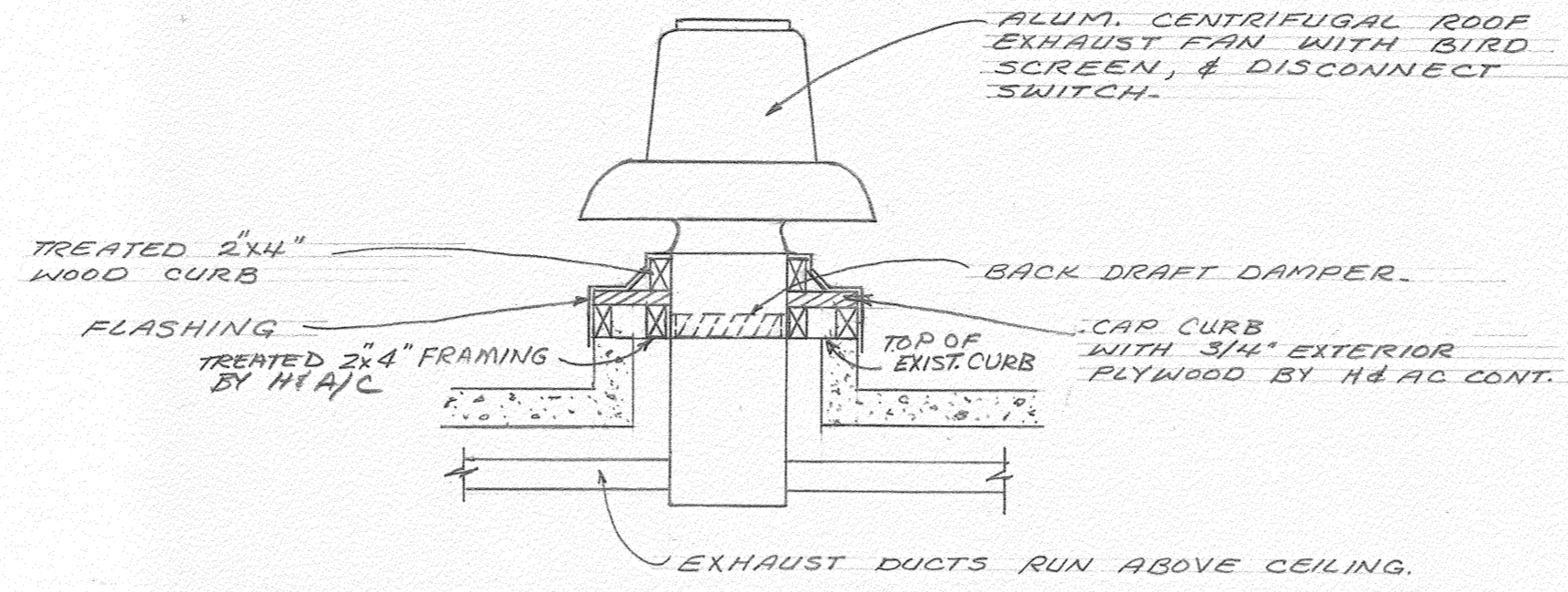
## MAIN FLOOR PLAN

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



EXISTING PLAN PROVIDED FOR DEMOLITION REFERENCE ONLY  
 NOT FOR CONSTRUCTION

- NOTE:
1. EXHAUST FAN SHALL BE MOUNTED ON EXISTING TURBINE VENTILATOR CURB.
  2. INTAKE VENT ON ROOF SHALL BE MOUNTED SIMILAR.



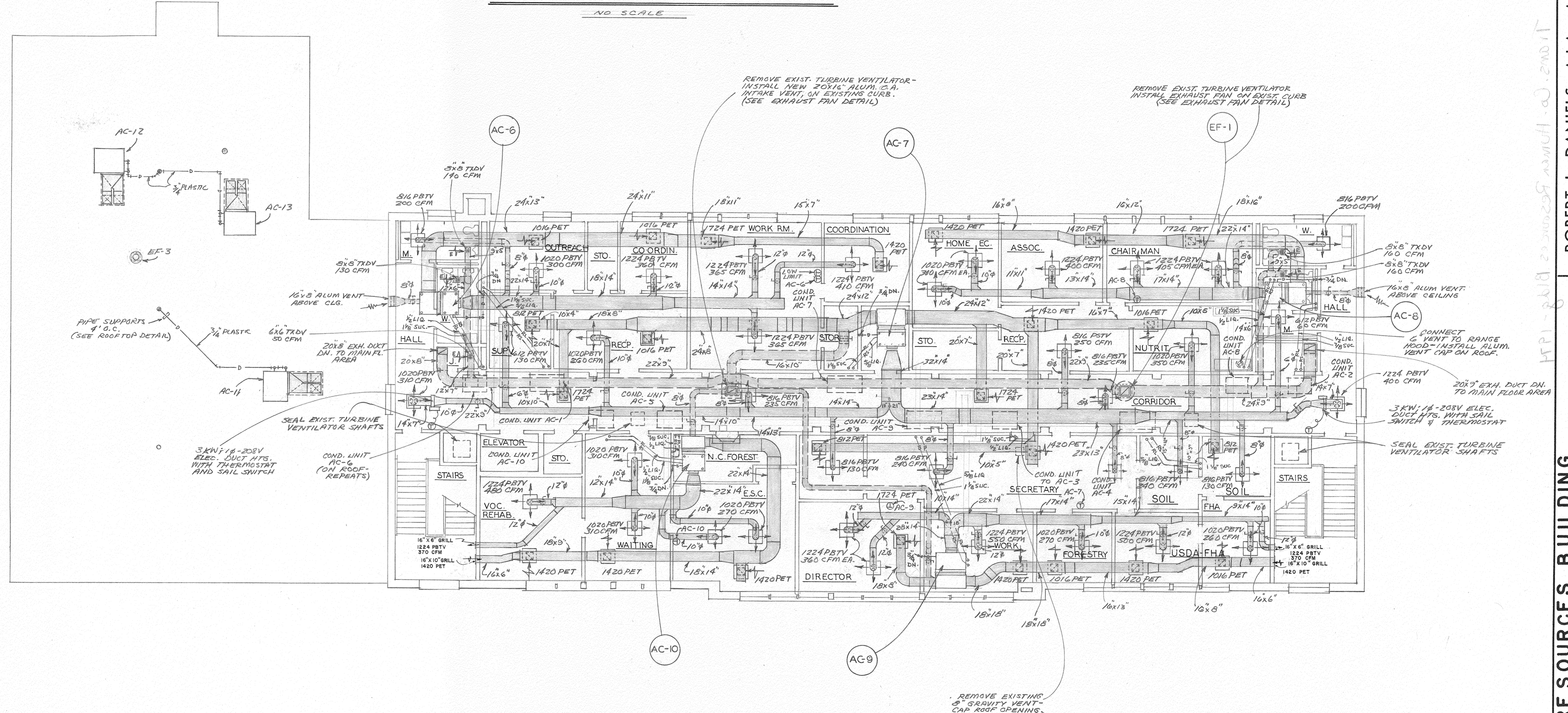
### EXHAUST FAN DETAIL

NO SCALE

### EXHAUST FAN SCHEDULE

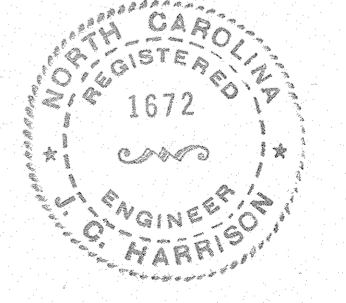
UNIT NO.	CFM	S.P.	H.P.	RPM	TIP SPEED	MOUNTING	MODEL NO. & MAKE
EF-1	2475	3/8	1/3	750	3630	ROOF	#CBE-18-B GREENHECK
EF-2	198	1/8	1/10	1050		CEILING	# SP-25 "
EF-3	780	1/4	1/2	1140	3320	ROOF	#CE-10-B "
EF-4	1226	1/8	1/2	1140	4176	WALL	#SDE-14-32-B "

- NOTE:
- 1) EF-1 & 3 SHALL BE FURNISHED WITH DISCONNECT SWITCH, BIRDSCREEN, BACKDRAFT DAMPER AND EF-3 WITH PREFAB CURB.
  - 2) EF-2 SHALL BE FURNISHED WITH ALUM. ROOF VENT CAP.
  - 3) EF-4 SHALL BE FURNISHED WITH DISCONNECT SWITCH, THERMOSTAT, & AUTOMATIC SHUTTERS.

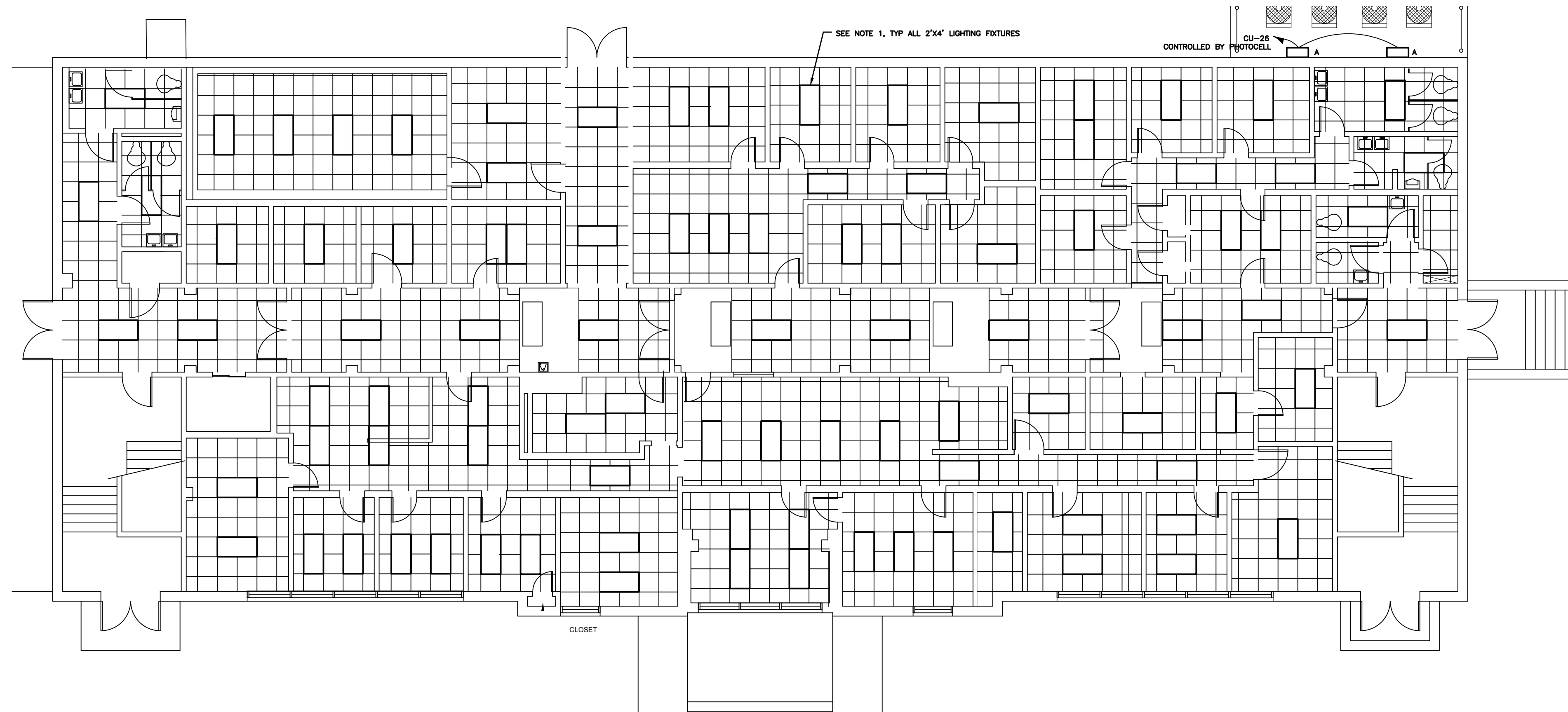


### SECOND FLOOR PLAN

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

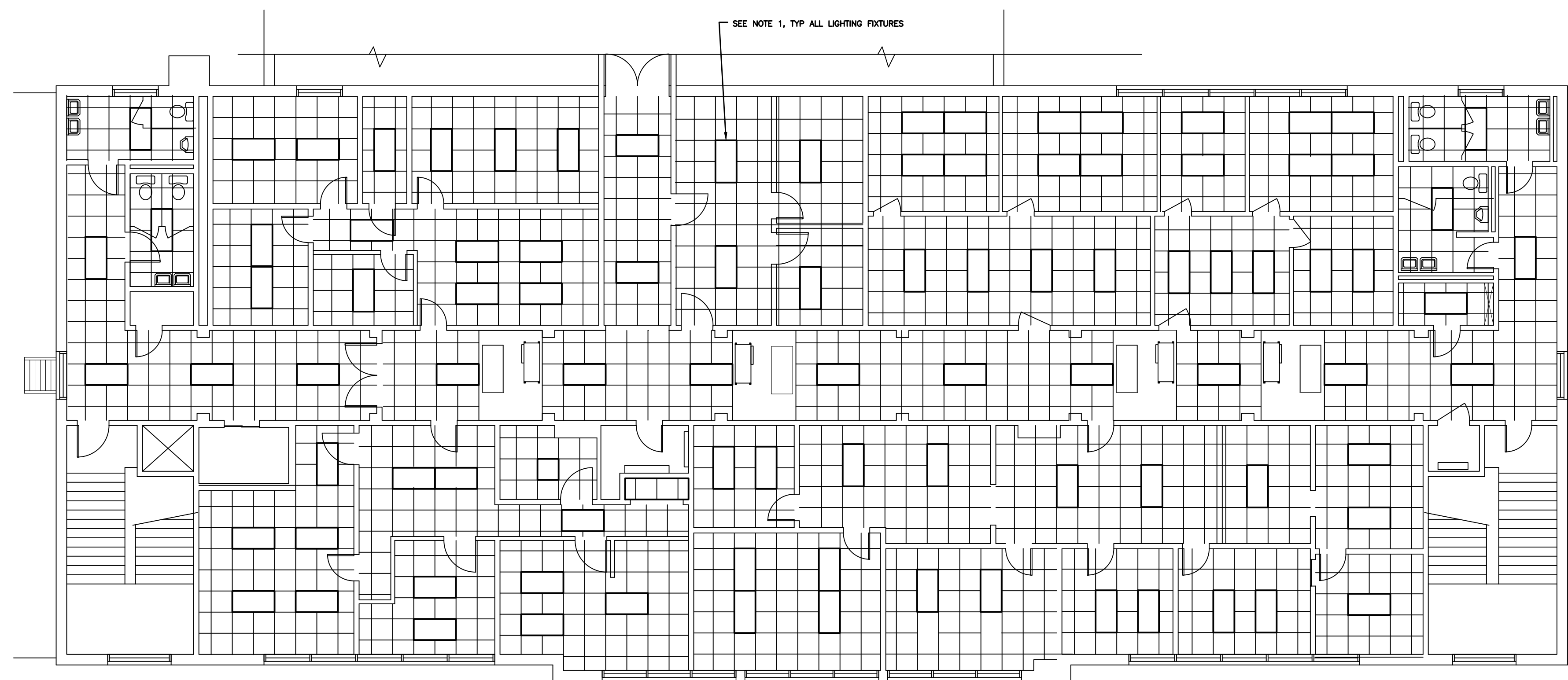


EXISTING PLAN PROVIDED FOR DEMOLITION REFERENCE ONLY NOT FOR CONSTRUCTION



1 LOWER LEVEL PLAN - LIGHTING  
 SCALE: 1/8" = 1'-0"

NOTES:  
 1. ALL EXISTING LIGHTING FIXTURES ARE TO REMAIN, BE TEMPORARILY SUPPORTED DURING CEILING GRID REPLACEMENT, AND REINSTALLED AS SHOWN ON PLAN ABOVE. IF ANY SINGLE FIXTURES ARE IN NEED OF REPLACING, ALL FIXTURES IN THE SAME ROOM WILL BE REPLACED WITH NEW LED FIXTURES SUCH THAT ALL FIXTURES IN EACH ROOM MATCH. CONTRACTOR SHALL PROVIDE A LINE ITEM COST TO PROVIDE AND INSTALL ONE NEW LED FIXTURE THAT WILL BE APPLICABLE TO ALL NEW FIXTURES PROVIDED. CONTRACTOR SHALL ALSO WORK WITH ARCHITECT/ENGINEER TO OPTIMIZE FIXTURE LAYOUT AND MINIMIZE THE AMOUNT OF NEW FIXTURES REQUIRED.  
 NEW FIXTURE BASIS OF DESIGN: 2'x4' LED LENSED TROFFER LITHONIA 2GTL SERIES.



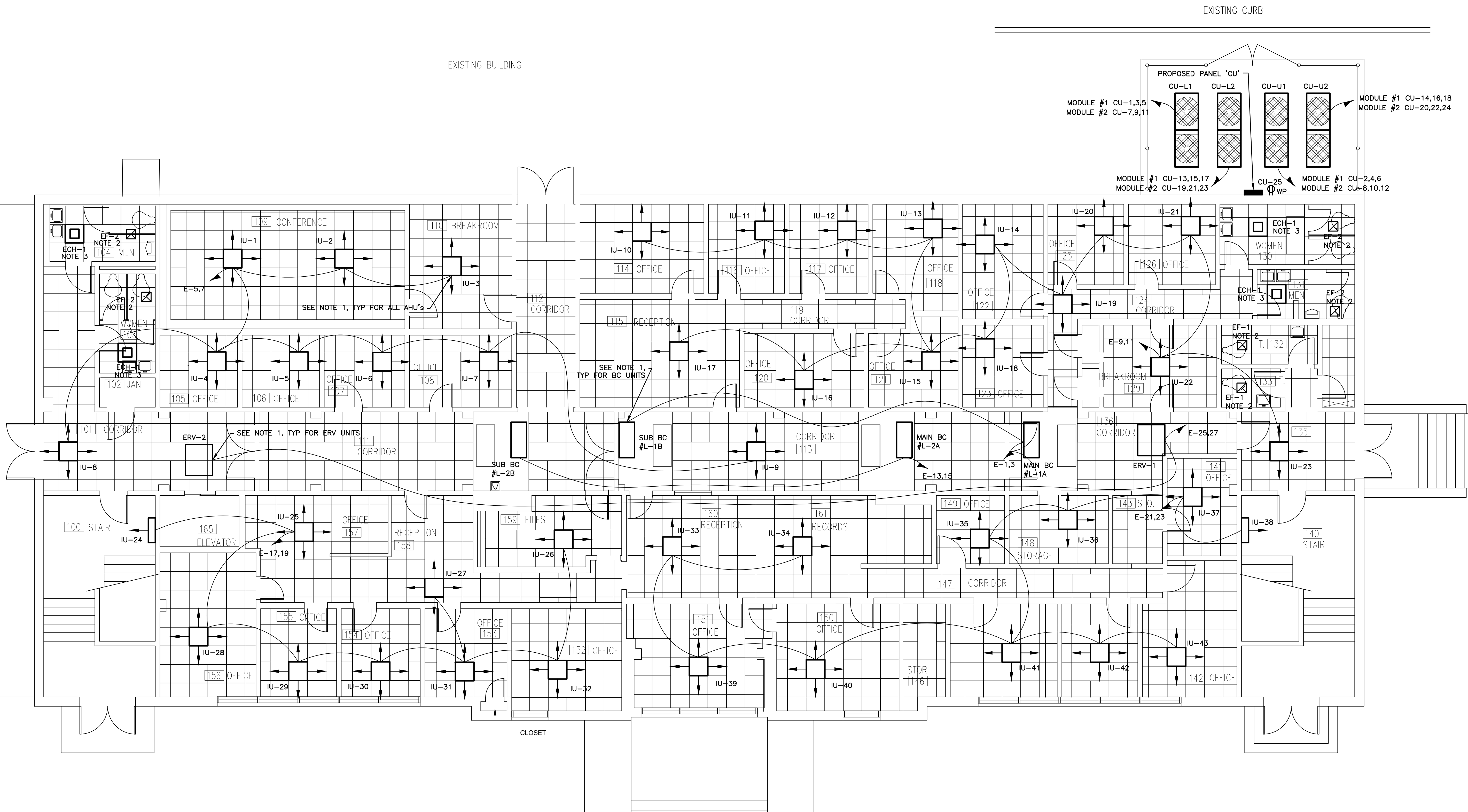
2 UPPER LEVEL PLAN - LIGHTING  
 SCALE: 1/8" = 1'-0"

NOTES:  
 1. ALL EXISTING LIGHTING FIXTURES ARE TO REMAIN, BE TEMPORARILY SUPPORTED DURING CEILING GRID REPLACEMENT, AND REINSTALLED AS SHOWN ON PLAN ABOVE. IF ANY SINGLE FIXTURES ARE IN NEED OF REPLACING, ALL FIXTURES IN THE SAME ROOM WILL BE REPLACED WITH NEW LED FIXTURES SUCH THAT ALL FIXTURES IN EACH ROOM MATCH. CONTRACTOR SHALL PROVIDE A LINE ITEM COST TO PROVIDE AND INSTALL ONE NEW LED FIXTURE THAT WILL BE APPLICABLE TO ALL NEW FIXTURES PROVIDED. CONTRACTOR SHALL ALSO WORK WITH ARCHITECT/ENGINEER TO OPTIMIZE FIXTURE LAYOUT AND MINIMIZE THE AMOUNT OF NEW FIXTURES REQUIRED.  
 NEW FIXTURE BASIS OF DESIGN: 2'x4' LED LENSED TROFFER LITHONIA 2GTL SERIES.



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1 LOWER LEVEL PLAN - HVAC POWER  
 E2 SCALE: 3/16" = 1'-0"

- NOTES:
1. PROVIDE DOUBLE POLE TOGGLE SWITCH AS MEANS OF SERVICE DISCONNECT AT EACH UNIT INDICATED.
  2. CONNECT TO EXISTING LIGHTING CIRCUIT AND CONTROLS IN BATHROOMS
  3. CONNECT TO DEDICATED 1P-20A SPARE CIRCUIT IN PANEL SERVING THIS AREA. FIELD VERIFY.



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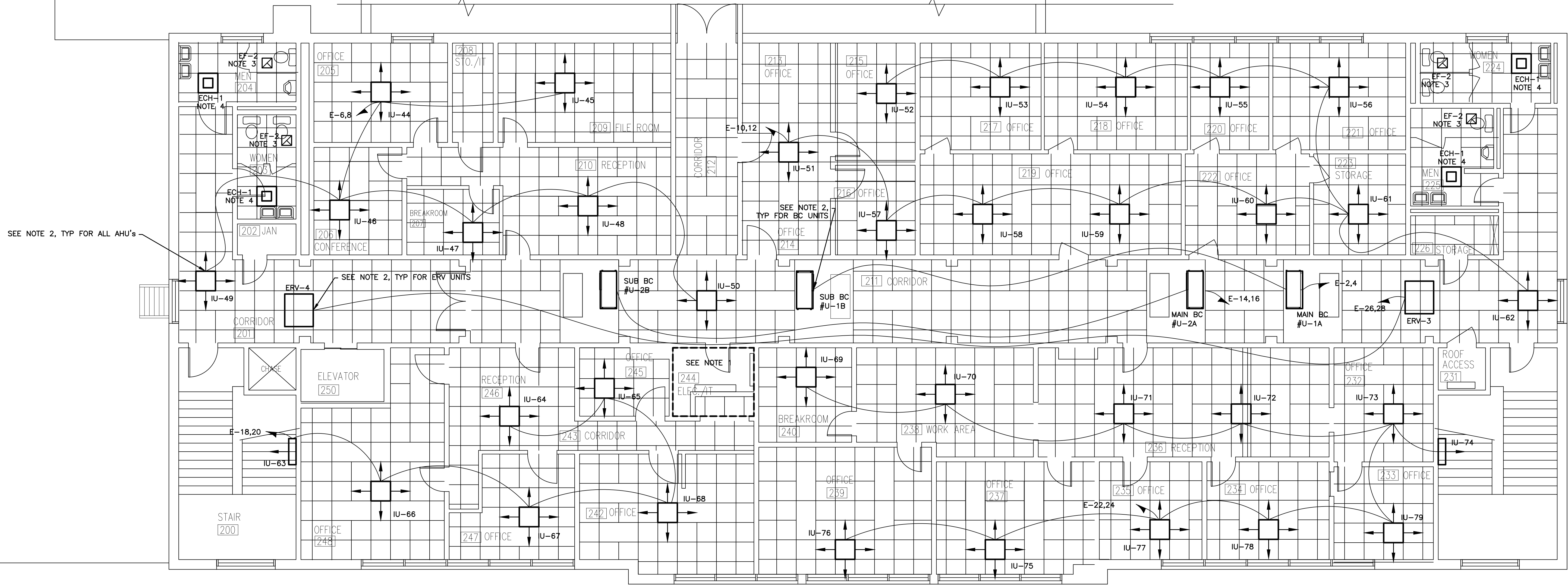
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SHEET **E2**

EXISTING BUILDING



**1** UPPER LEVEL PLAN - HVAC POWER  
 E3 SCALE: 3/16" = 1'-0"

- NOTES:
1. EXISTING PANEL 'E' IS 500A, 120/208V, 3 PHASE AND SERVES HVAC EQUIPMENT ONLY. THIS PANEL SHALL BE REPLACED WITH NEW PANEL 'E' THAT WILL BE DEDICATED TO FEED ENTIRE PROPOSED MITSUBISHI VRF SYSTEM. SEE SHEET E4.
  2. PROVIDE DOUBLE POLE TOGGLE SWITCH AS MEANS OF SERVICE DISCONNECT AT EACH UNIT INDICATED.
  3. CONNECT TO EXISTING LIGHTING CIRCUIT AND CONTROLS IN BATHROOMS
  4. CONNECT TO DEDICATED 1P-20A SPARE CIRCUIT IN PANEL SERVING THIS AREA. FIELD VERIFY.



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DATE 30 MAY 2019

SHEET **E3**

