



MIDLAND COUNTY BOARD OF COMMISSIONERS  
220 WEST ELLSWORTH STREET  
MIDLAND, MICHIGAN 48640

MIDLAND COUNTY SERVICES BUILDING

CONSTRUCTION DRAWINGS

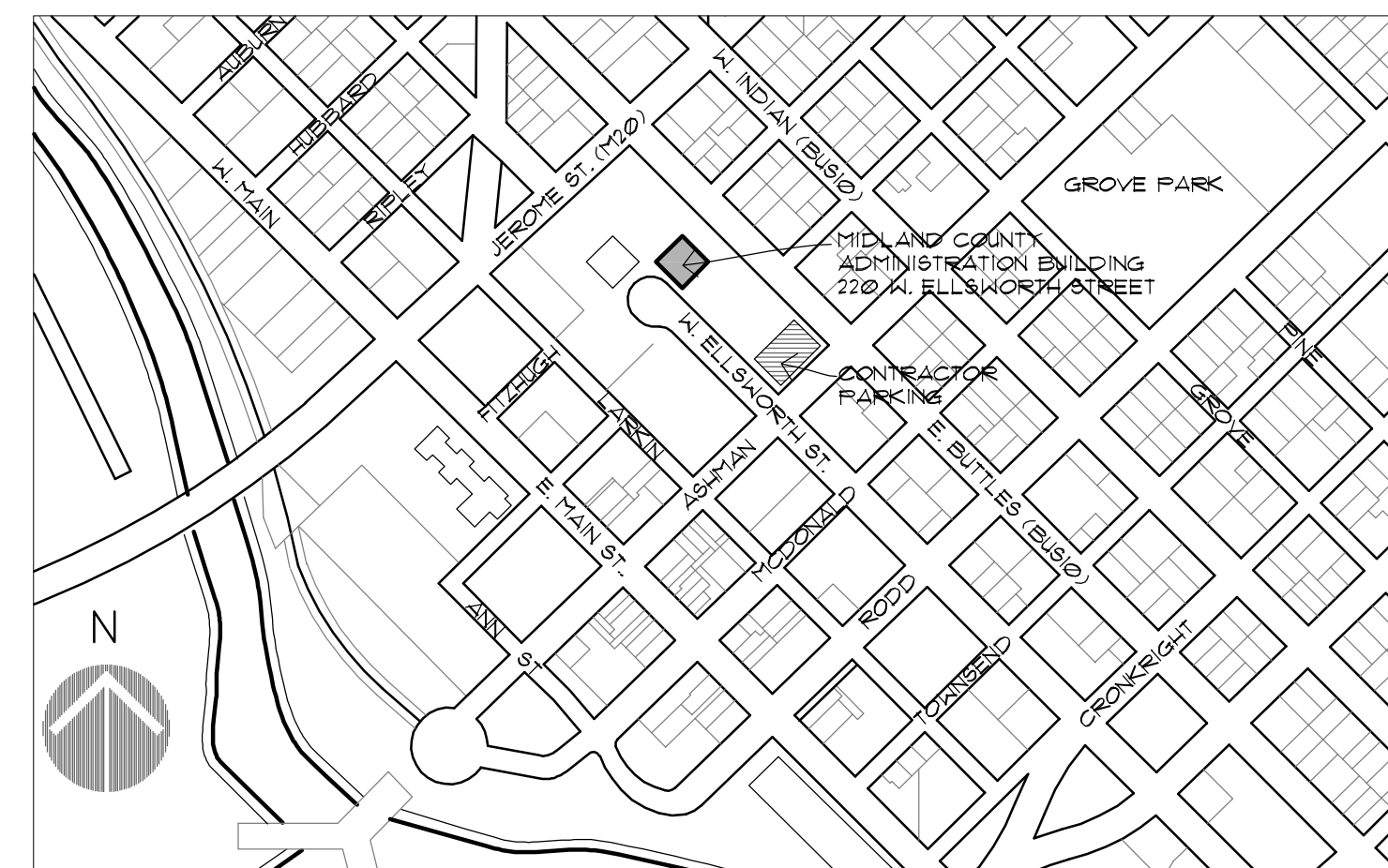
OCTOBER 24, 2024

MIDLAND COUNTY SERVICES BUILDING RENOVATIONS  
220 WEST ELLSWORTH STREET  
MIDLAND, MICHIGAN 48640

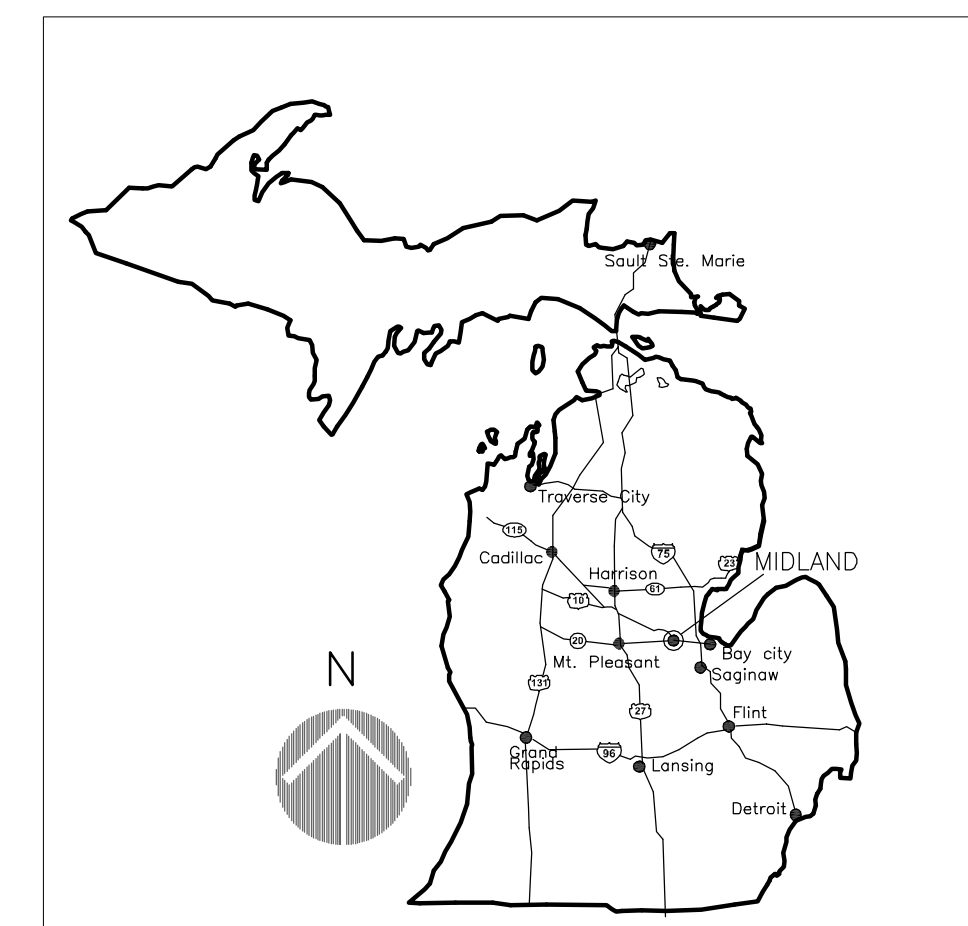
LIFE SAFETY INFORMATION

**BUILDING SUMMARY:**  
USE GROUP: B-2 OFFICE  
CONSTRUCTION TYPE: II, 1 HOUR SPRINKLED  
ALLOWABLE AREA: 5-A + 10,000 SF PER FLOOR  
NO FRONTAGE INCREASE PERMITTED DUE TO LESS THAN 25% OF BUILDING PERIMETER ADJOINING AN OPEN SPACE  
TOTAL BUILDING AREA = 70,608 SF.  
RENOVATED AREA (1ST FLOOR) = 1,740 SF.  
RENOVATED AREA (2ND FLOOR) = 13,071 SF.  
RENOVATED AREA (3RD FLOOR) = 14,901 SF.  
BUILDING IS SPRINKLED.  
**FIRE RATING REQUIRED:**  
STAIR ENCLOSURES: 2 HOUR  
CORRIDOR WALLS: 1 HOUR  
STRUCTURE: 1 HOUR  
ROOF STRUCTURE: 1 HOUR

VICINITY MAP

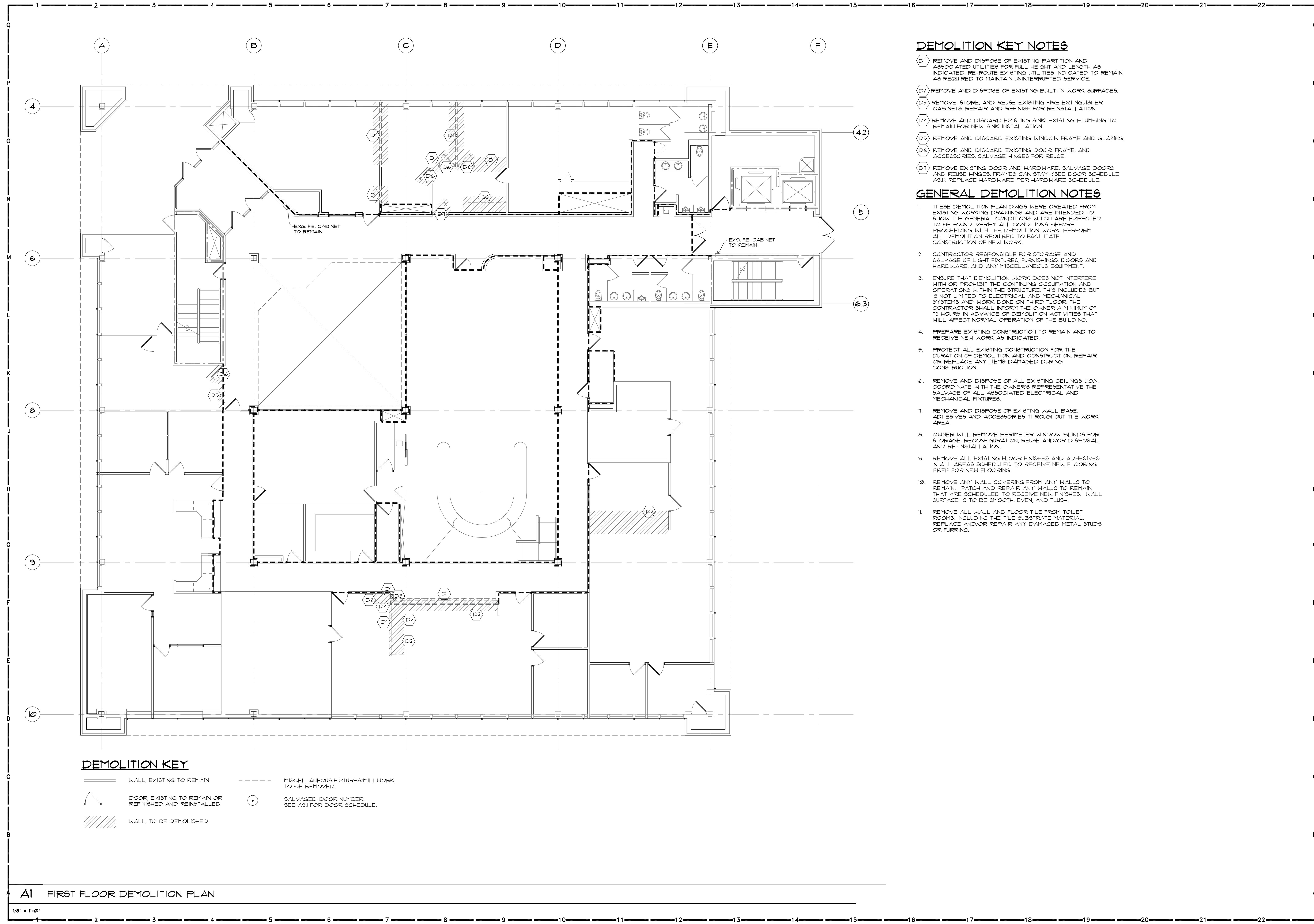


LOCATION MAP



DRAWING LIST

GENERAL:	PLUMBING:	ELECTRICAL:
G1.1 COVER SHEET AND GENERAL PROJECT INFORMATION	M0.1 PLUMBING TITLE SHEET	M0.1 MECHANICAL DETAILS
D2.1 FIRST FLOOR DEMOLITION PLAN	P1.1 FIRST FLOOR SANITARY DEMOLITION	M1.2 MECHANICAL DETAILS
D2.2 SECOND FLOOR DEMOLITION PLAN	P1.2 SECOND FLOOR SANITARY DEMOLITION	M1.3 MECHANICAL DETAILS
D2.3 THIRD FLOOR DEMOLITION PLAN	P1.3 THIRD FLOOR SANITARY DEMOLITION	M1.4 MECHANICAL DETAILS
A2.1 FIRST FLOOR PLAN	P2.1 FIRST FLOOR WATER & FIRE SUPPRESSION DEMOLITION	M1.5 MECHANICAL DETAILS
A2.2 SECOND FLOOR PLAN	P2.2 SECOND FLOOR WATER & FIRE SUPPRESSION DEMOLITION	E0.1 ELECTRICAL TITLE SHEET
A2.3 THIRD FLOOR PLAN	P2.3 THIRD FLOOR WATER & FIRE SUPPRESSION DEMOLITION	E1.1 FIRST FLOOR POWER DEMOLITION
A2.4 ENLARGED PLANS	P3.1 FIRST FLOOR SANITARY NEW WORK	E1.2 SECOND FLOOR POWER DEMOLITION
A3.1 FIRST FLOOR REFLECTED CEILING PLAN	P3.2 SECOND FLOOR SANITARY NEW WORK	E1.3 THIRD FLOOR POWER DEMOLITION
A3.2 SECOND FLOOR REFLECTED CEILING PLAN	P3.3 THIRD FLOOR SANITARY NEW WORK	E2.1 FIRST FLOOR LIGHTING DEMOLITION
A3.3 THIRD FLOOR REFLECTED CEILING PLAN	P4.1 FIRST FLOOR WATER & FIRE SUPPRESSION NEW WORK	E2.2 SECOND FLOOR LIGHTING DEMOLITION
A6.1 FIRST FLOOR FINISHES PLAN	P4.2 SECOND FLOOR WATER & FIRE SUPPRESSION NEW WORK	E2.3 THIRD FLOOR LIGHTING DEMOLITION
A6.2 SECOND FLOOR FINISHES PLAN	P4.3 THIRD FLOOR WATER & FIRE SUPPRESSION NEW WORK	E3.1 FIRST FLOOR POWER NEW WORK
A6.3 THIRD FLOOR FINISHES PLAN	P4.4 THIRD FLOOR WATER & FIRE SUPPRESSION NEW WORK	E3.2 SECOND FLOOR POWER NEW WORK
A8.1 FIRST FLOOR INTERIOR ELEVATIONS	M3.1 PLUMBING DETAILS	E3.3 THIRD FLOOR POWER NEW WORK
A8.2 SECOND FLOOR INTERIOR ELEVATIONS	M0.1 MECHANICAL TITLE SHEET	E4.1 FIRST FLOOR LIGHTING NEW WORK
A8.3 THIRD FLOOR INTERIOR ELEVATIONS	M1.1 FIRST FLOOR PIPING DEMOLITION	E4.2 SECOND FLOOR LIGHTING NEW WORK
A8.4 THIRD FLOOR INTERIOR ELEVATIONS	M1.2 SECOND FLOOR PIPING DEMOLITION	E4.3 THIRD FLOOR LIGHTING NEW WORK
A8.5 THIRD FLOOR INTERIOR ELEVATIONS	M1.3 THIRD FLOOR PIPING DEMOLITION	E5.1 ELECTRICAL DETAILS
A9.1 FIRST FLOOR DOOR SCHEDULE/DETAILS	M1.4 FIRST FLOOR SHEET METAL DEMOLITION	E5.2 ELECTRICAL DETAILS
A9.2 SECOND FLOOR DOOR SCHEDULE	M1.5 SECOND FLOOR SHEET METAL DEMOLITION	E5.3 ELECTRICAL DETAILS
A9.3 THIRD FLOOR DOOR SCHEDULE/DETAILS	M2.1 FIRST FLOOR SHEET METAL DEMOLITION	E5.4 ELECTRICAL DETAILS
A9.4 INTERIOR DETAILS	M2.2 SECOND FLOOR SHEET METAL DEMOLITION	E5.5 ELECTRICAL DETAILS
A9.5 INTERIOR DETAILS	M2.3 THIRD FLOOR SHEET METAL DEMOLITION	
	M3.1 FIRST FLOOR PIPING NEW WORK	
	M3.2 SECOND FLOOR PIPING NEW WORK	
	M3.3 THIRD FLOOR PIPING NEW WORK	
	M4.1 FIRST FLOOR SHEET METAL NEW WORK	
	M4.2 SECOND FLOOR SHEET METAL NEW WORK	
	M4.3 THIRD FLOOR SHEET METAL NEW WORK	



**DEMOLITION KEY NOTES**

- (D1) REMOVE AND DISPOSE OF EXISTING PARTITION AND ASSOCIATED UTILITIES FOR FULL HEIGHT AND LENGTH AS INDICATED. RE-ROUTE EXISTING UTILITIES INDICATED TO REMAIN AS REQUIRED TO MAINTAIN UNINTERRUPTED SERVICE.
- (D2) REMOVE AND DISPOSE OF EXISTING BUILT-IN WORK SURFACES.
- (D3) REMOVE, STORE, AND REUSE EXISTING FIRE EXTINGUISHER CABINETS. REPAIR AND REFINISH FOR REINSTALLATION.
- (D4) REMOVE AND DISCARD EXISTING SINK EXISTING PLUMBING TO REMAIN FOR NEW SINK INSTALLATION.
- (D5) REMOVE AND DISCARD EXISTING WINDOW FRAME AND GLAZING.
- (D6) REMOVE AND DISCARD EXISTING DOOR FRAME, AND ACCESSORIES. SALVAGE HINGES FOR REUSE.
- (D7) REMOVE EXISTING DOOR AND HARDWARE. SALVAGE DOORS AND REUSE HINGES. FRAMES CAN STAY. (SEE DOOR SCHEDULE A31). REPLACE HARDWARE PER HARDWARE SCHEDULE.

**GENERAL DEMOLITION NOTES**

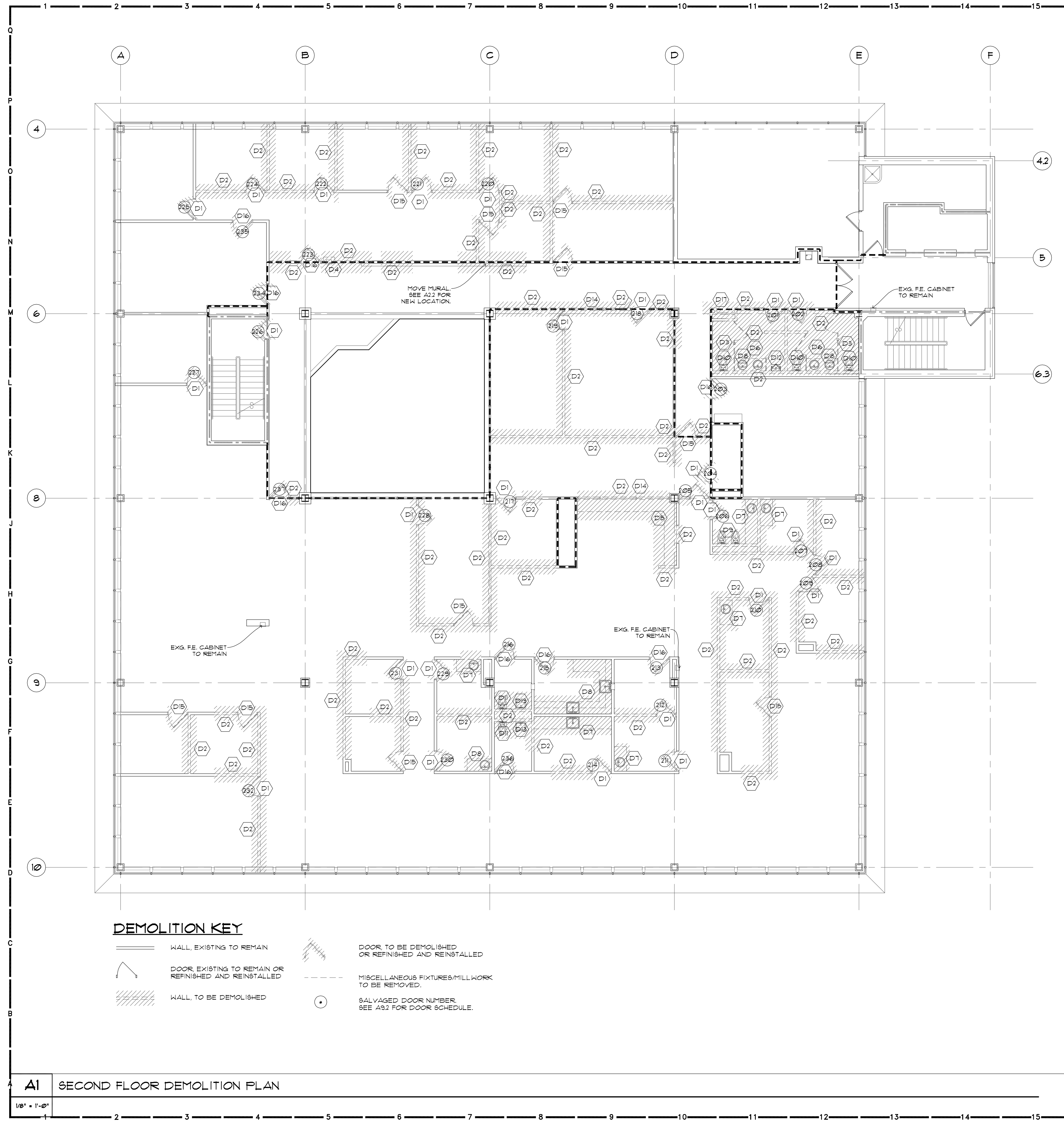
1. THESE DEMOLITION PLAN DIAGS WERE CREATED FROM EXISTING WORKING DRAWINGS AND ARE INTENDED TO SHOW THE GENERAL CONDITIONS WHICH ARE EXPECTED TO BE FOUND. VERIFY ALL CONDITIONS BEFORE PROCEEDING WITH THE DEMOLITION WORK. PERFORM ALL DEMOLITION REQUIRED TO FACILITATE CONSTRUCTION OF NEW WORK.
2. CONTRACTOR RESPONSIBLE FOR STORAGE AND SALVAGE OF LIGHT FIXTURES, FURNISHINGS, DOORS AND HARDWARE, AND ANY MISCELLANEOUS EQUIPMENT.
3. ENSURE THAT DEMOLITION WORK DOES NOT INTERFERE WITH OR PROHIBIT THE CONTINUING OCCUPATION AND OPERATIONS WITHIN THE STRUCTURE. THIS INCLUDES BUT IS NOT LIMITED TO ELECTRICAL AND MECHANICAL SYSTEMS AND WORK DONE ON THIRD FLOOR. THE CONTRACTOR SHALL INFORM THE OWNER A MINIMUM OF 12 HOURS IN ADVANCE OF DEMOLITION ACTIVITIES THAT WILL AFFECT NORMAL OPERATION OF THE BUILDING.
4. PREPARE EXISTING CONSTRUCTION TO REMAIN AND TO RECEIVE NEW WORK AS INDICATED.
5. PROTECT ALL EXISTING CONSTRUCTION FOR THE DURATION OF DEMOLITION AND CONSTRUCTION. REPAIR OR REPLACE ANY ITEMS DAMAGED DURING CONSTRUCTION.
6. REMOVE AND DISPOSE OF ALL EXISTING CEILING UNON. COORDINATE WITH THE OWNER'S REPRESENTATIVE THE SALVAGE OF ALL ASSOCIATED ELECTRICAL AND MECHANICAL FIXTURES.
7. REMOVE AND DISPOSE OF EXISTING WALL BASE, ADHESIVES AND ACCESSORIES THROUGHOUT THE WORK AREA.
8. OWNER WILL REMOVE PERIMETER WINDOW BLINDS FOR STORAGE, RECONFIGURATION, REUSE AND/OR DISPOSAL, AND RE-INSTALLATION.
9. REMOVE ALL EXISTING FLOOR FINISHES AND ADHESIVES IN ALL AREAS SCHEDULED TO RECEIVE NEW FLOORING. PREP FOR NEW FLOORING.
10. REMOVE ANY WALL COVERING FROM ANY WALLS TO REMAIN. PATCH AND REPAIR ANY WALLS TO REMAIN THAT ARE SCHEDULED TO RECEIVE NEW FINISHES. WALL SURFACE IS TO BE SMOOTH, EVEN, AND FLUSH.
11. REMOVE ALL WALL AND FLOOR TILE FROM TOILET ROOMS, INCLUDING THE TILE SUBSTRATE MATERIAL. REPLACE AND/OR REPAIR ANY DAMAGED METAL STUDS OR FURRING.

**DEMOLITION KEY**

- WALL, EXISTING TO REMAIN
- MISCELLANEOUS FIXTURES, MILL WORK TO BE REMOVED.
- DOOR EXISTING TO REMAIN OR REFINISHED AND REINSTALLED
- SALVAGED DOOR NUMBER. SEE A31 FOR DOOR SCHEDULE.
- WALL, TO BE DEMOLISHED

**A1** FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0"

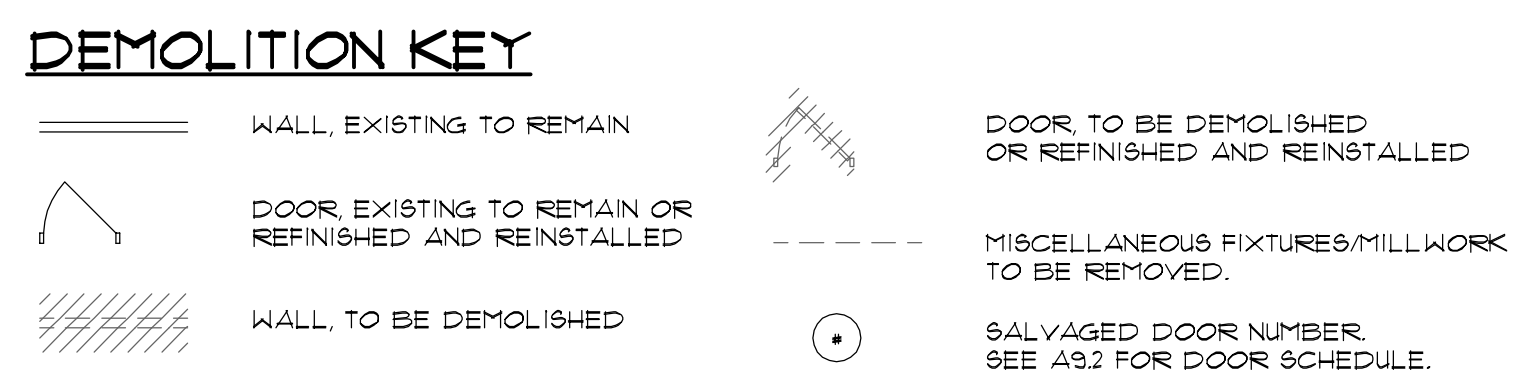


**DEMOLITION KEY NOTES**

- D1 REMOVE EXISTING DOOR FRAME, HARDWARE AND ACCESSORIES. SALVAGE DOORS AND HINGES. REMOVE LOCK SETS (SEE DOOR SCHEDULE A9.2). REPLACE HARDWARE PER HARDWARE SCHEDULE.
- D2 REMOVE AND DISPOSE OF EXISTING PARTITION AND ASSOCIATED UTILITIES FOR FULL HEIGHT AND LENGTH AS INDICATED. RE-ROUTE EXISTING UTILITIES INDICATED TO REMAIN AS REQUIRED TO MAINTAIN UNINTERRUPTED SERVICE.
- D3 REMOVE EXISTING TOILET PARTITIONS NEAT AND FLUSH WITH EXISTING ADJACENT SURFACES.
- D4 REMOVE, STORE, AND REUSE EXISTING FIRE EXTINGUISHER CABINETS. REPAIR AND REFINISH FOR REINSTALLATION.
- D5 REMOVE AND DISPOSE OF EXISTING BUILT-IN WORK SURFACES.
- D6 REMOVE AND DISPOSE OF EXISTING VANITY AND LAVATORIES. REFER TO PLUMBING DRAWINGS.
- D7 REMOVE AND DISCARD EXISTING BASE CABINETS, WALL CABINETS, AND SINK. REMOVE PLUMBING LINES BACK TO NEAREST MAIN. REFER TO PLUMBING DRAWINGS.
- D8 REMOVE AND DISCARD EXISTING BASE CABINETS, WALL CABINETS, WORK SURFACE, AND SINK. PREP FOR INSTALLATION OF NEW CABINETS AND SINK.
- D9 REMOVE AND DISCARD EXISTING WALL MOUNTED TOILETS. REMOVE PLUMBING LINES BACK TO NEAREST MAIN. REFER TO PLUMBING DRAWINGS.
- D10 EXISTING WALL MOUNTED TOILETS TO BE REMOVED.
- D11 EXISTING WALL MOUNTED TOILETS TO BE REMOVED. ADJUST LOCATION FROM SIDE WALL TO COMPLY WITH ACCESSIBILITY STANDARDS. SEE ENLARGED PLAN L6/A2.4.
- D12 REMOVE AND DISCARD EXISTING WALL URINAL. REMOVE PLUMBING LINES BACK TO NEAREST MAIN. REFER TO PLUMBING DRAWINGS.
- D13 REMOVE AND DISCARD EXISTING WALL MOUNTED LAVATORIES. REROUTE PLUMBING LINES TO NEW FIXTURE LOCATION. REFER TO PLUMBING DRAWINGS.
- D14 REMOVE AND DISCARD EXISTING WINDOW FRAME AND GLAZING.
- D15 REMOVE AND DISCARD EXISTING DOOR FRAME, AND ACCESSORIES. SALVAGE HINGES FOR REUSE.
- D16 REMOVE EXISTING DOOR AND HARDWARE. SALVAGE DOORS AND REUSE HINGES. FRAMES CAN STAY. (SEE DOOR SCHEDULE A9.2). REPLACE HARDWARE PER HARDWARE SCHEDULE.
- D17 REMOVE AND SALVAGE EMERGENCY DEFIBRILLATOR FOR REINSTALLATION. REFER TO A2.2 DRAWING.

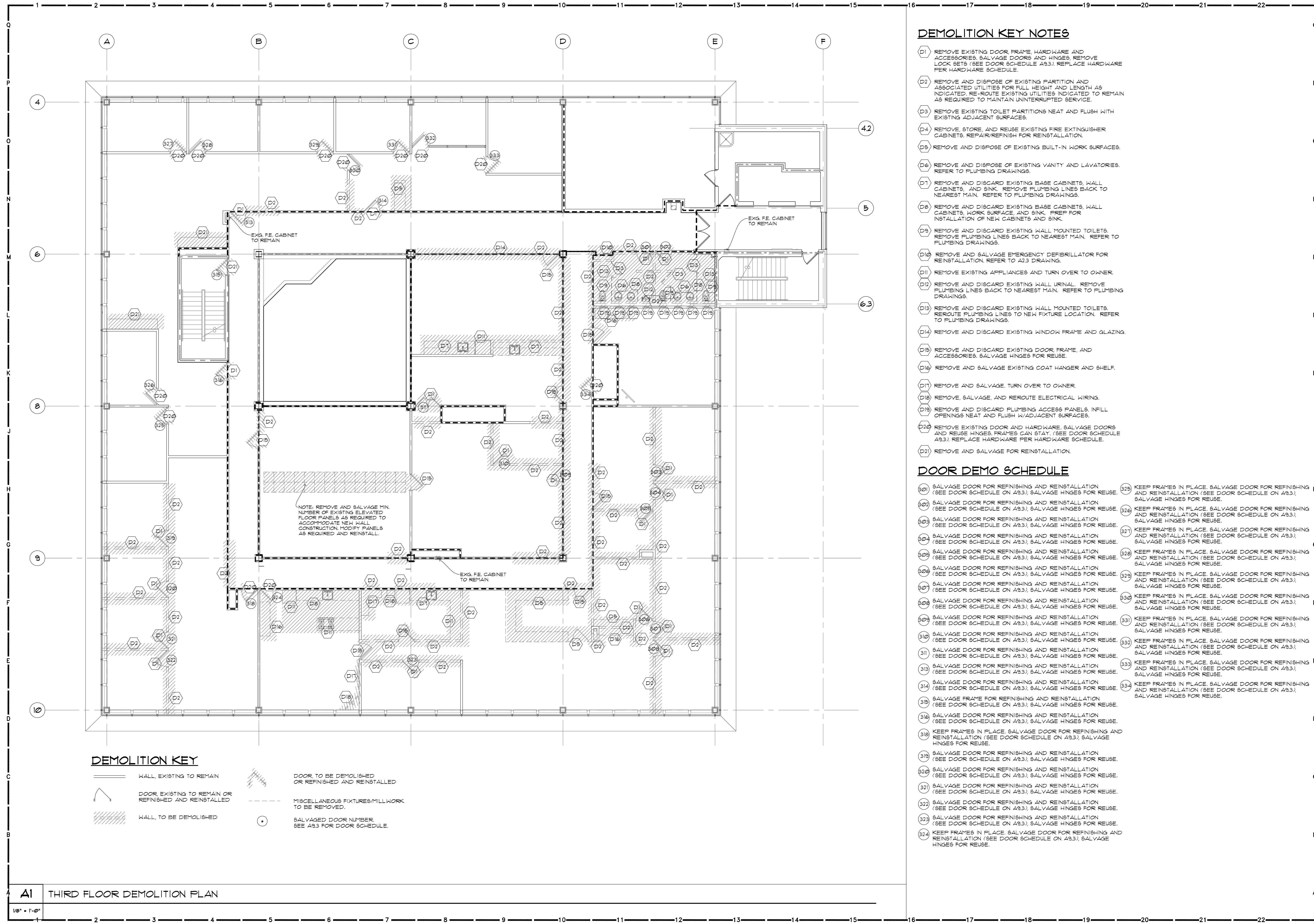
**DOOR DEMO SCHEDULE**

- 201 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 202 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 203 REMOVE AND DISCARD EXISTING WINDOW FRAME AND GLAZING. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 204 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
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- 209 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
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- 211 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 212 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 213 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 214 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 215 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 216 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
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- 222 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 223 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 224 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
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- 231 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 232 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 233 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 236 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.
- 237 KEEP FRAMES IN PLACE. SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.2). SALVAGE HINGES FOR REUSE.



**A1 SECOND FLOOR DEMOLITION PLAN**

1/8" = 1'-0"



**DEMOLITION KEY**

- WALL, EXISTING TO REMAIN
- DOOR TO BE DEMOLISHED OR REFINISHED AND REINSTALLED
- WALL, TO BE DEMOLISHED
- MISCELLANEOUS FIXTURES/MILLWORK TO BE REMOVED.
- SALVAGED DOOR NUMBER. SEE A9.3 FOR DOOR SCHEDULE.

**DEMOLITION KEY NOTES**

- D1 REMOVE EXISTING DOOR FRAME, HARDWARE AND ACCESSORIES. SALVAGE DOORS AND HINGES. REMOVE LOCK SETS (SEE DOOR SCHEDULE A9.3). REPLACE HARDWARE PER HARDWARE SCHEDULE.
- D2 REMOVE AND DISPOSE OF EXISTING PARTITION AND ASSOCIATED UTILITIES FOR FULL HEIGHT AND LENGTH AS INDICATED. RE-ROUTE EXISTING UTILITIES INDICATED TO REMAIN AS REQUIRED TO MAINTAIN UNINTERRUPTED SERVICE.
- D3 REMOVE EXISTING TOILET PARTITIONS NEAT AND FLUSH WITH EXISTING ADJACENT SURFACES.
- D4 REMOVE, STORE, AND REUSE EXISTING FIRE EXTINGUISHER CABINETS. REPAIR/REFINISH FOR REINSTALLATION.
- D5 REMOVE AND DISPOSE OF EXISTING BUILT-IN WORK SURFACES.
- D6 REMOVE AND DISPOSE OF EXISTING VANITY AND LAVATORIES. REFER TO PLUMBING DRAWINGS.
- D7 REMOVE AND DISCARD EXISTING BASE CABINETS, WALL CABINETS, AND SINK. REMOVE PLUMBING LINES BACK TO NEAREST MAIN. REFER TO PLUMBING DRAWINGS.
- D8 REMOVE AND DISCARD EXISTING BASE CABINETS, WALL CABINETS, WORK SURFACE, AND SINK. PREP FOR INSTALLATION OF NEW CABINETS AND SINK.
- D9 REMOVE AND DISCARD EXISTING WALL MOUNTED TOILETS. REMOVE PLUMBING LINES BACK TO NEAREST MAIN. REFER TO PLUMBING DRAWINGS.
- D10 REMOVE AND SALVAGE EMERGENCY DEFIBRILLATOR FOR REINSTALLATION. REFER TO A2.3 DRAWING.
- D11 REMOVE EXISTING APPLIANCES AND TURN OVER TO OWNER.
- D12 REMOVE AND DISCARD EXISTING WALL URINAL. REMOVE PLUMBING LINES BACK TO NEAREST MAIN. REFER TO PLUMBING DRAWINGS.
- D13 REMOVE AND DISCARD EXISTING WALL MOUNTED TOILETS. REROUTE PLUMBING LINES TO NEW FIXTURE LOCATION. REFER TO PLUMBING DRAWINGS.
- D14 REMOVE AND DISCARD EXISTING WINDOW FRAME AND GLAZING.
- D15 REMOVE AND DISCARD EXISTING DOOR, FRAME, AND ACCESSORIES. SALVAGE HINGES FOR REUSE.
- D16 REMOVE AND SALVAGE EXISTING COAT HANGER AND SHELF.
- D17 REMOVE AND SALVAGE. TURN OVER TO OWNER.
- D18 REMOVE, SALVAGE, AND REROUTE ELECTRICAL WIRING.
- D19 REMOVE AND DISCARD PLUMBING ACCESS PANELS. INFILL OPENINGS NEAT AND FLUSH W/ADJACENT SURFACES.
- D20 REMOVE EXISTING DOOR AND HARDWARE. SALVAGE DOORS AND REUSE HINGES. FRAMES CAN STAY. (SEE DOOR SCHEDULE A9.3). REPLACE HARDWARE PER HARDWARE SCHEDULE.
- D21 REMOVE AND SALVAGE FOR REINSTALLATION.

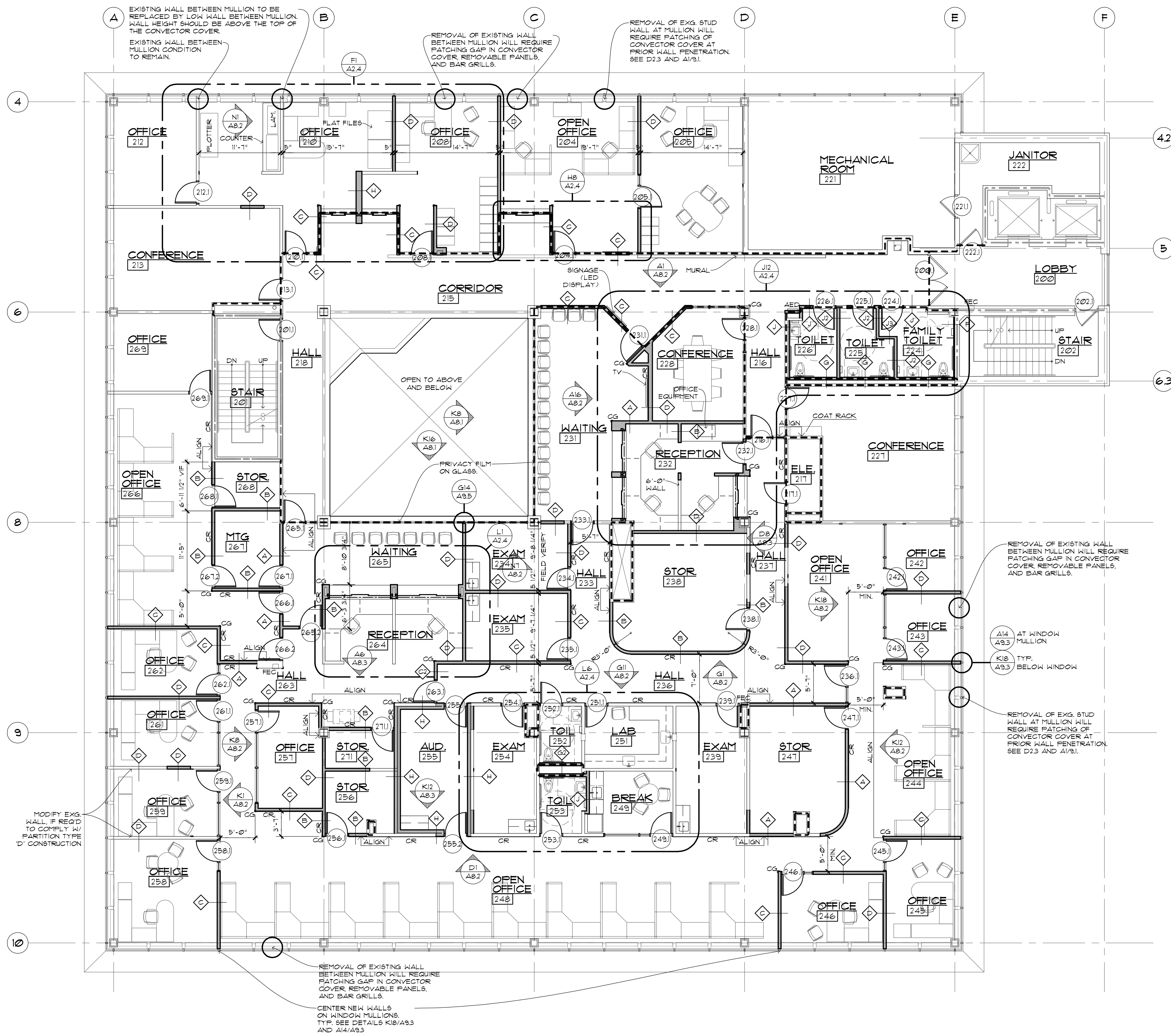
**DOOR DEMO SCHEDULE**

- S20 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.3). SALVAGE HINGES FOR REUSE.
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- S55 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.3). SALVAGE HINGES FOR REUSE.
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- S100 SALVAGE DOOR FOR REFINISHING AND REINSTALLATION (SEE DOOR SCHEDULE ON A9.3). SALVAGE HINGES FOR REUSE.



**FLOOR PLAN KEY**

- WALL, EXISTING TO REMAIN
- DOOR, EXISTING TO REMAIN
- NEW WALL
- NEW DOOR
- CG TYPICAL CORNER GUARD LOCATIONS. COLOR TO MATCH WALL COVERING.
- CR CONTINUOUS CRASH RAILS
- FEC FIRE EXTINGUISHER CABINET - FULLY RECESSED.
- O FE FIRE EXTINGUISHER - SURFACE MOUNTED
- 1 HOUR RATED FIRE WALL ASSEMBLY FROM FLOOR TO DECK ABOVE.
- 2 HOUR RATED FIRE WALL ASSEMBLY FROM FLOOR TO DECK ABOVE.



A EXISTING WALL BETWEEN MULLION TO BE REPLACED BY LOW WALL BETWEEN MULLION. WALL HEIGHT SHOULD BE ABOVE THE TOP OF THE CONVECTOR COVER.  
 B EXISTING WALL BETWEEN MULLION CONDITION TO REMAIN.

C REMOVAL OF EXISTING WALL BETWEEN MULLION WILL REQUIRE PATCHING GAP IN CONVECTOR COVER, REMOVABLE PANELS, AND BAR GRILLS.

D REMOVAL OF EXG. STUD WALL AT MULLION WILL REQUIRE PATCHING OF CONVECTOR COVER AT PRIOR WALL PENETRATION. SEE D1.3 AND A1/9.1.

REMOVAL OF EXISTING WALL BETWEEN MULLION WILL REQUIRE PATCHING GAP IN CONVECTOR COVER, REMOVABLE PANELS, AND BAR GRILLS.

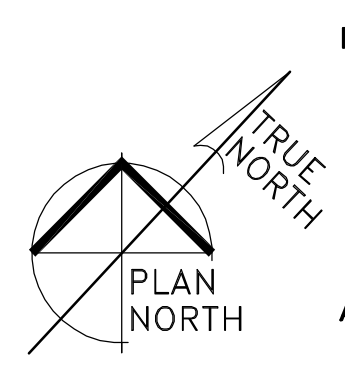
REMOVAL OF EXG. STUD WALL AT MULLION WILL REQUIRE PATCHING OF CONVECTOR COVER AT PRIOR WALL PENETRATION. SEE D1.3 AND A1/9.1.

REMOVAL OF EXISTING WALL BETWEEN MULLION WILL REQUIRE PATCHING GAP IN CONVECTOR COVER, REMOVABLE PANELS, AND BAR GRILLS.  
 CENTER NEW WALLS ON WINDOW MULLIONS. TYP. SEE DETAILS K18/A9.3 AND A14/A9.3

MODIFY EXG. WALL, IF REQ'D TO COMPLY W/ PARTITION TYPE 'D' CONSTRUCTION

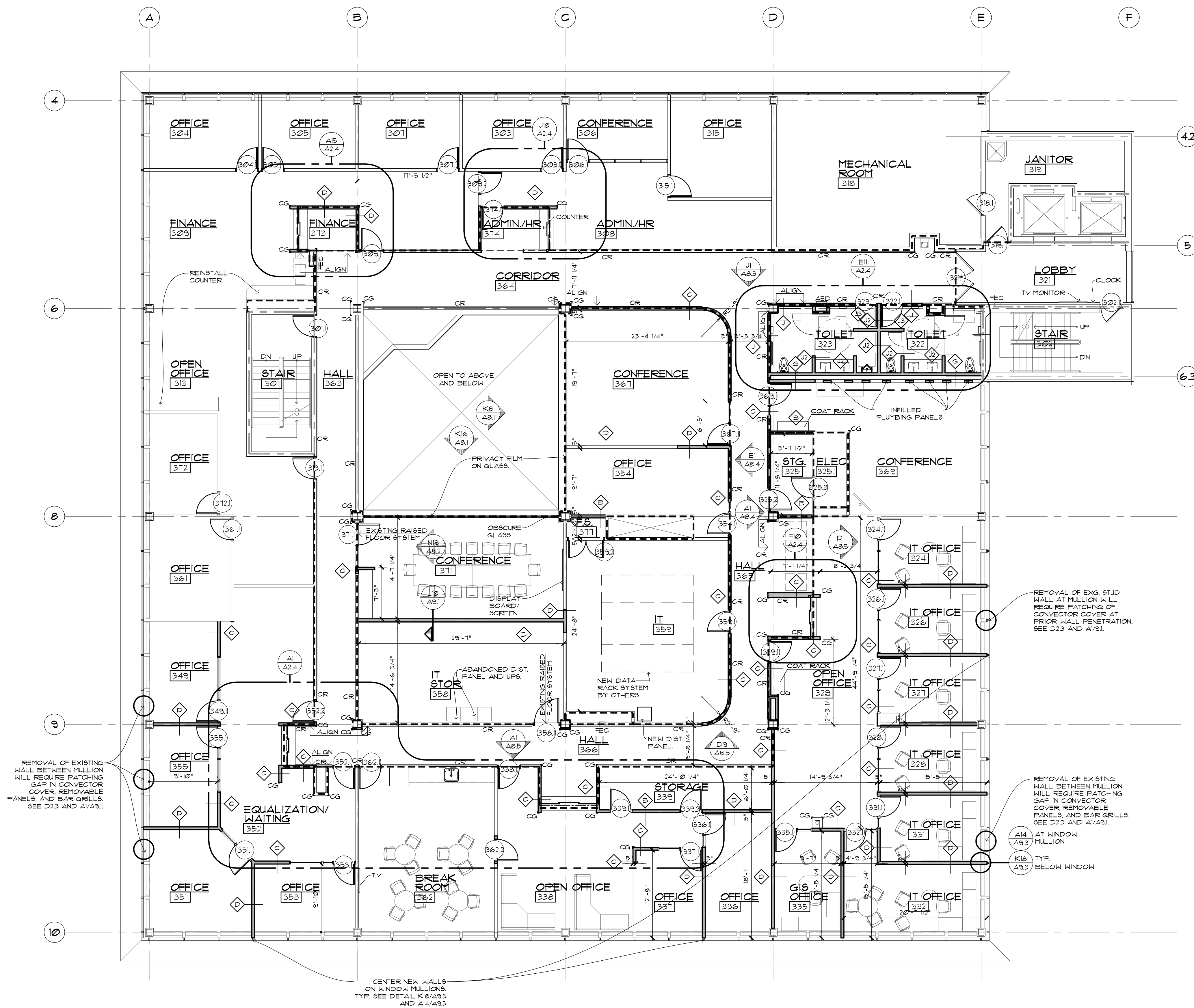
**A1** SECOND FLOOR PLAN

1/8" = 1'-0"



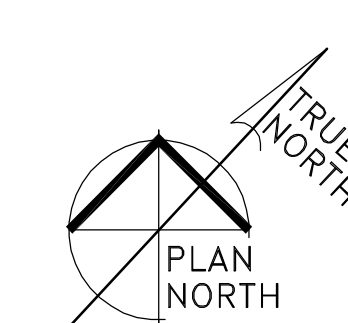
**FLOOR PLAN KEY**

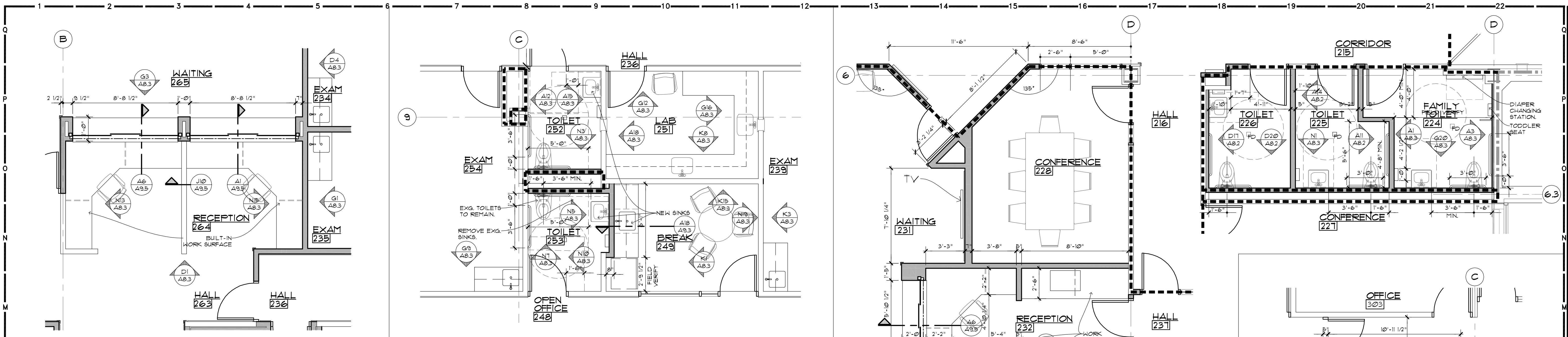
- WALL, EXISTING TO REMAIN
- DOOR, EXISTING TO REMAIN
- NEW WALL
- NEW DOOR
- CG TYPICAL CORNER GUARD LOCATIONS. COLOR TO MATCH WALL COVERING.
- CR CONTINUOUS CRASH RAILS.
- FEC FIRE EXTINGUISHER CABINET - FULLY RECESSED.
- FE FIRE EXTINGUISHER - SURFACE MOUNTED
- - - 1 HOUR RATED FIRE WALL ASSEMBLY FROM FLOOR TO DECK ABOVE.
- - - 2 HOUR RATED FIRE WALL ASSEMBLY FROM FLOOR TO DECK ABOVE.



**A1** THIRD FLOOR PLAN

1/8" = 1'-0"



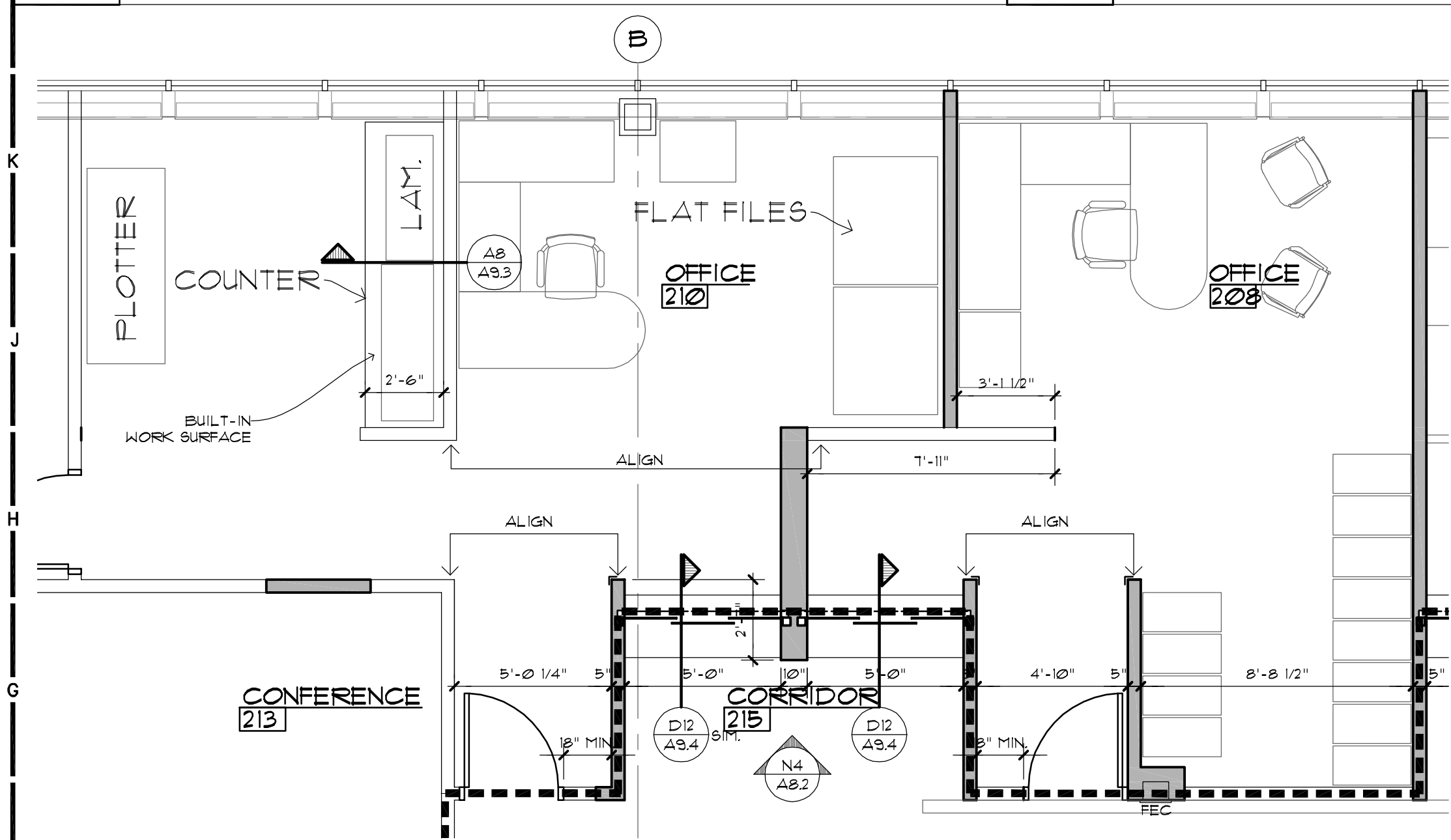


**L1** SECOND FLOOR ENLARGED PLAN

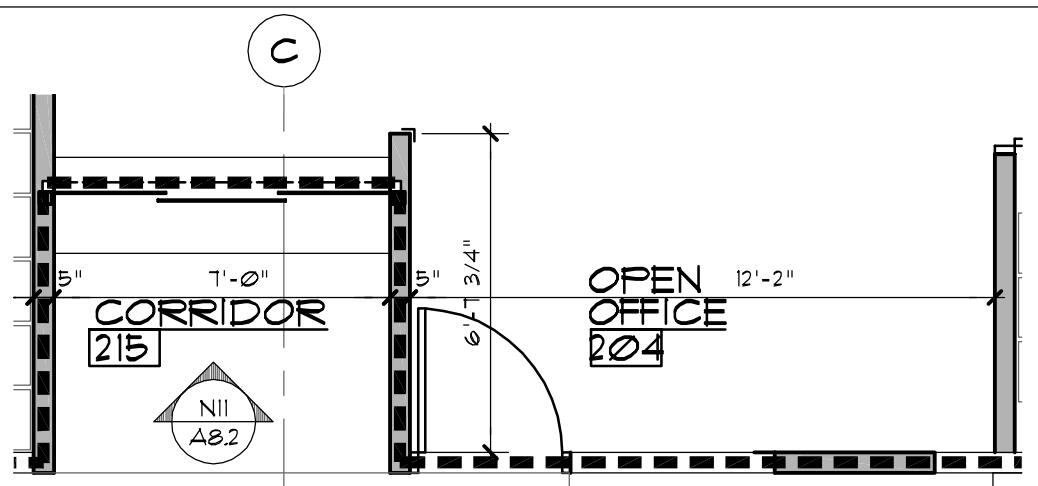
**L6** SECOND FLOOR ENLARGED PLAN

**J12** SECOND FLOOR ENLARGED PLAN

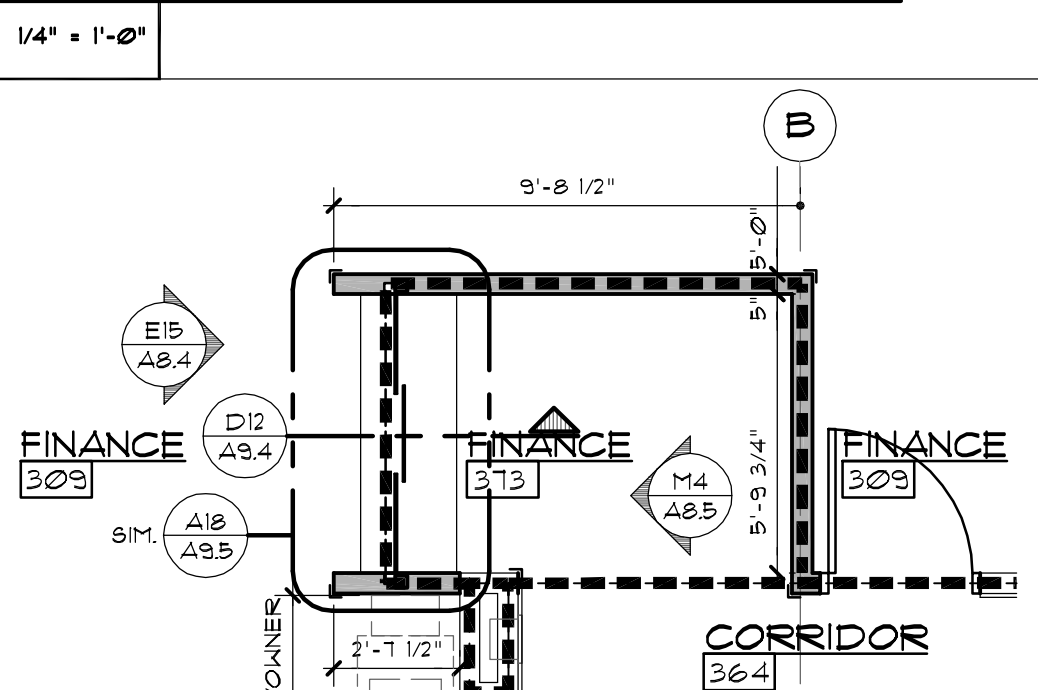
**J18** THIRD FLOOR ENLARGED PLAN



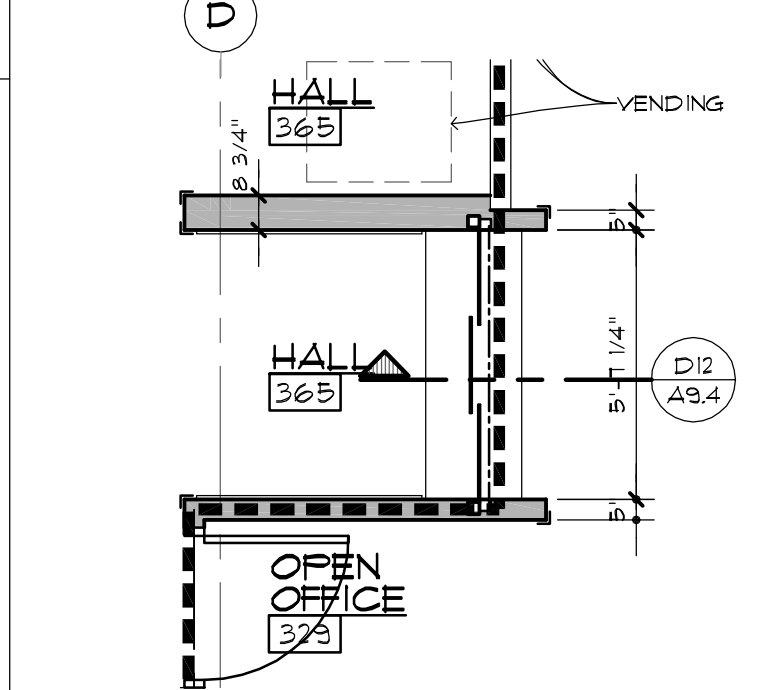
**F1** SECOND FLOOR ENLARGED PLAN



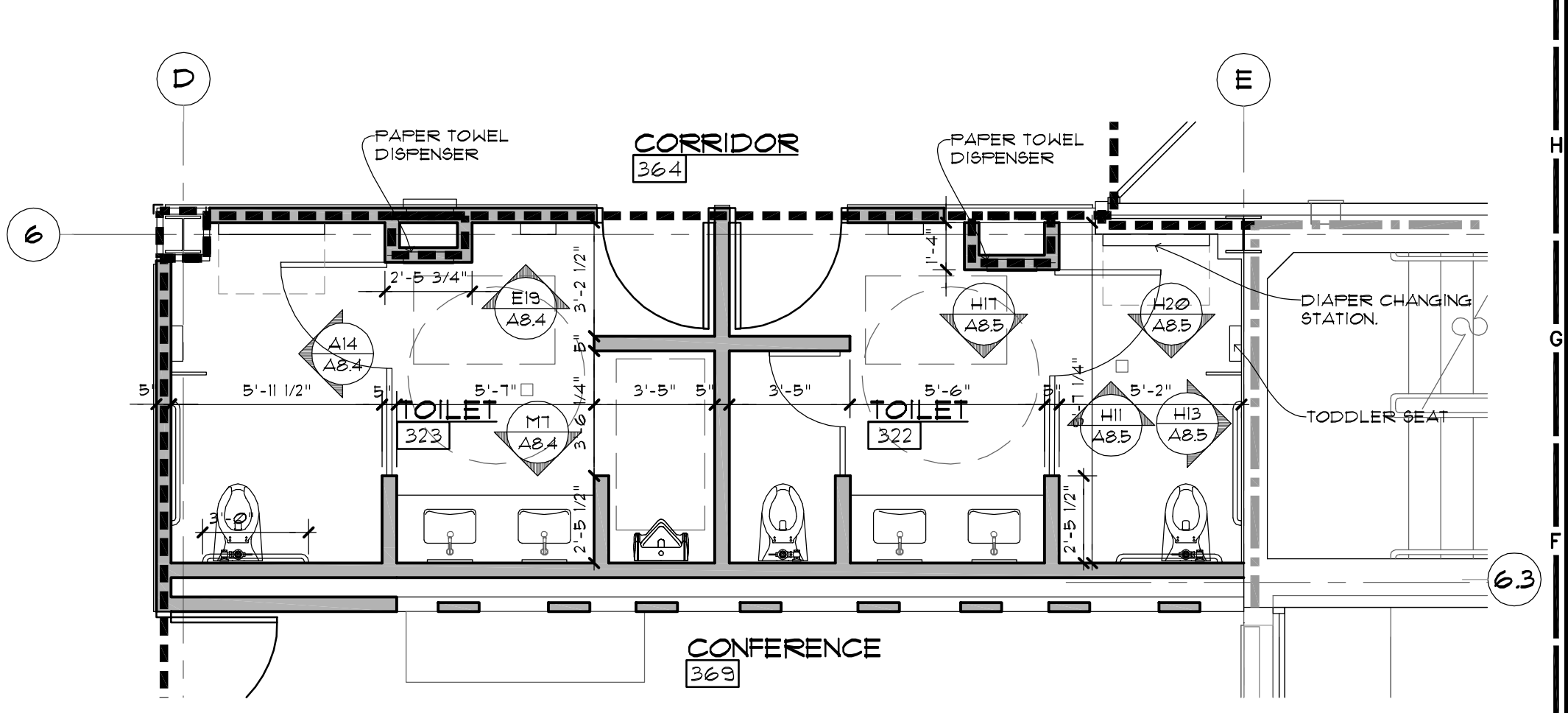
**H8** SECOND FL. ENLARGED PLAN



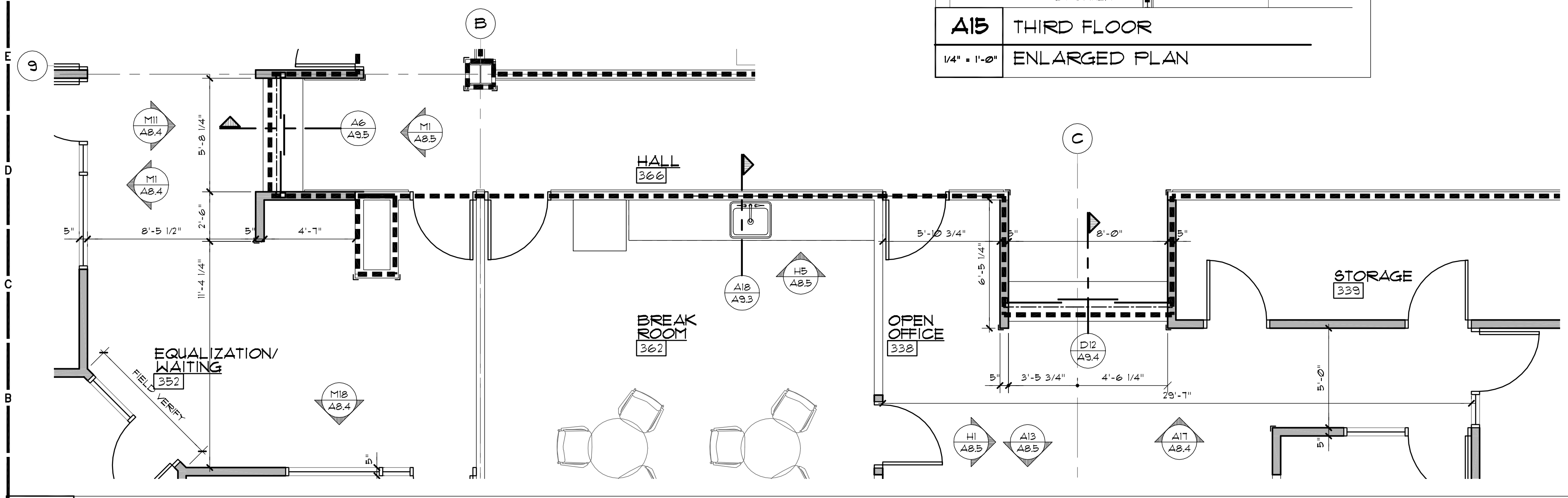
**A15** THIRD FLOOR ENLARGED PLAN



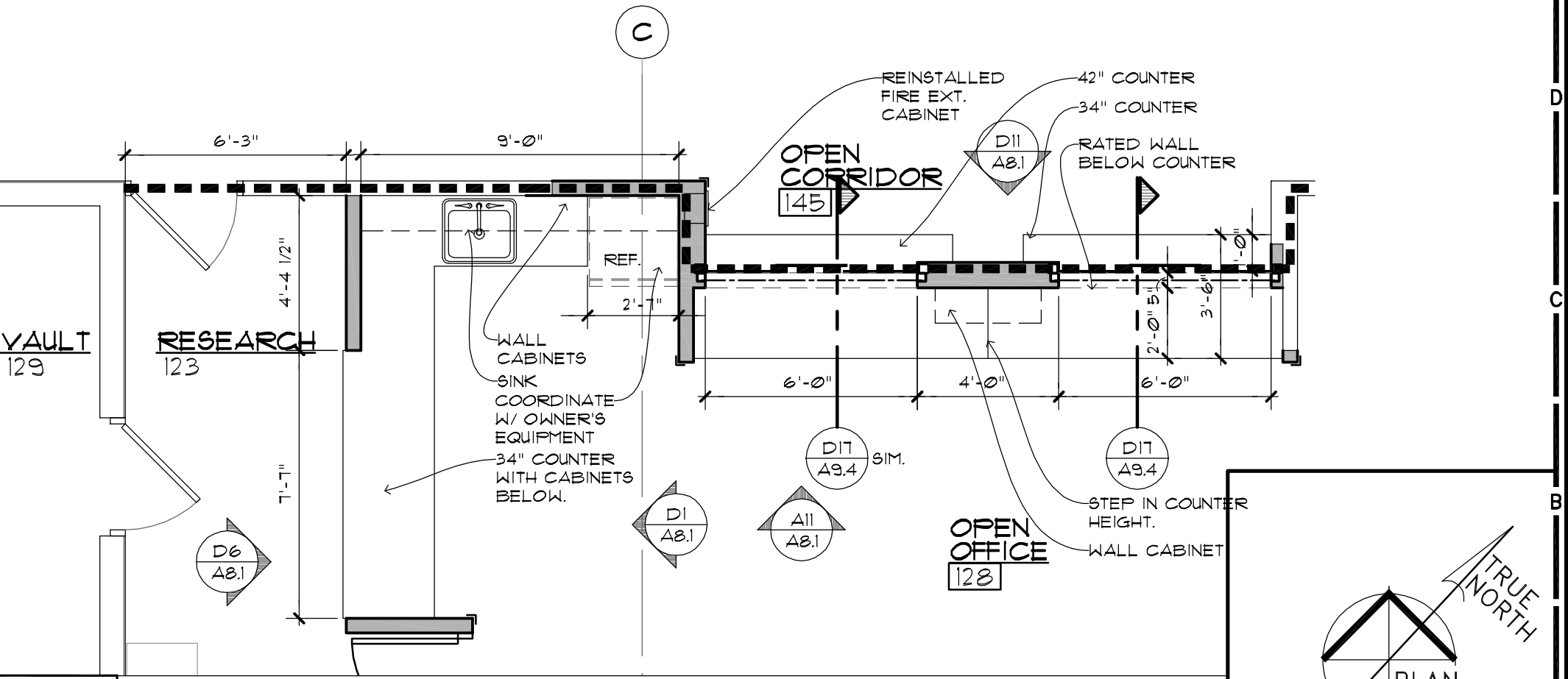
**F10** THIRD FLOOR ENLARGED PLAN



**E11** THIRD FLOOR ENLARGED PLAN



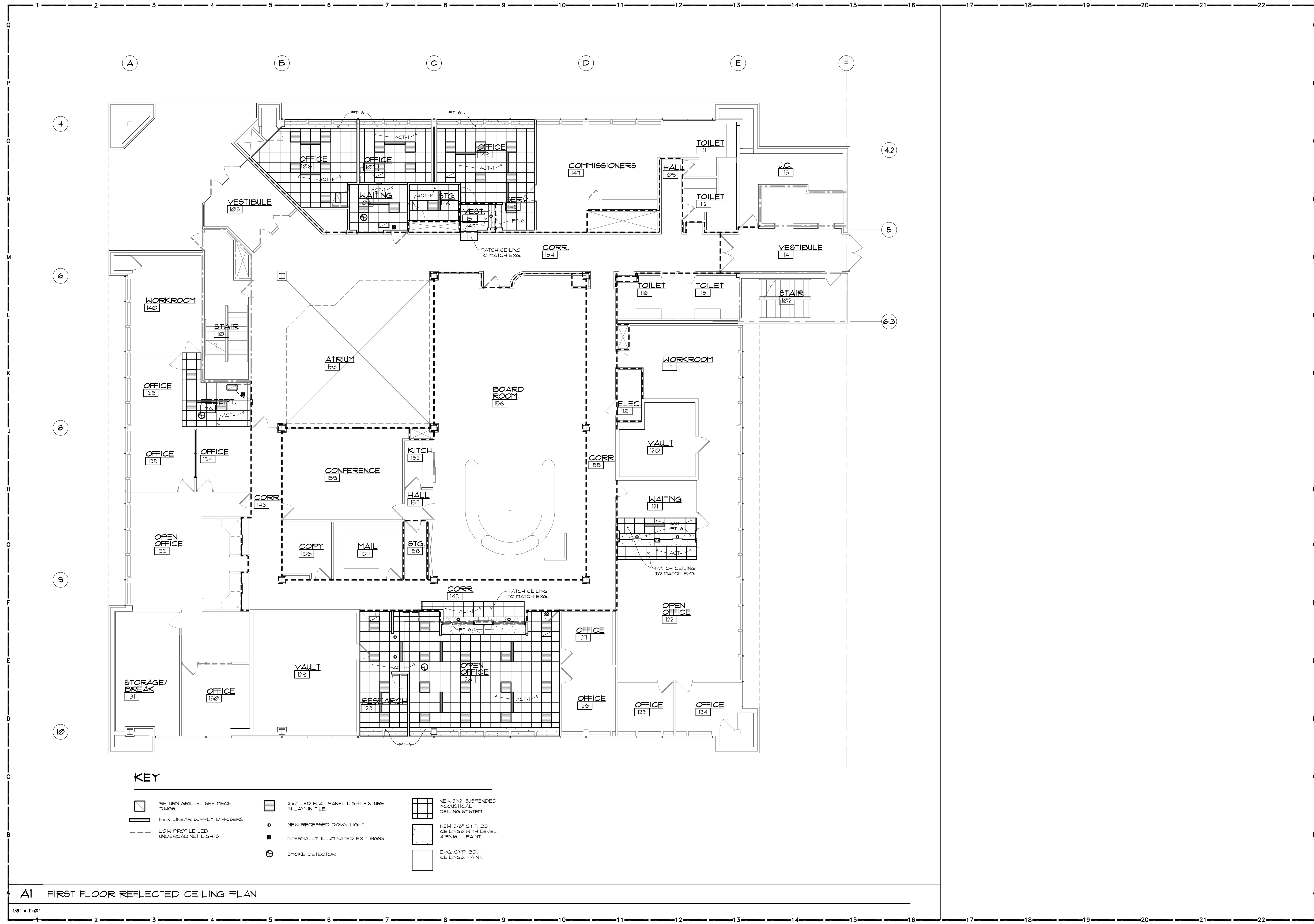
**A1** THIRD FLOOR ENLARGED PLAN



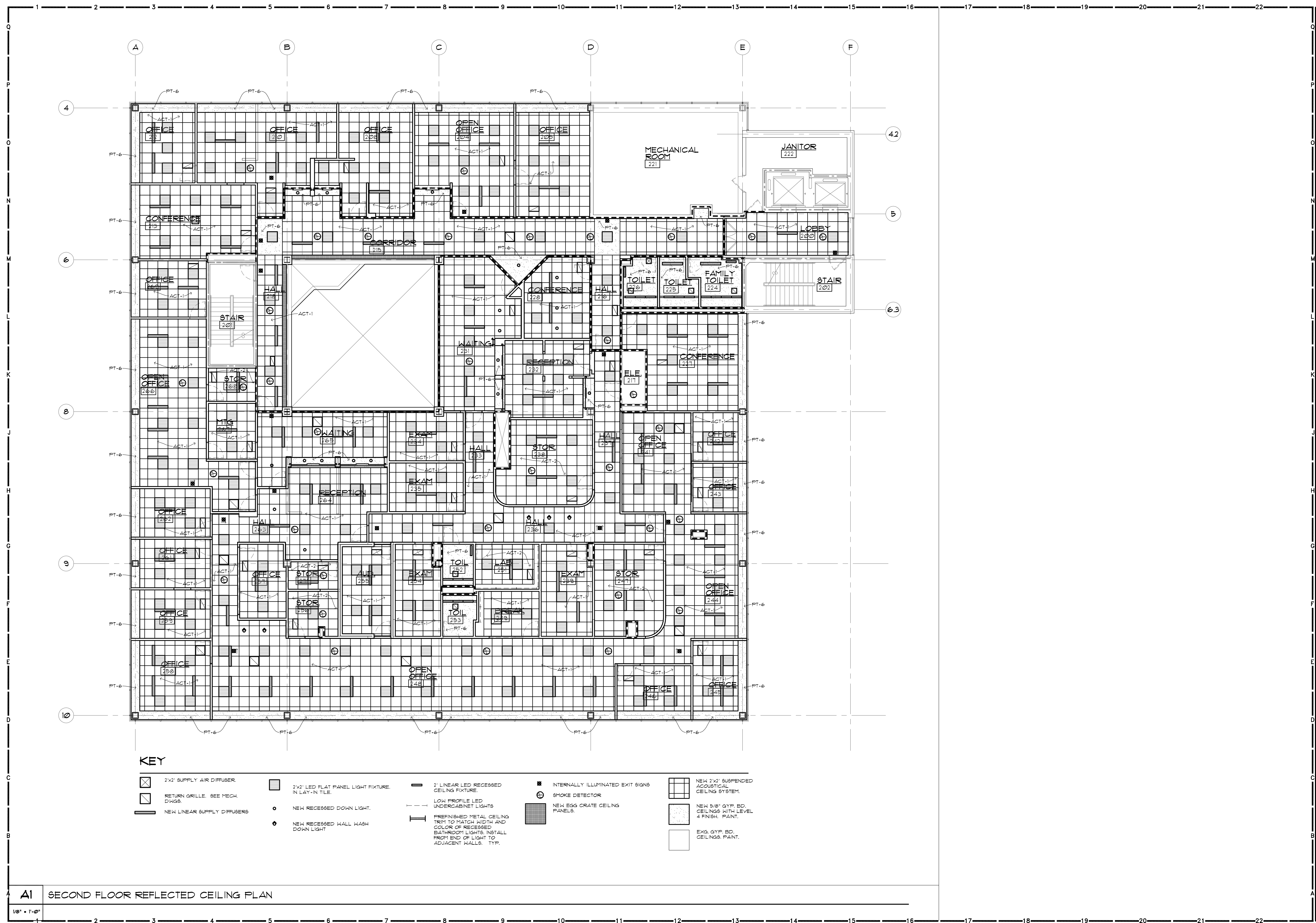
**A15** FIRST FLOOR ENLARGED PLAN







**A1** FIRST FLOOR REFLECTED CEILING PLAN

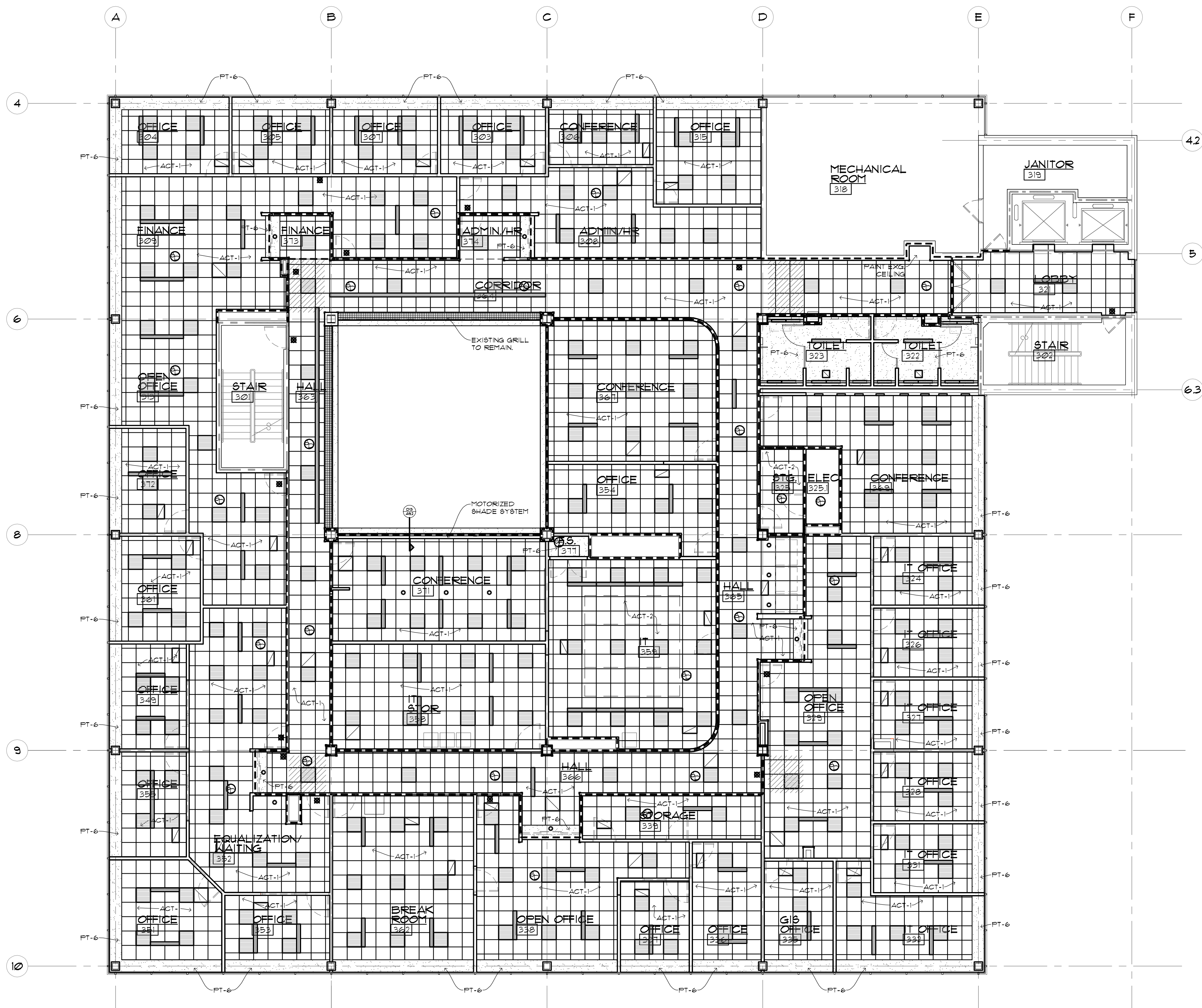


**KEY**

- |                                |   |  |                                   |   |
|--------------------------------|---|--|-----------------------------------|---|
| 2x2 SUPPLY AIR DIFFUSER        | 2x2 LED FLAT PANEL LIGHT FIXTURE IN LAY-IN TILE | 2' LINEAR LED RECESSED CEILING FIXTURE   | INTERNALLY ILLUMINATED EXIT SIGNS | NEW 2x2 SUSPENDED ACOUSTICAL CEILING SYSTEM         |
| RETURN GRILLE. SEE MECH. DWGS. | NEW RECESSED DOWN LIGHT                         | LOW PROFILE LED UNDERCABINET LIGHTS  | SMOKE DETECTOR                    | NEW 5/8" GYP. BD. CEILING WITH LEVEL 4 FINISH PAINT |
| NEW LINEAR SUPPLY DIFFUSERS    | NEW RECESSED WALL WASH DOWN LIGHT               | PREFINISHED METAL CEILING TRIM TO MATCH WIDTH AND COLOR OF RECESSED BATHROOM LIGHTS. INSTALL FROM END OF LIGHT TO ADJACENT WALLS. TYP. | NEW EGG CRATE CEILING PANELS      | EXG. GYP. BD. CEILING WITH PAINT                    |

**A1** SECOND FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"

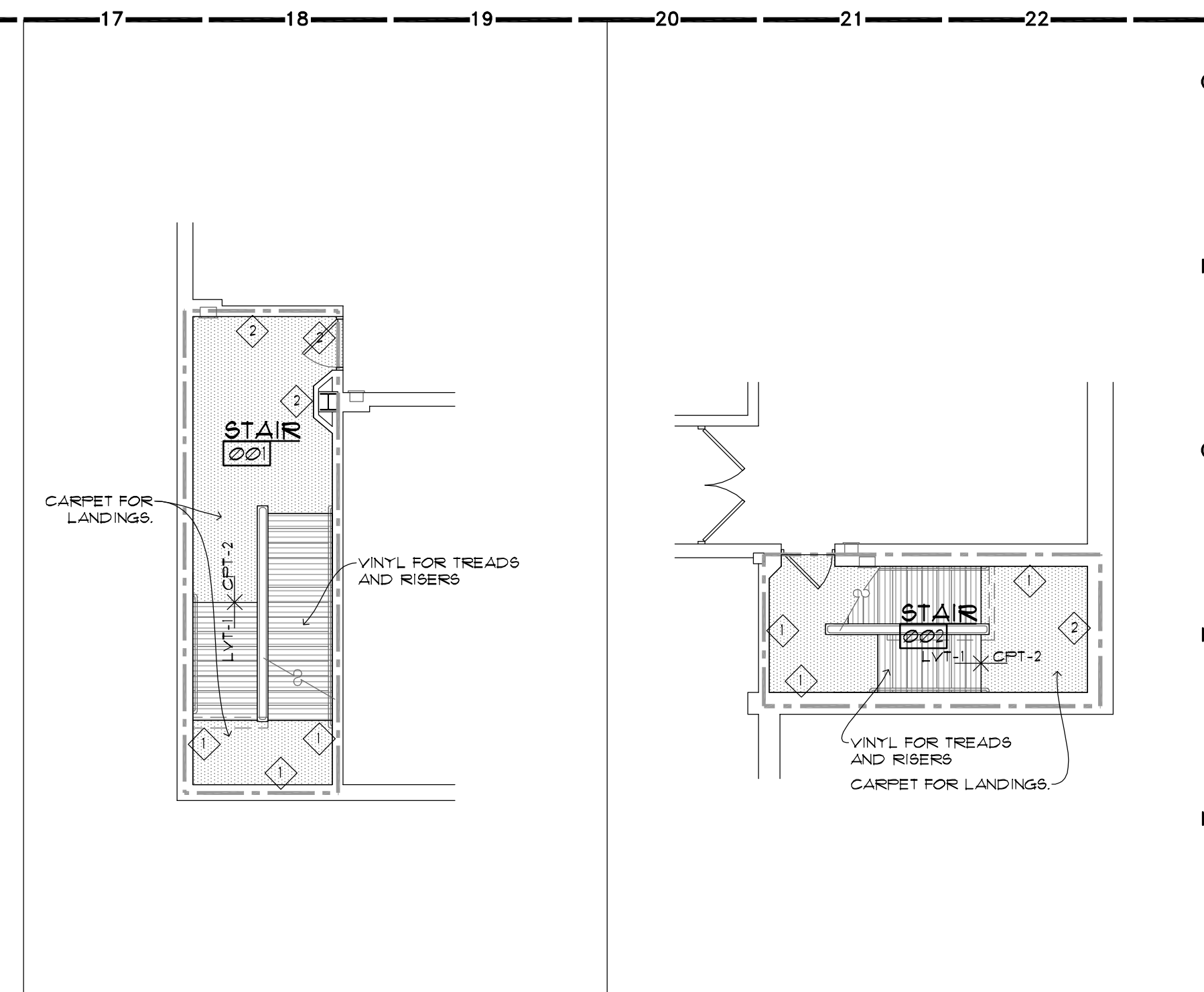
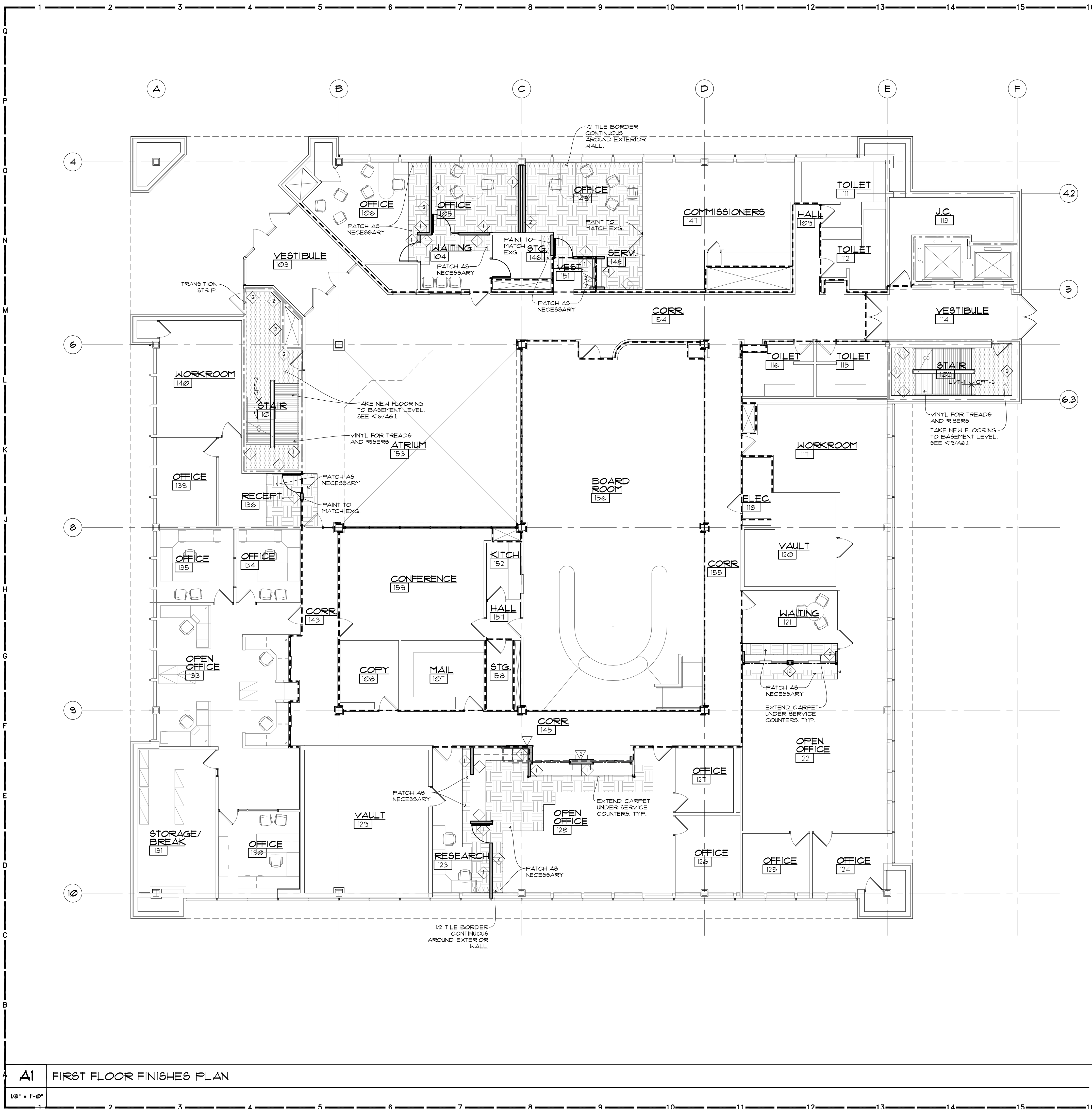


**KEY**

- |                                |   |  |                                    |   |
|--------------------------------|---|--|------------------------------------|---|
| 2'x2' SUPPLY AIR DIFFUSER.     | 2'x2' LED FLAT PANEL LIGHT FIXTURE, IN LAY-IN TILE. | 2' LINEAR LED RECESSED CEILING FIXTURE.  | INTERNALLY ILLUMINATED EXIT SIGNS. | NEW 2'x2' SUSPENDED ACOUSTICAL CEILING SYSTEM.        |
| RETURN GRILLE. SEE MECH. DWGS. | NEW RECESSED DOWN LIGHT.                            | PREFINISHED METAL CEILING TRIM TO MATCH WIDTH AND COLOR OF RECESSED BATHROOM LIGHTS. INSTALL FROM END OF LIGHT TO ADJACENT WALLS. TYP. | SMOKE DETECTOR.                    | NEW 5/8" GYP. BD. CEILINGS WITH LEVEL 4 FINISH PAINT. |
| LINEAR SUPPLY DIFFUSERS.       | NEW EGG CRATE CEILING PANELS.                       | REMOVE EXG. GYP. BD. REPLACE WITH NEW 2'x2' SUSPENDED ACOUSTICAL CEILING SYSTEM.   | EXG. GYP. BD. CEILINGS, PAINT.     |   |

**A1** THIRD FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"



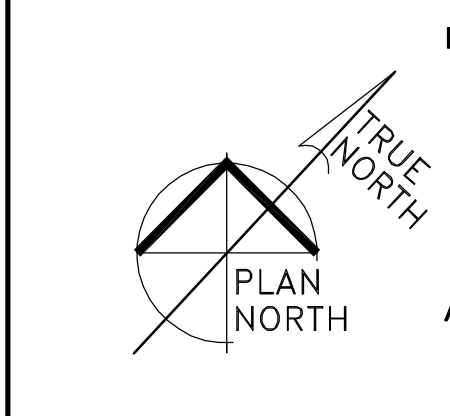
<b>K16</b>	<b>BASEMENT FLOOR FINISHES</b>	<b>K19</b>	<b>BASEMENT FLOOR FINISHES</b>
1/8" = 1'-0"		1/8" = 1'-0"	

**FLOORING KEY**

- CARPET TILE CPT-1
- CARPET TILE CPT-2 (GREY)
- CARPET TILE CPT-3 (BLUE)
- RESILIENT FLOORING LVT-1
- FLOOR TILE CT-2

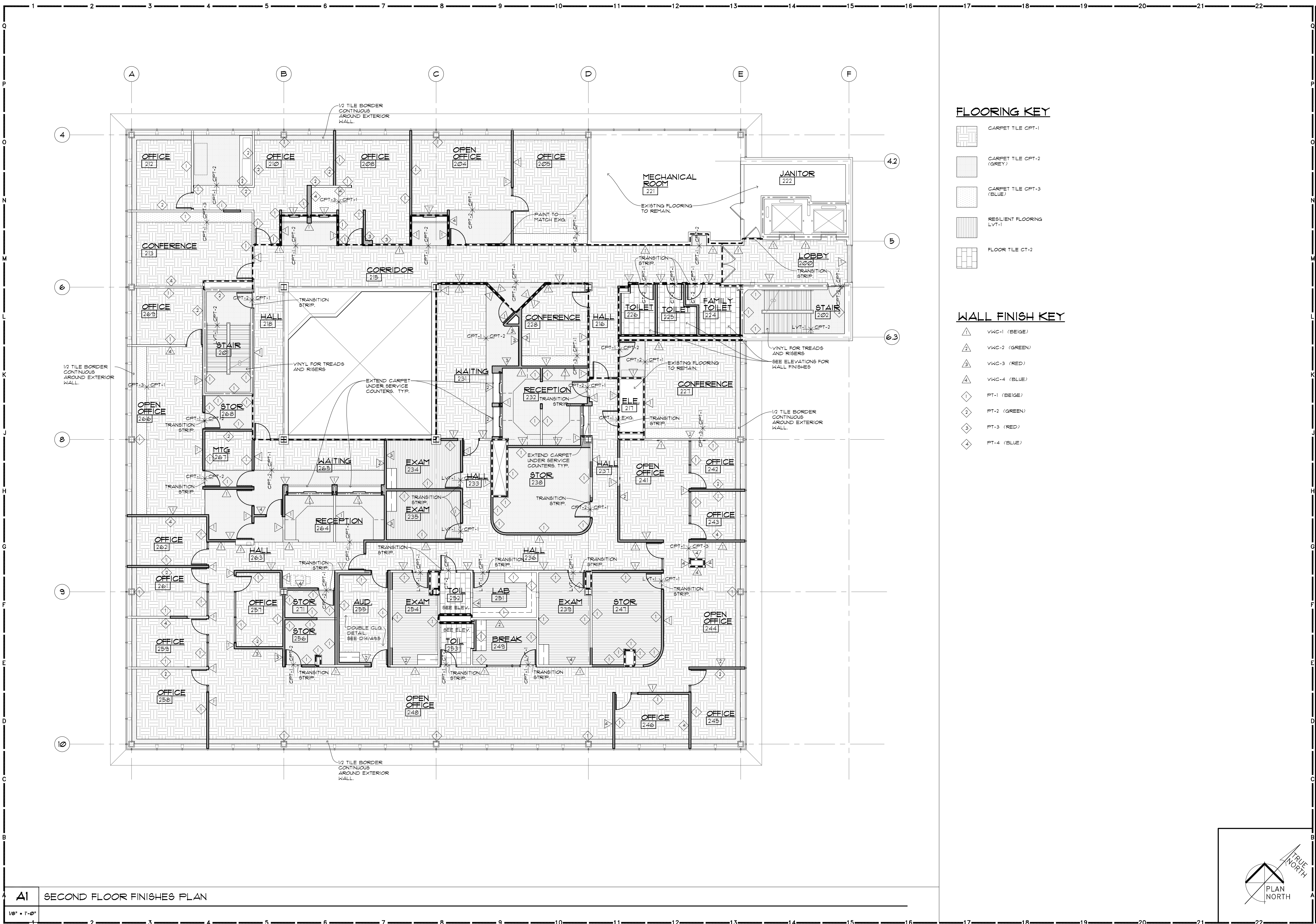
**WALL FINISH KEY**

- VW-1 (BEIGE)
- VW-2 (GREEN)
- VW-3 (RED)
- VW-4 (BLUE)
- FT-1 (BEIGE)
- FT-2 (GREEN)
- FT-3 (RED)
- FT-4 (BLUE)



**A1** FIRST FLOOR FINISHES PLAN

1/8" = 1'-0"



**FLOORING KEY**

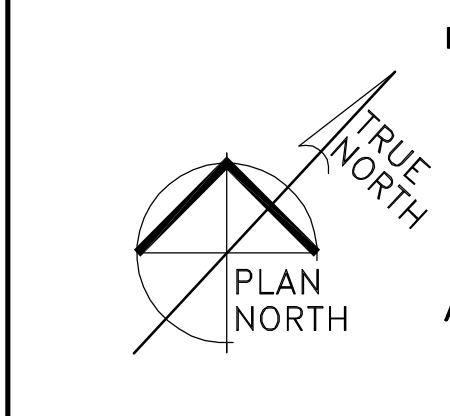
- CARPET TILE CPT-1
- CARPET TILE CPT-2 (GREY)
- CARPET TILE CPT-3 (BLUE)
- RESILIENT FLOORING LVT-1
- FLOOR TILE FT-2

**WALL FINISH KEY**

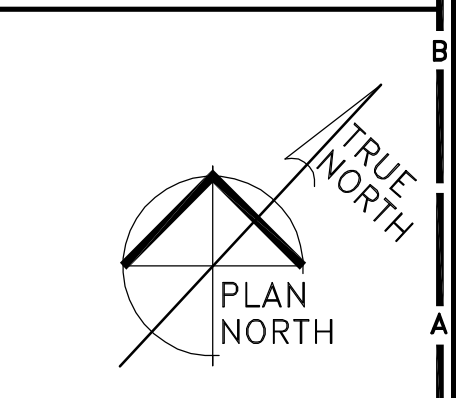
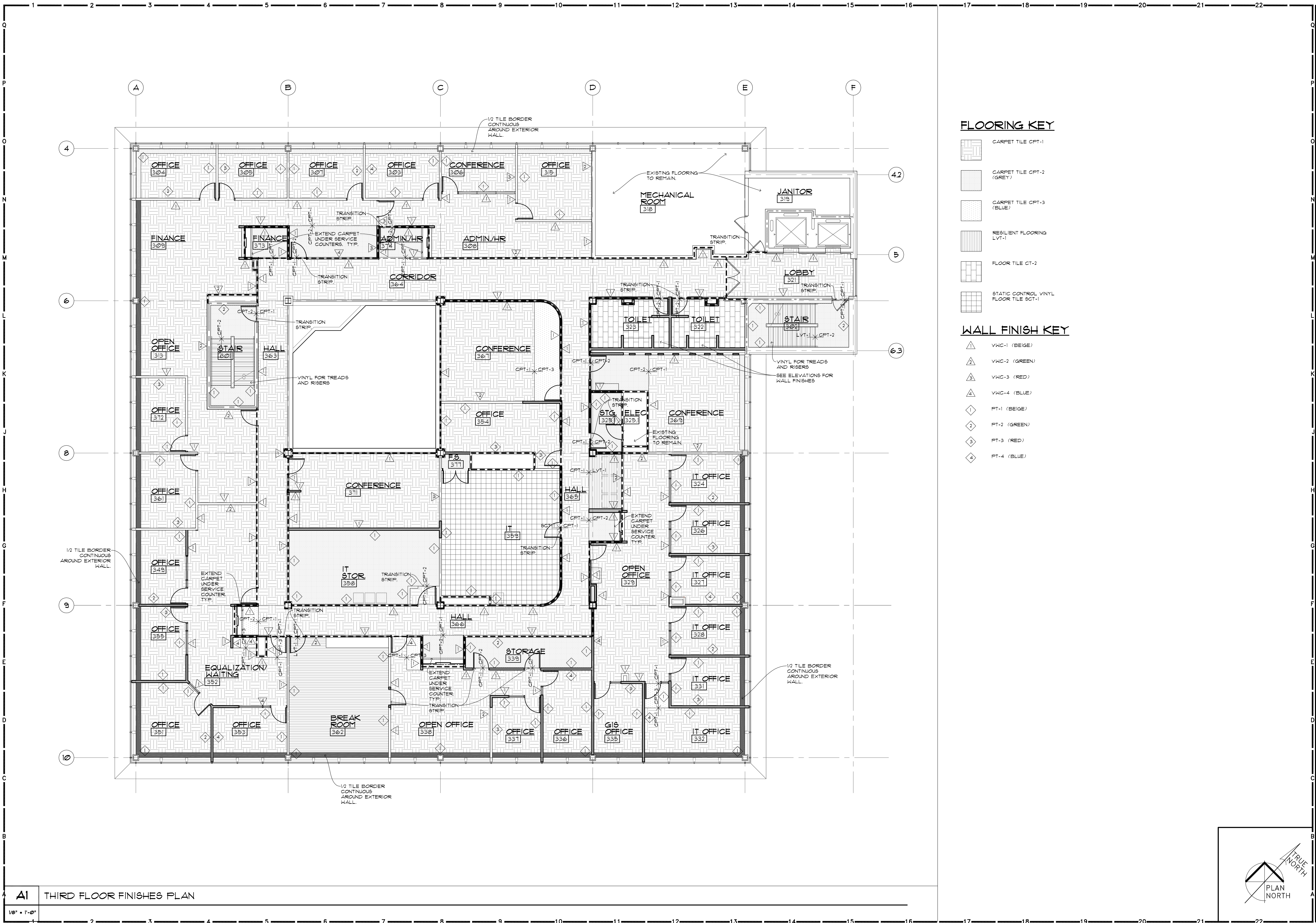
- VW-1 (BEIGE)
- VW-2 (GREEN)
- VW-3 (RED)
- VW-4 (BLUE)
- FT-1 (BEIGE)
- FT-2 (GREEN)
- FT-3 (RED)
- FT-4 (BLUE)

**A1 SECOND FLOOR FINISHES PLAN**

1/8" = 1'-0"

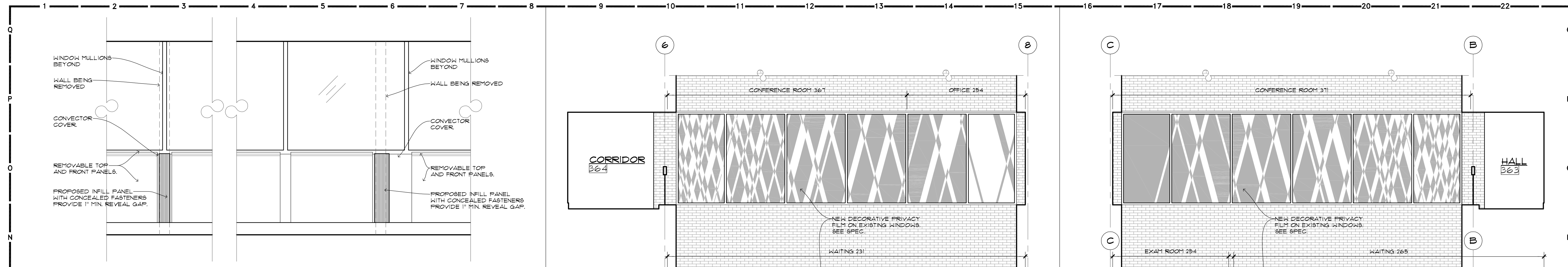


SCALE:  
PROJECT NO. 20220400  
DRAWING NO. **A6.2**



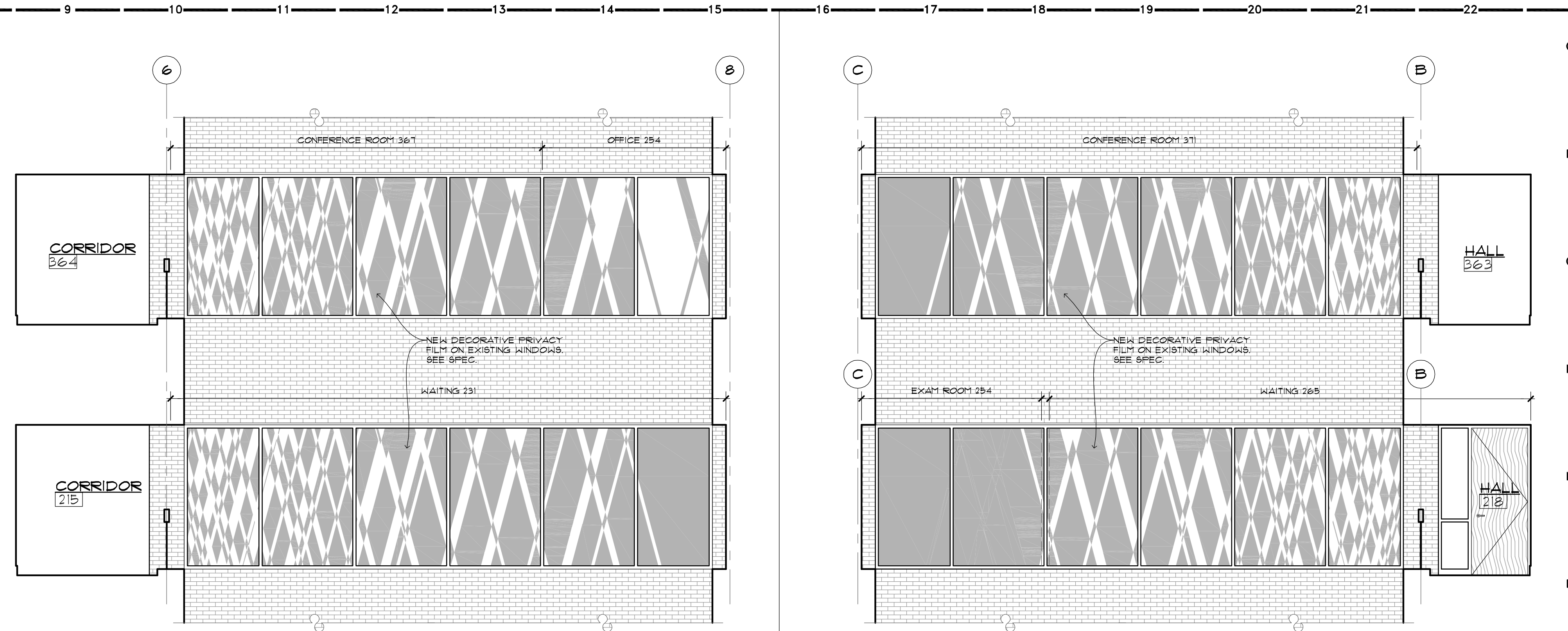
**A1** THIRD FLOOR FINISHES PLAN

1/8" = 1'-0"



**M1** TYPICAL CONVECTOR COVER PATCHING

1/2" = 1'-0"

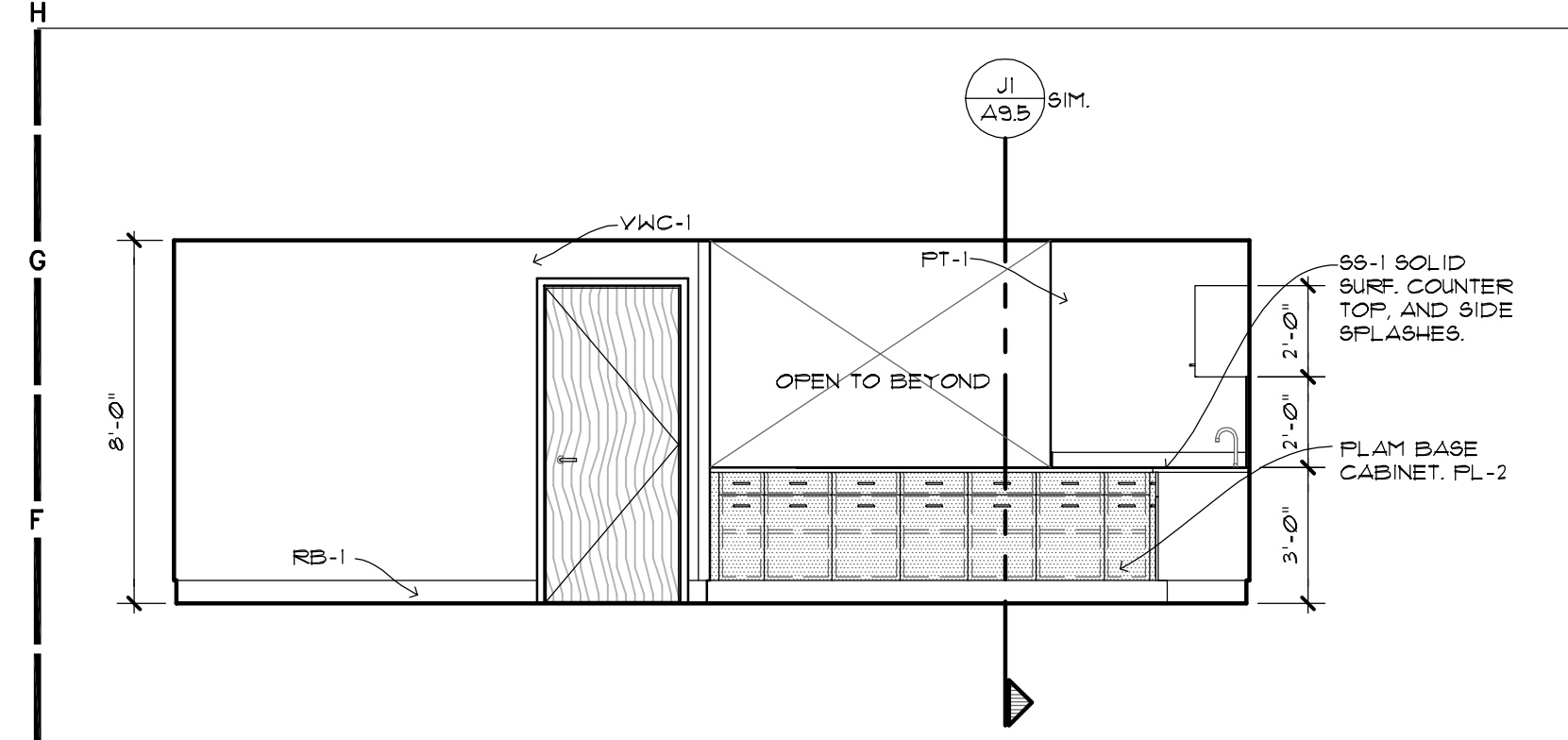


**K8** EAST ELEVATION

1/4" = 1'-0" AT ATRIUM

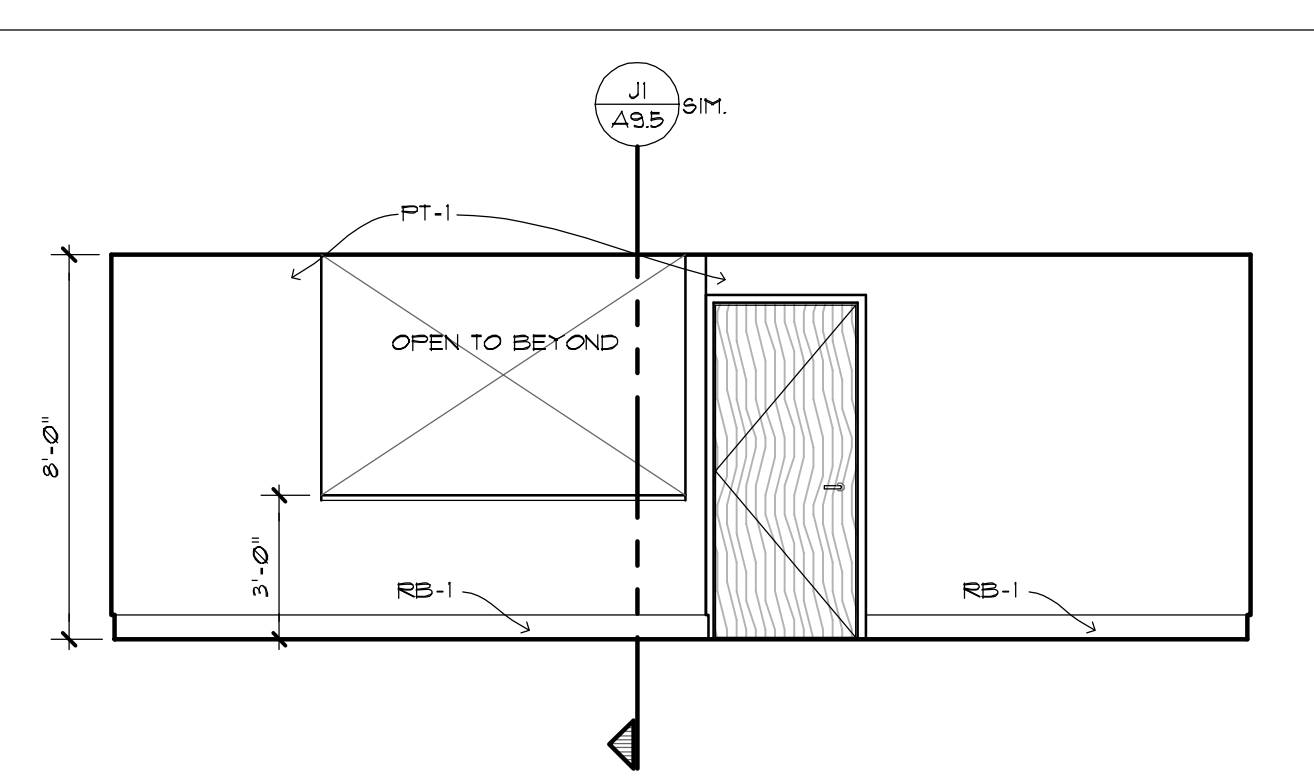
**K16** SOUTH ELEVATION

1/4" = 1'-0" AT ATRIUM



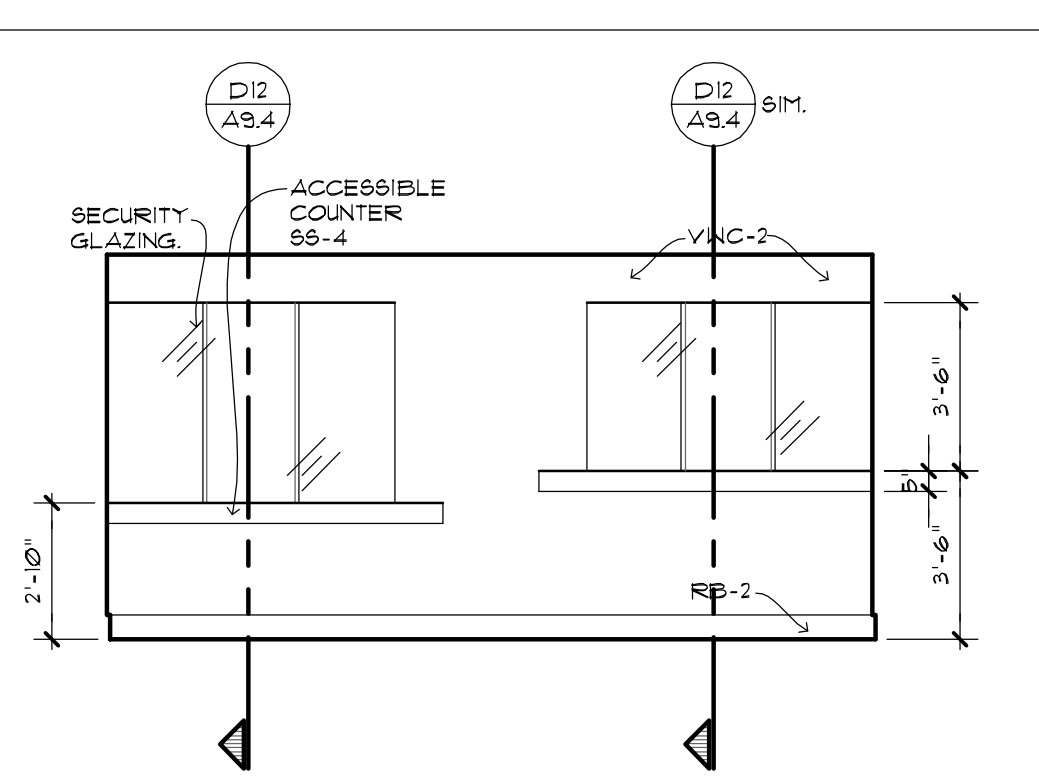
**D1** WEST ELEVATION

1/4" = 1'-0" AT OPEN OFFICE 128



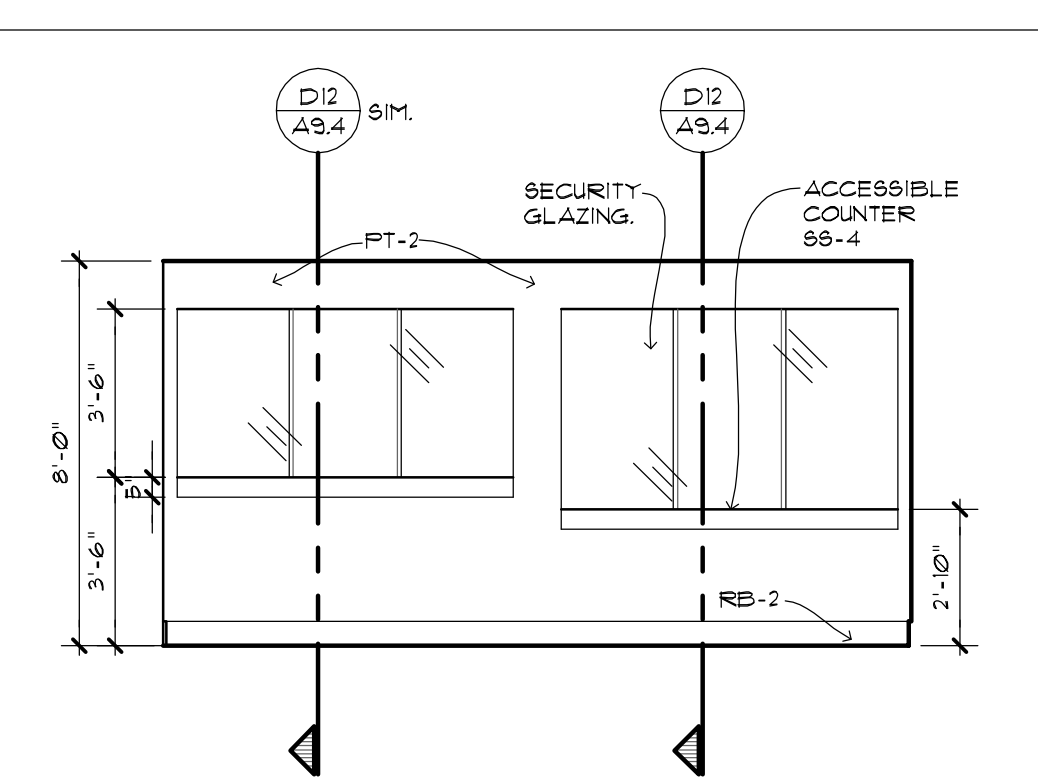
**D6** EAST ELEVATION

1/4" = 1'-0" AT RESEARCH 123



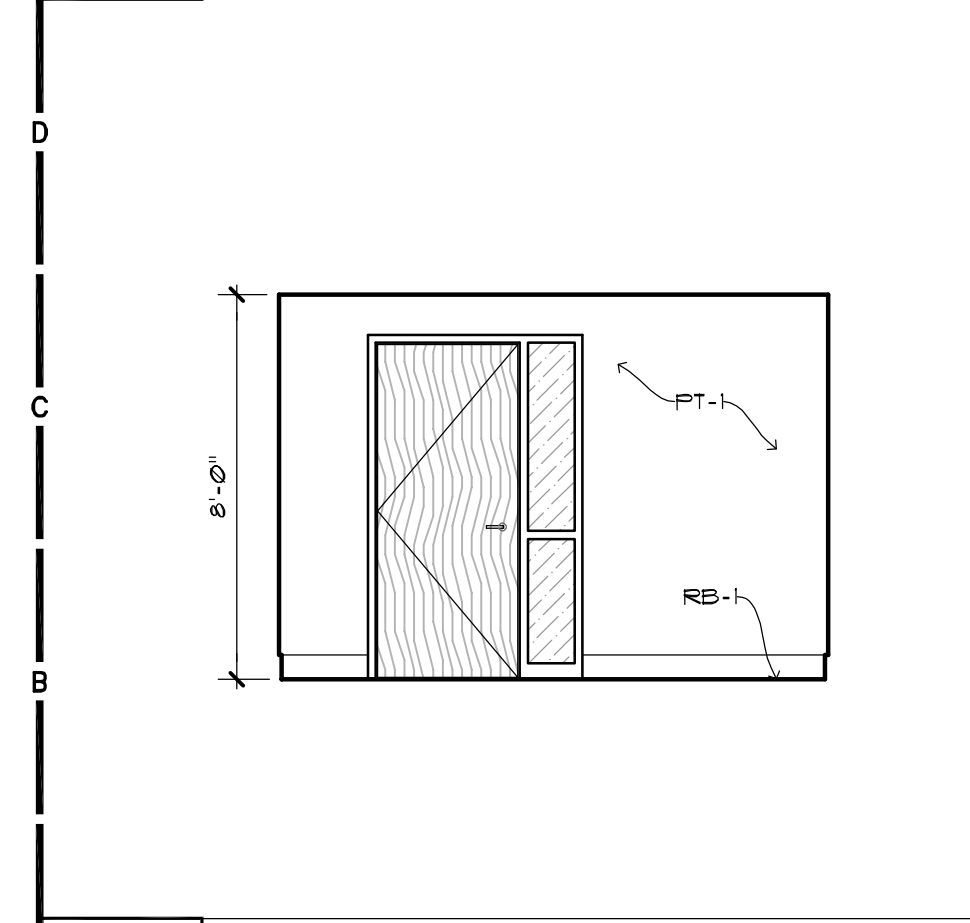
**D11** SOUTH ELEVATION

1/4" = 1'-0" AT CORRIDOR 145



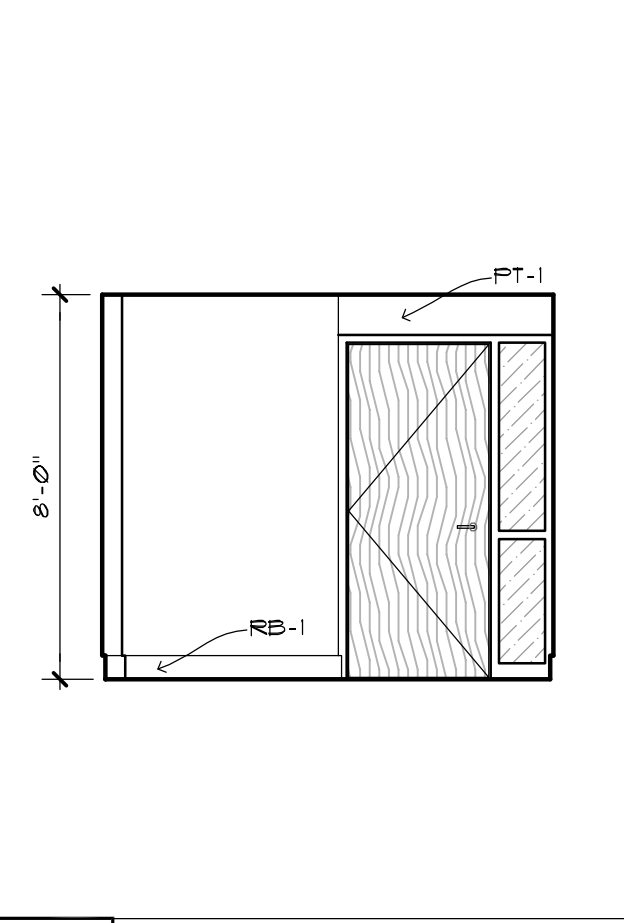
**D15** SOUTH ELEVATION

1/4" = 1'-0" AT WAITING 121



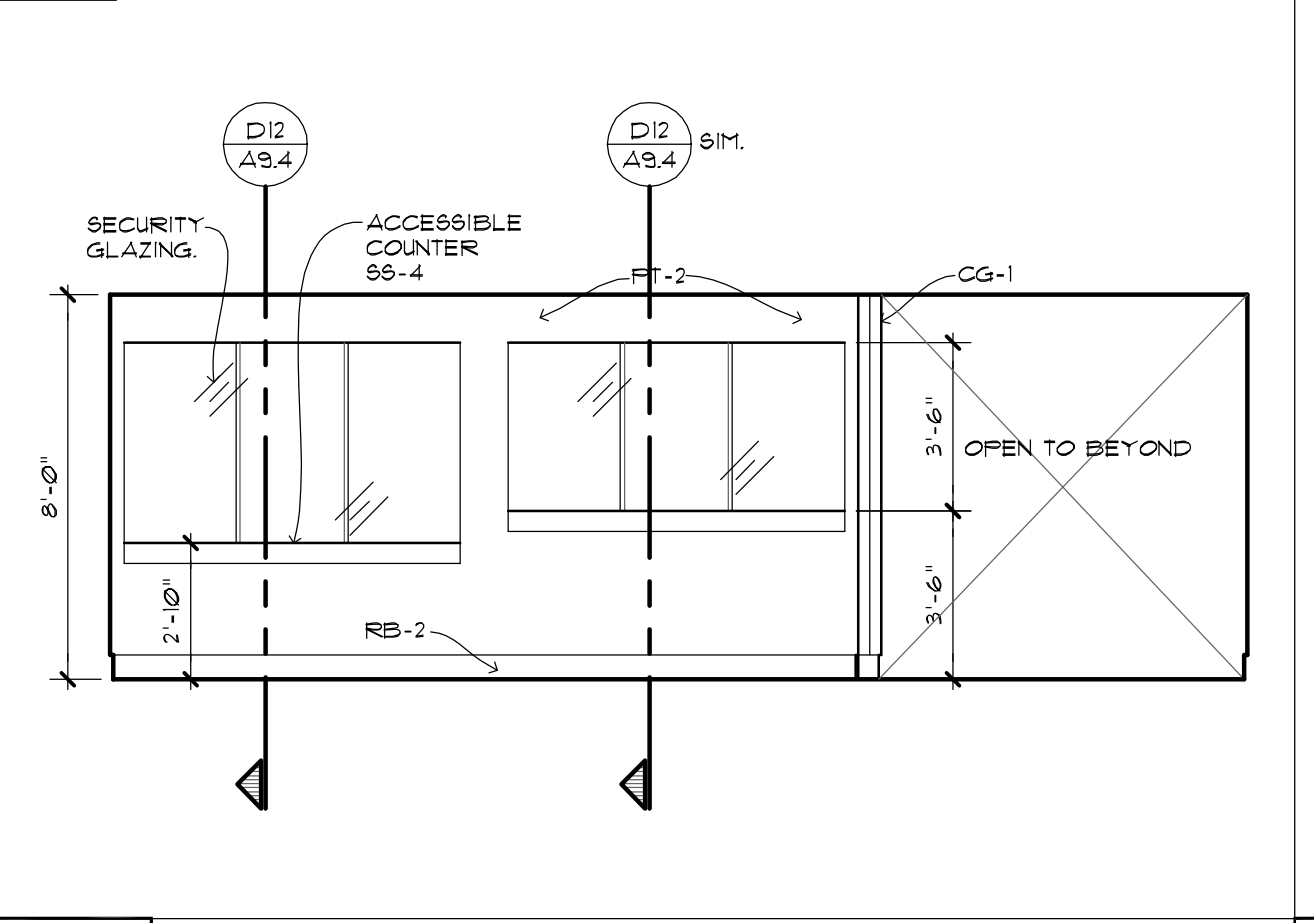
**A1** NORTH ELEVATION

1/4" = 1'-0" AT WAITING 104



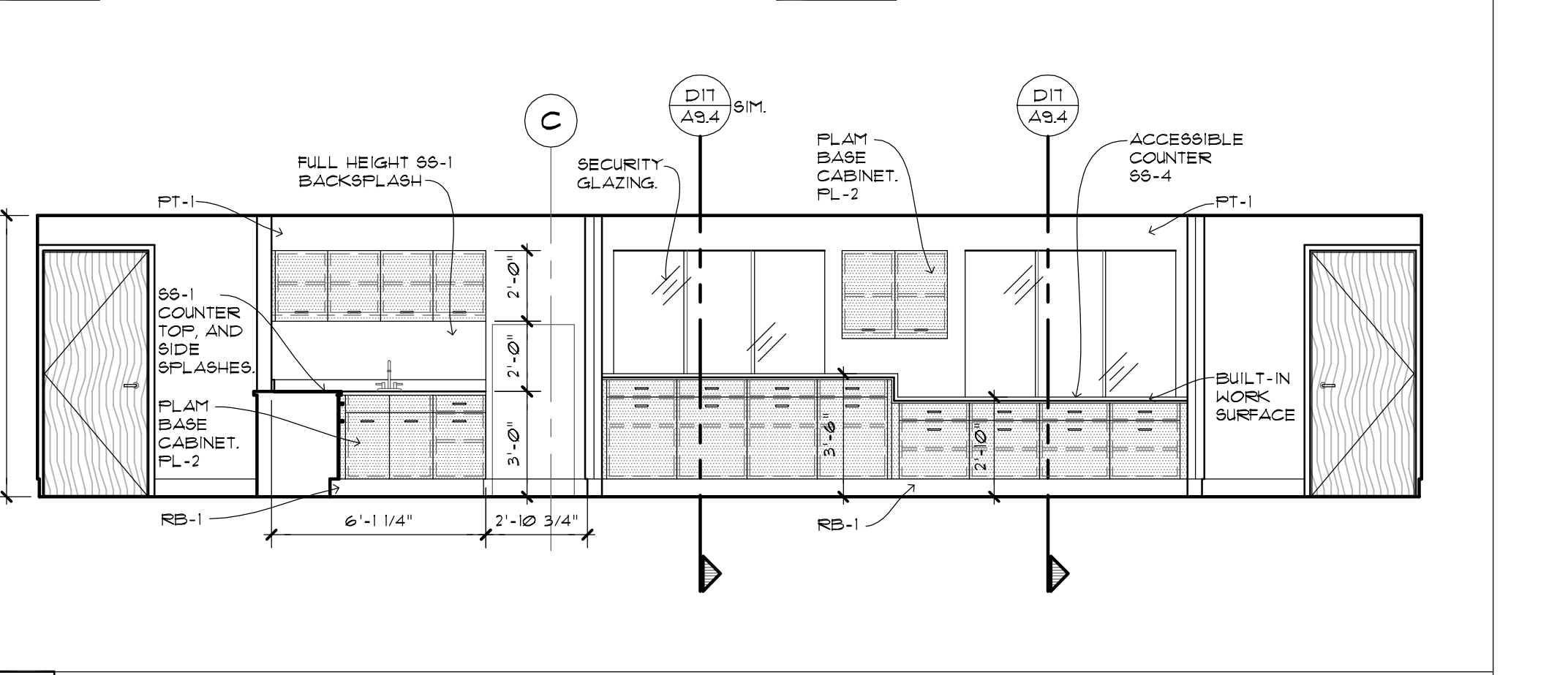
**A4** WEST ELEVATION

1/4" = 1'-0" AT WAITING 104



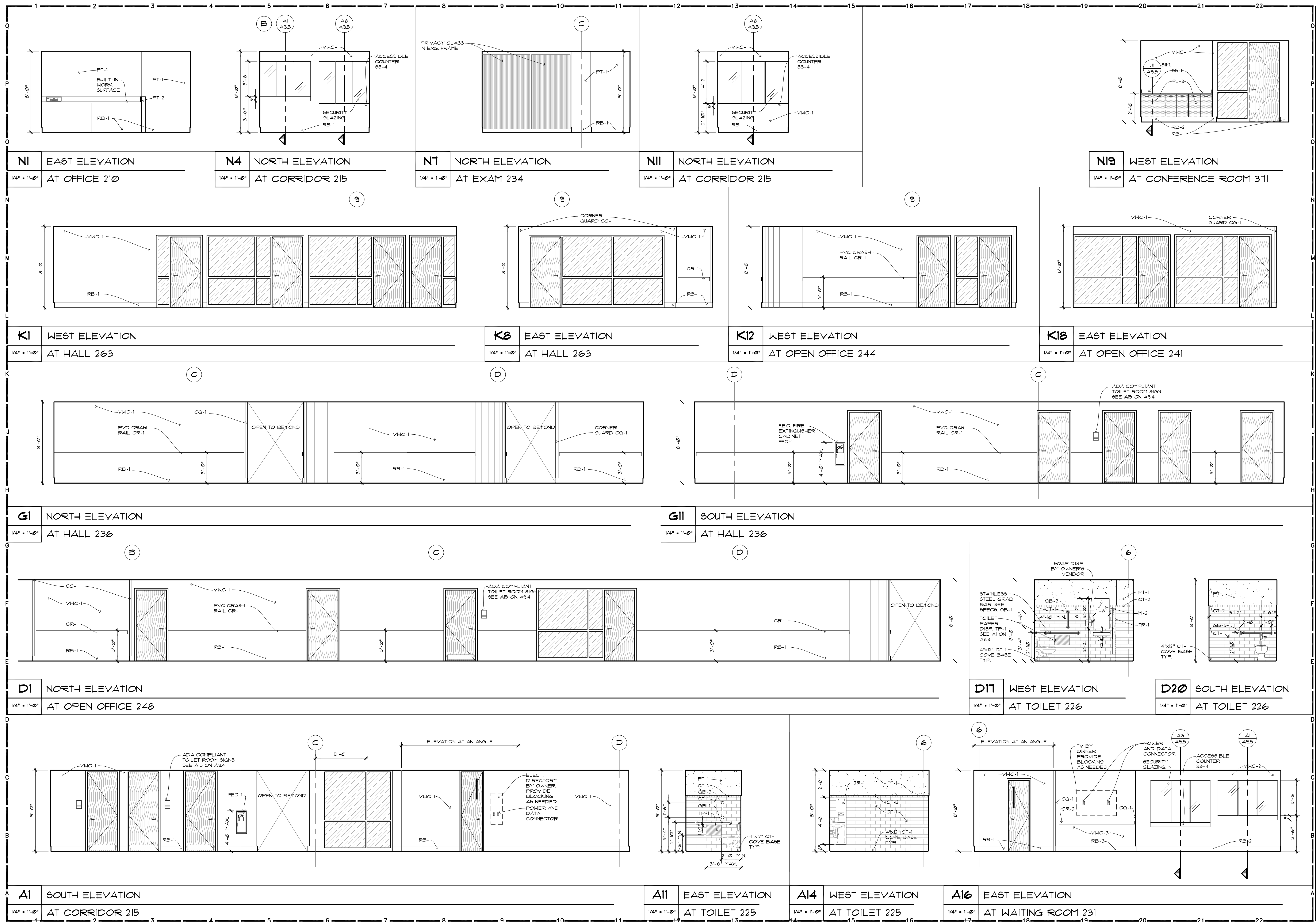
**A6** NORTH ELEVATION

1/4" = 1'-0" AT OPEN OFFICE 122

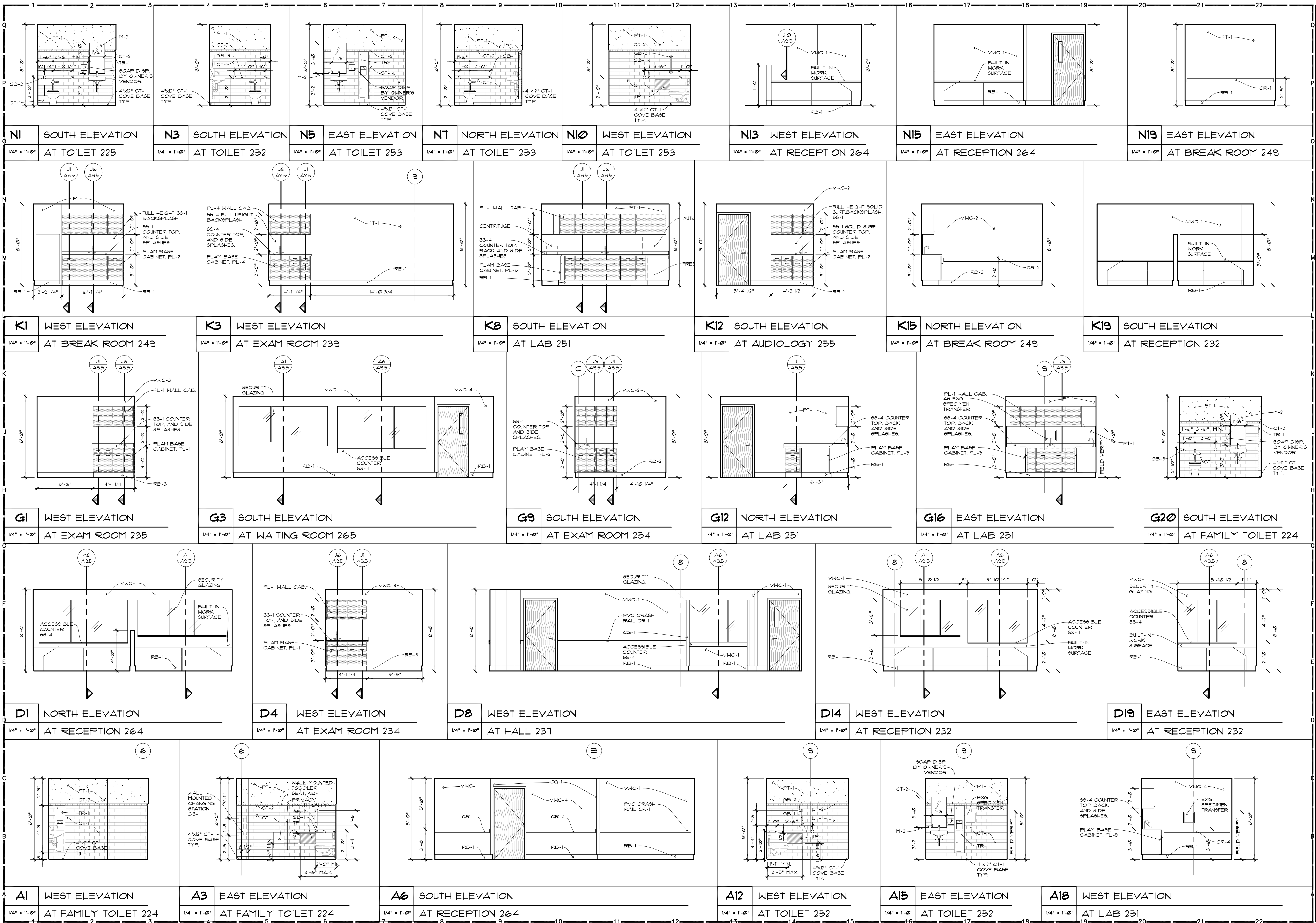


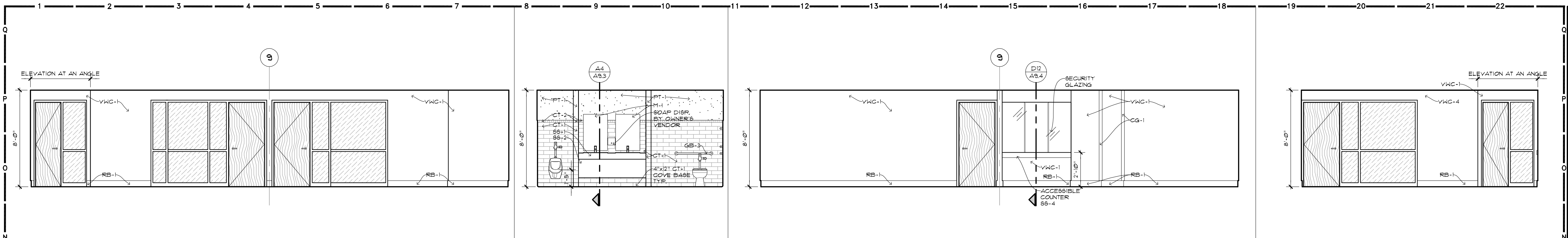
**A11** NORTH ELEVATION

1/4" = 1'-0" AT OPEN OFFICE 128

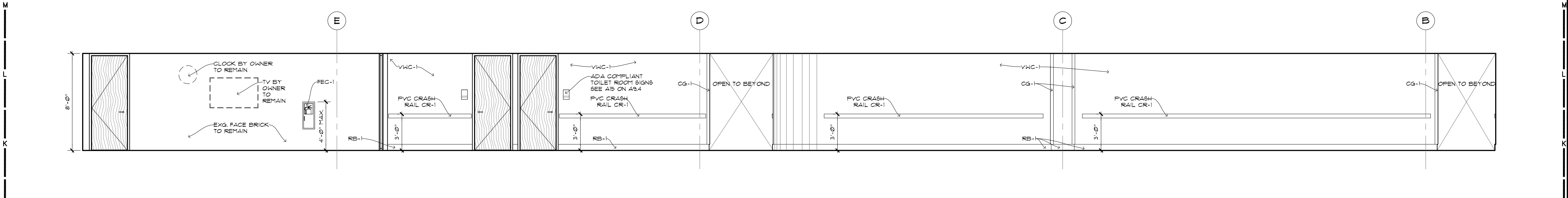




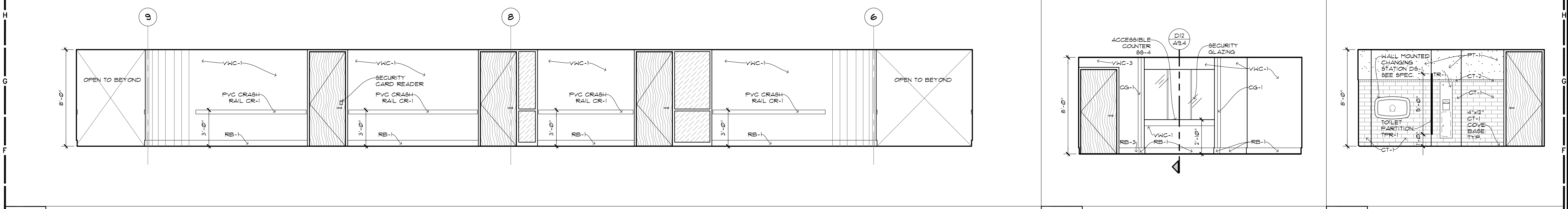




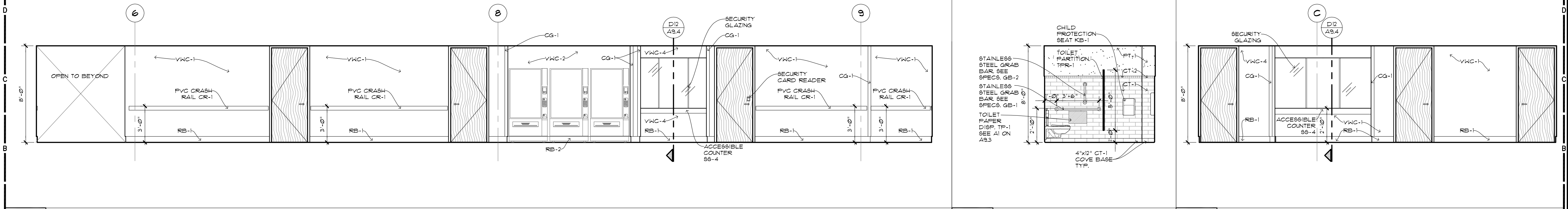
<b>M1</b>	WEST ELEVATION	<b>M7</b>	SOUTH ELEVATION	<b>M11</b>	EAST ELEVATION	<b>M18</b>	SOUTH ELEVATION
1/4" = 1'-0"	AT EQUALIZATION/WAITING 352	1/4" = 1'-0"	AT TOILET 323	1/4" = 1'-0"	AT EQUALIZATION/WAITING 352	1/4" = 1'-0"	AT EQUALIZATION/WAITING 352



<b>J1</b>	SOUTH ELEVATION
1/4" = 1'-0"	AT CORRIDOR 364



<b>E1</b>	WEST ELEVATION	<b>E15</b>	EAST ELEVATION	<b>E19</b>	NORTH ELEVATION
1/4" = 1'-0"	AT HALL 365	1/4" = 1'-0"	AT FINANCE 309	1/4" = 1'-0"	AT TOILET 323



<b>A14</b>	WEST ELEVATION	<b>A17</b>	NORTH ELEVATION
1/4" = 1'-0"	AT TOILET 323	1/4" = 1'-0"	AT RECEPTION 338

ROOM INFORMATION SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	FINISHES						CEILING		REMARKS
				WALLS						FINISH	HT.	
				NORTH	EAST	SOUTH	WEST					
101	STAIR	LVT-1/CPT-2	RB-1/RB-2	PT-2	PT-1/PT-2	PT-1	PT-1	EXG.	EXG.	*CPT-2 AT LANDINGS **RB-2 AT PT-2 WALLS *CPT-2 AT LANDINGS **RB-2 AT PT-2 WALLS		
102	STAIR	LVT-1/CPT-2	RB-1/RB-2	PT-1	PT-2	PT-1	PT-1	EXG.	EXG.			
103	VESTIBULE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
104	WAITING	CPT-1	RB-1	PT-1	EXG.	EXG.	EXG.	ACT-1	EXG.			
105	OFFICE	CPT-1/CPT-2	RB-1	PT-1	PT-1	PT-1	PT-4	ACT-1	EXG.	*CPT-2 AT EXT. WALL SEE A6.1 **PAINT CONVECTOR COVERS PT-1		
106	OFFICE	CPT-1/CPT-2	RB-1	EXG.	PT-2/PT-1	PT-1	EXG.	ACT-1	EXG.			
107	MAIL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
108	COPY	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
109	HALL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
110	NOT USED											
111	TOILET	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
112	TOILET	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
113	JANITORIAL CLOSET	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
114	VESTIBULE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
115	TOILET	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
116	TOILET	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
117	WORKROOM	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
118	ELECTRICAL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
119	NOT USED											
120	VAULT	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
121	WAITING	CPT-1	RB-2	EXG.	EXG.	PT-2	EXG.	ACT-1	PT-6	EXG.		
122	OPEN OFFICE	CPT-1	RB-2	EXG.	EXG.	EXG.	EXG.	ACT-1	EXG.			
123	RESEARCH	CPT-1/CPT-2	RB-1	EXG.	PT-1	PT-1	EXG.	ACT-1	EXG.	*CPT-2 AT EXT. WALL SEE A6.1 **PAINT CONVECTOR COVERS PT-1		
124	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
125	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
126	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
127	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
128	OPEN OFFICE	CPT-1/CPT-2	RB-1/RB-2	PT-1	PT-1	PT-1	PT-1	ACT-1	PT-6	*CPT-2 AT EXTENSION WALL SEE A6.1 **PAINT CONVECTOR COVERS PT-1 **RB-2 AT PT-2 WALLS		
129	VAULT	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
130	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
131	STORAGE/BREAK	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
132	NOT USED											
133	OPEN OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
134	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
135	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
136	RECEPTION	CPT-1	RB-1	EXG.	PT-1	EXG.	EXG.	ACT-1	EXG.			
137	NOT USED											
138	NOT USED											
139	OFFICE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
140	WORKROOM	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
141	NOT USED											
142	NOT USED											
143	CORRIDOR	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
144	NOT USED											
145	CORRIDOR	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
146	STORAGE	CPT-2	RB-1	EXG.	PT-1	EXG.	EXG.	ACT-1	EXG.			
147	COMMISSIONERS	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
148	SERVICE	CPT-1	RB-1	EXG.	EXG.	PT-1	PT-1	ACT-1	PT-6	EXG.		
149	OFFICE	CPT-1/CPT-2	RB-1/RB-2	EXG.	EXG.	PT-1	PT-2	ACT-1	EXG.	*CPT-2 AT EXTENSION WALL SEE A6.1 **PAINT CONVECTOR COVERS PT-1		
150	NOT USED											
151	VESTIBULE	CPT-1	RB-1/RB-2	PT-1	YHC-2	EXG.	EXG.	ACT-1	EXG.	*RB-2 AT YHC-2 WALL NOTE: SEE NO/A6.4 CELL SECTION		
152	KITCHEN	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
153	ATRIUM	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
154	CORRIDOR	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
155	CORRIDOR	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
156	BOARD ROOM	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
157	HALL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
158	STORAGE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			
159	CONFERENCE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.			

ROOM INFORMATION SCHEDULE GENERAL NOTES

- MATCH TINT DOOR AS REQUIRED WITH A CLEAR FINISH TO MATCH NEW FACTORY FINISHED DOORS.
- ALL EXISTING DOORS TO REMAIN ARE TO BE REFINISHED TO MATCH NEW DOORS.

ROOM INFORMATION SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	FINISHES						CEILING		REMARKS
				WALLS						FINISH	HT.	
				NORTH	EAST	SOUTH	WEST					
001	STAIR	LVT-1/CPT-2	RB-1/RB-2	PT-2	PT-1/PT-2	PT-1	PT-1	EXG.	EXG.	*CPT-2 AT LANDINGS **RB-2 AT PT-2 WALLS *CPT-2 AT LANDINGS **RB-2 AT PT-2 WALLS		
002	STAIR	LVT-1/CPT-2	RB-1/RB-2	PT-1	PT-2	PT-1	PT-1	EXG.	EXG.			

ROOM INFORMATION SCHEDULE GENERAL NOTES

- MATCH TINT DOOR AS REQUIRED WITH A CLEAR FINISH TO MATCH NEW FACTORY FINISHED DOORS.
- ALL EXISTING DOORS TO REMAIN ARE TO BE REFINISHED TO MATCH NEW DOORS.

DOOR SCHEDULE HARDWARE SET REFER TO SPECS.

DOOR TYPE											FRAME TYPE				DETAILS			REMARKS
NO.	TYPE	PAIR	SALVAGED MATERIAL	WIDTH	HEIGHT	THICK	FINISH	LABEL	FR. TYPE	FR. MAT.	FR. PROF.	FINISH	HEAD	JAMB	SILL			
001	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
002	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		

DOOR SCHEDULE GENERAL NOTES

- REPAIR ANY WATER DAMAGED GYP. BD. PRIOR TO PAINTING.
- ALL CONVECTOR COVERS ARE TO BE PAINTED PT-1, SEMI-GLOSS.

DOOR SCHEDULE HARDWARE SET REFER TO SPECS.

DOOR TYPE											FRAME TYPE				DETAILS			REMARKS
NO.	TYPE	PAIR	SALVAGED MATERIAL	WIDTH	HEIGHT	THICK	FINISH	LABEL	FR. TYPE	FR. MAT.	FR. PROF.	FINISH	HEAD	JAMB	SILL			
101	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
102	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
103	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
104	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
105	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
106	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
107	I		NO	HD	3'-0"	1'-0"	1-3/4"	FACTORY	-	B	HM.	MDP6/MDP15/MDP15/MDP15	PT-5	D10/D14/A95	A14/A95	A10/A95	EXG. DOOR TO REMAIN.	
108	I		NO	HD	3'-0"	1'-0"	1-3/4"	FACTORY	-	B	HM.	MDP6/MDP15/MDP15/MDP15	PT-5	D10/D14/A95	N10/A95	A10/A95	EXG. DOOR TO REMAIN.	
109	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
110	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
111	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
112	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
113	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
114	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
115	EXG.	YES	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
116	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
117	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
118	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
119	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
120	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
121	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
122	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
123	I		NO	HD	3'-0"	1'-0"	1-3/4"	FACTORY	-	A	HM.	MDP1	PT-5	N10/A9.4	A14/N10/A95		EXG. DOOR TO REMAIN.	
124	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
125	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
126	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
127	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
128	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
129	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
130	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
131	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
132	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
133	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
134	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
135	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
136	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
137	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
138	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
139	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
140	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
141	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
142	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
143	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
144	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
145	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
146	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.		

ROOM INFORMATION SCHEDULE

ROOM NO.	ROOM NAME	FINISHES										REMARKS
		FLOOR	BASE	WALLS				CEILING				
				NORTH	EAST	SOUTH	WEST	FINISH	HT.			
200	LOBBY	CPT-1	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	EXG.	** PAINT CONVEXOR COVERS PT-1
201	STAIR	LVT-1/ICPT-2	RB-1/RB-2	PT-2	PT-1	PT-1	PT-1	EXG.	EXG.	EXG.	** PAINT CONVEXOR COVERS PT-1	
202	STAIR	LVT-1/ICPT-2	RB-1/RB-2	PT-1	PT-2	PT-1	PT-1	EXG.	EXG.	EXG.	** PAINT CONVEXOR COVERS PT-1	
203	NOT USED											
204	OFFICE	CPT-1	CPT-2	RB-1	PT-1	VHC-1	PT-1	PT-4	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1
205	OFFICE	CPT-1	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1
206	NOT USED											
207	NOT USED											
208	OFFICE	CPT-1	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-3	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1
209	NOT USED											
210	OFFICE	CPT-1	CPT-2	RB-1/RB-2	PT-1	PT-1	PT-1/PT-2	PT-1/PT-2	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1
211	NOT USED											
212	OFFICE	CPT-1	RB-1/RB-2	PT-1	PT-1	PT-2	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1
213	CONFERENCE	CPT-1	CPT-2	RB-1	PT-1	PT-1	PT-1/PT-4	PT-1	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1
214	NOT USED											
215	CORRIDOR	CPT-1/ICPT-2	RB-1/EXG.	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1/PT-6	EXG.	EXG.	** ACCENT AT DOOR 2311. SEE A62	
216	HALL	CPT-1	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	EXG.	EXG.	** NO RB-1 AT BRICK WALLS	
217	ELECTRICAL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	ACT-1	EXG.	EXG.	** NO RB-1 AT BRICK WALLS	
218	HALL	CPT-1	RB-1/EXG.	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1/PT-6	EXG.	EXG.	** NO RB-1 AT BRICK WALLS	
219	NOT USED											
220	NOT USED											
221	MECHANICAL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	**	
222	JANITOR	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	**	
223	NOT USED											
224	FAMILY TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	PT-6	8'-0"	EXG.	** 6x6 COVE BASE	
225	TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	PT-6	8'-0"	EXG.	** 6x6 COVE BASE	
226	TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	PT-6	8'-0"	EXG.	** 6x6 COVE BASE	
227	CONFERENCE	CPT-1	CPT-2	RB-1/RB-2	VHC-1	VHC-1	VHC-2	ACT-1/PT-6	EXG.	EXG.	** ACCENT ON SOUTH WALL	
228	CONFERENCE	CPT-1/ICPT-2	RB-1/RB-2	VHC-1	VHC-1	VHC-1	VHC-3	ACT-1	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1	
229	NOT USED											
230	NOT USED											
231	WAITING	CPT-1/ICPT-2	RB-1/RB-2	VHC-1	VHC-1	VHC-2	WIDOW FRAMES	ACT-1/PT-6	8'-0"	EXG.	** ACCENT CARPET. SEE A62	
232	RECEPTION	CPT-2	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	** SEE INTERIOR ELEVATIONS	
233	HALL	CPT-1	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	**	
234	EXAM	LVT-1	PT-1	PT-1	PT-1	PT-1	VHC-3	ACT-1	8'-0"	EXG.	**	
235	EXAM	LVT-1	PT-1	PT-1	PT-1	PT-1	VHC-3	ACT-1	8'-0"	EXG.	**	
236	HALL	CPT-1	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	**	
237	HALL	CPT-1	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	** SEE INTERIOR ELEVATIONS	
238	STORAGE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2	8'-0"	EXG.	**	
239	EXAM	LVT-1	PT-1	PT-1	PT-1	PT-1	VHC-4	ACT-1	8'-0"	EXG.	**	
240	NOT USED											
241	OPEN OFFICE	CPT-1	RB-1/RB-2	VHC-1	VHC-1	VHC-2	VHC-2	ACT-1	8'-0"	EXG.	** AT VHC-2	
242	OFFICE	CPT-1	RB-1/RB-2	PT-1	PT-1	PT-2	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-2	
243	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1	
244	OPEN OFFICE	CPT-1/ICPT-2	RB-1/RB-2	VHC-1/VHC-4	VHC-4/PT-1	VHC-2/VHC-4	VHC-1/VHC-4	ACT-1/PT-6	8'-0"	EXG.	** PAINT CONVEXOR COVERS PT-1	
245	OFFICE	CPT-1	RB-1/RB-2	PT-2	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-2	
246	OFFICE	CPT-1	RB-1	PT-1	PT-4	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-4	
247	STORAGE	LVT-1	PT-1	PT-1	PT-1	PT-1	PT-1	ACT-2	8'-0"	EXG.	**	
248	OPEN OFFICE	CPT-1	RB-1/RB-2	VHC-1/VHC-3	VHC-1/VHC-4	VHC-1	VHC-1	ACT-1/PT-6	8'-0"	EXG.	** AT VHC-4 ** AT VHC-3	
249	BREAK ROOM	LVT-1	RB-1/RB-2	VHC-2	PT-1	PT-1	PT-1	ACT-1	8'-0"	EXG.	** AT VHC-2	
250	NOT USED											
251	LAB	LVT-1	RB-1	PT-1	PT-1	PT-1	VHC-4	ACT-2	8'-0"	EXG.	** AT VHC-4	
252	TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	PT-6	8'-0"	EXG.	** 6x6 COVE BASE	
253	TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	PT-6	8'-0"	EXG.	** 6x6 COVE BASE	
254	EXAM	LVT-1	RB-1/RB-2	PT-1	PT-1	VHC-2	PT-1	ACT-1	8'-0"	EXG.	** AT VHC-2	
255	AUDIOLOGY	CPT-1	RB-1/RB-2	PT-1	PT-1	VHC-2	PT-1	ACT-1	8'-0"	EXG.	** AT VHC-2	
256	STORAGE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2	8'-0"	EXG.	**	
257	OFFICE	CPT-1	RB-1/PT-2	PT-1	PT-1	PT-2	PT-1	ACT-1	8'-0"	EXG.	** AT PT-2	
258	OFFICE	CPT-1	RB-1/RB-2	PT-2	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-2	
259	OFFICE	CPT-1	RB-1	PT-4	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-4	
260	NOT USED											
261	OFFICE	CPT-1	RB-1/RB-2	PT-2	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-2	
262	OFFICE	CPT-1	RB-1	PT-4	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-4	
263	HALL	CPT-1/ICPT-2	RB-1	VHC-1	VHC-1	VHC-4	VHC-1	ACT-1	8'-0"	EXG.	** ACCENT CARPET. SEE A62	
264	RECEPTION	CPT-2	RB-1	VHC-1	VHC-1	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	** AT VHC-4	
265	WAITING	CPT-1/ICPT-2	RB-1/RB-2	WIDOW FRAMES	VHC-2	VHC-1	VHC-1	ACT-1	8'-0"	EXG.	** ACCENT CARPET. SEE A62	
266	OPEN OFFICE	CPT-1/ICPT-2	RB-1	VHC-4	VHC-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** ACCENT CARPET. SEE A62	
267	MEETING	CPT-1/ICPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1	8'-0"	EXG.	** ACCENT CARPET. SEE A62	
268	STORAGE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2	8'-0"	EXG.	**	
269	OFFICE	CPT-1	RB-1/RB-2	PT-1	PT-2	PT-1	PT-1	ACT-1/PT-6	8'-0"	EXG.	** AT PT-2	
270	NOT USED											
271	STORAGE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2	8'-0"	EXG.	**	

ROOM INFORMATION SCHEDULE GENERAL NOTES  
 1 MATCH: TINT DOOR AS REQUIRED WITH A CLEAR FINISH TO MATCH NEW FACTORY FINISHED DOORS.  
 2 ALL EXISTING DOORS TO REMAIN ARE TO BE REFINISHED TO MATCH NEW DOORS

DOOR SCHEDULE

DOOR TYPE													FRAME TYPE			DETAILS			REMARKS
NO.	TYPE	PAIR	SALVAGED	MATERIAL	WIDTH	HEIGHT	THICK	FINISH	LABEL	FR. TYPE	FR. MAT.	FR. PROF.	FINISH	HEAD	JAMB	SILL			
2001	EXG.	YES		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	HM.	EXG.	PT-5				EXG. DOOR TO REMAIN.		
2011	EXG.			226	WD	3'-0"	1'-10"	1-3/4"	MATCH	30 MIN.	A	HM.	EXG.				EXG. DOOR TO REMAIN.		
2021	EXG.			EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	HM.	EXG.	PT-5				EXG. DOOR TO REMAIN.		
2041	2			NO	WD	3'-0"	1'-0"	1-3/4"	FACTORY		A	HM.	MDPI	NB/A9.4	N10/A4/A9.5	A10/A9.5			
2051	1			NO	WD	3'-0"	1'-0"	1-3/4"	FACTORY		C	HM.	MDPI	G10/A9.5	N10/A9.5	A10/A9.5			
2081	2			221	WD	3'-0"	1'-0"	1-3/4"	MATCH		A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2101	2			222	WD	3'-0"	1'-0"	1-3/4"	MATCH		A	HM.	MDPI	G10/A9.5	N10/A4/A9.5	A10/A9.5			
2121	1			224	WD	3'-0"	1'-0"	1-3/4"	MATCH		A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2131	1			234	WD	3'-0"	1'-10"	1-3/4"	MATCH	30 MIN.	A	HM.	EXG.	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2161	1			NO	WD	3'-0"	1'-10"	1-3/4"	FACTORY	30 MIN.	C	HM.	MDPI	G10/A9.5	N10/A9.5	A10/A9.5			
2171	1			204	WD	3'-0"	1'-10"	1-3/4"	MATCH	30 MIN.	A	HM.	EXG.	N10/A9.4	N10/A9.5	A10/A9.5			
2211	EXG.			EXG.	WD	EXG.	EXG.	EXG.	EXG.	EXG.	HM.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
2221	EXG.			EXG.	WD	EXG.	EXG.	EXG.	EXG.	EXG.	HM.	EXG.	EXG.				EXG. DOOR TO REMAIN.		
2241	3			202	WD	3'-0"	1'-10"	1-3/4"	MATCH		A	HM.	MDPI	G10/A9.5	N10/A4/A9.5	A10/A9.5			
2251	3			201	WD	3'-0"	1'-10"	1-3/4"	MATCH		A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2261	3			NO	WD	3'-0"	1'-10"	1-3/4"	FACTORY		A	HM.	MDPI	G10/A9.5	N10/A4/A9.5	A10/A9.5			
2271	1			203	WD	3'-0"	1'-10"	1-3/4"	MATCH	30 MIN.	EXG.	HM.	EXG.	G10/A9.5	N10/A4/A9.5	A10/A9.5			
2281	1			NO	WD	3'-0"	1'-10"	1-3/4"	FACTORY	30 MIN.	C	HM.	MDPI	G10/A9.5	N10/A4/A9.5	A10/A9.5			
2311	2			NO	WD	3'-0"	1'-10"	1-3/4"	FACTORY	30 MIN.	A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2321	2			NO	WD	3'-0"	1'-10"	1-3/4"	FACTORY		A	HM.	MDPI	N10/A9.4	N10/A9.5	A10/A9.5			
2331	2			235	WD	3'-0"	1'-0"	1-3/4"	MATCH		A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2341	1			232	WD	3'-0"	1'-0"	1-3/4"	MATCH		A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2351	1			231	WD	3'-0"	1'-0"	1-3/4"	MATCH		A	HM.	MDPI	N10/A9.4	N10/A4/A9.5	A10/A9.5			
2361	1			NO	WD	3'-0"	1'-0"	1-3/4"	FACTORY		B	HM.	MDPI	G10/A9.5	N10/A9.5	A10/A9.5			
2381	1			NO	WD	3'-0"	1'-0"												

ROOM INFORMATION SCHEDULE

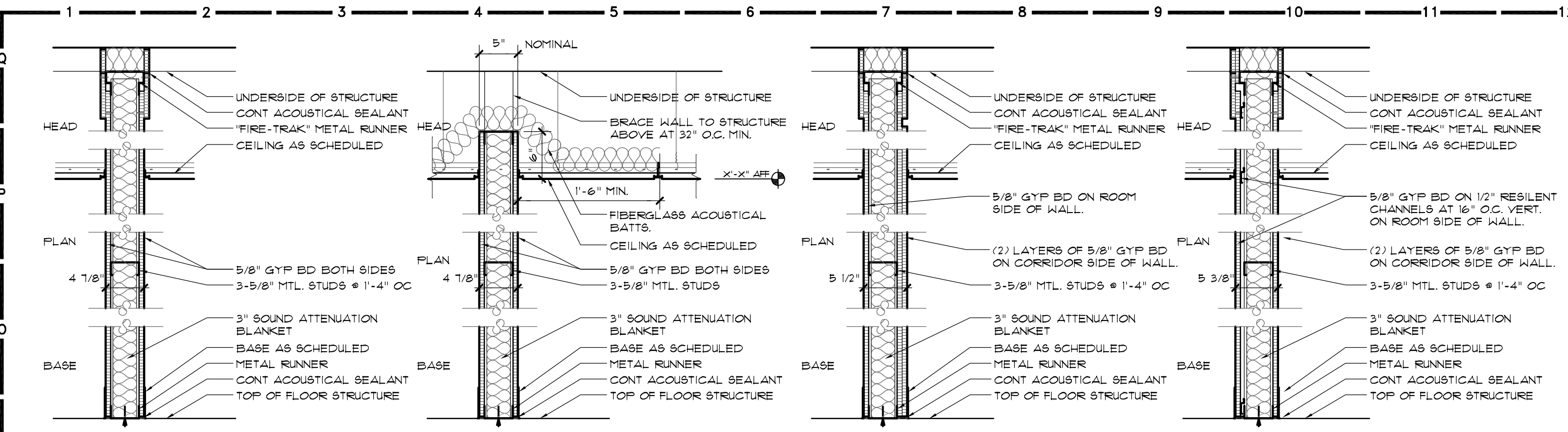
ROOM NO.	ROOM NAME	FLOOR	BASE	FINISHES						REMARKS
				WALLS				CEILING		
				NORTH	EAST	SOUTH	WEST	FINISH	HT.	
301	STAIR	LVT-1/DCPT-2	RB-1/RSB-2	PT-2	PT-1	PT-1	PT-1	EXG.	EXG.	* CRT-2 AT LANDINGS ** RB-2 AT NORTH WALL ** RB-2 AT EAST WALL
302	STAIR	LVT-1/DCPT-2	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	EXG.	EXG.	** RB-2 ON SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
303	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON WEST WALL ** PAINT CONVECTOR COVERS PT-1
304	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON EAST WALL ** PAINT CONVECTOR COVERS PT-1
305	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON WEST WALL ** PAINT CONVECTOR COVERS PT-1
306	CONFERENCE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON EAST WALL ** PAINT CONVECTOR COVERS PT-1
307	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON WEST WALL ** PAINT CONVECTOR COVERS PT-1
308	ADMIN/HR	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON EAST WALL ** PAINT CONVECTOR COVERS PT-1
309	FINANCE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON WEST WALL ** PAINT CONVECTOR COVERS PT-1
310	NOT USED									
311	NOT USED									
312	NOT USED									
313	OPEN OFFICE	CPT-1	RB-1/RSB-2	VWC-2	VWC-2	VWC-1	VWC-1	ACT-1/PT-6	8'-0"	** RB-2 AT VWC-2 WALLS ** PAINT CONVECTOR COVERS PT-1
314	NOT USED									
315	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON EAST WALL ** PAINT CONVECTOR COVERS PT-1
316	NOT USED									
317	NOT USED									
318	MECHANICAL ROOM	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	
319	JANITOR	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	
320	NOT USED									
321	LOBBY	CPT-1	RB-1/EXG.	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1	EXG.	** PAINT CONVECTOR COVERS PT-1
322	TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	FT-6	8'-0"	** 6x6 COVE BASE
323	TOILET	CT-2	CT-1	CT-1	CT-1	CT-1	CT-1	FT-6	8'-0"	** 6x6 COVE BASE
324	IT OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON EAST WALL ** PAINT CONVECTOR COVERS PT-1
325	STORAGE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	
325B	ELECTRICAL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	
326	IT OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
327	IT OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** PAINT CONVECTOR COVERS PT-1
328	IT OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
329	OPEN OFFICE	CPT-1/DCPT-2	RB-1/RSB-2	VWC-1/VWC-2	VWC-1	VWC-1	VWC-1/VWC-2	ACT-1	8'-0"	** RB-2 ON NORTH WALL
330	NOT USED									
331	IT OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON NORTH WALL ** PAINT CONVECTOR COVERS PT-1
332	IT OFFICE	CPT-1/DCPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON NORTH WALL ** PAINT CONVECTOR COVERS PT-1
333	NOT USED									
334	NOT USED									
335	GIS OFFICE	CPT-1	RB-1/RSB-2	PT-3	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON NORTH WALL ** PAINT CONVECTOR COVERS PT-1
336	OFFICE	CPT-1	RB-1	PT-4	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** PAINT CONVECTOR COVERS PT-1
337	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** PAINT CONVECTOR COVERS PT-1
338	OPEN OFFICE	CPT-1/DCPT-2	RB-1/RSB-2	VWC-1/VWC-4	VWC-1/VWC-2	VWC-1	VWC-1	ACT-1/PT-6	8'-0"	** RB-2 AT VWC-4 WALLS ** PAINT CONVECTOR COVERS PT-1
339	STORAGE	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1	8'-0"	
340	NOT USED									
341	NOT USED									
342	NOT USED									
343	NOT USED									
344	NOT USED									
345	NOT USED									
346	NOT USED									
347	NOT USED									
348	NOT USED									
349	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-2	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
350	NOT USED									
351	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-2	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON EAST WALL ** PAINT CONVECTOR COVERS PT-1
352	EQUAL/WAITING	CPT-1/DCPT-2	RB-1/RSB-2	VWC-1/VWC-4	VWC-1/VWC-4	VWC-1/VWC-4	VWC-1/VWC-4	ACT-1	8'-0"	** RB-2 ON NORTH WALL ** PAINT CONVECTOR COVERS PT-1
353	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** PAINT CONVECTOR COVERS PT-1
354	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-3	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH/WEST WALL ** PAINT CONVECTOR COVERS PT-1
355	OFFICE	CPT-1	RB-1/RSB-2	PT-3	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON NORTH WALL ** PAINT CONVECTOR COVERS PT-1
356	NOT USED									
357	NOT USED									
358	IT STORAGE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2	8'-0"	
359	IT	DCPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1	8'-0"	
360	NOT USED									
361	OFFICE	CPT-1	RB-1/RSB-2	PT-1	PT-1	PT-3	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
362	BREAK ROOM	LVT-1	RB-1/RSB-2	VWC-2	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
363	HALL	CPT-1/DCPT-2	RB-1	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1	EXG.	** NO RB-1 AT BRICK WALLS
364	CORRIDOR	CPT-1	RB-1	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1	EXG.	** NO RB-1 AT BRICK WALLS
365	HALL	CPT-1/DCPT-2	RB-1/RSB-2	VWC-1	VWC-1/VWC-2	VWC-1	VWC-1	ACT-1	EXG.	** NO RB-1 AT BRICK WALLS
366	HALL	CPT-1/DCPT-2	RB-1	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1	8'-0"	** NO RB-1 AT BRICK WALLS
367	CONFERENCE	CPT-1/DCPT-2	RB-1/RSB-2	VWC-1	VWC-1	VWC-2	VWC-1	ACT-1	8'-0"	** RB-2 AT SOUTH WALL ** PAINT CONVECTOR COVERS PT-1
368	NOT USED									
369	CONFERENCE	CPT-1/DCPT-2	RB-1/RSB-2	VWC-1	VWC-1	VWC-2	VWC-1	ACT-1/PT-6	8'-0"	** RB-2 ON SOUTH WALL AT VWC-2 ** PAINT CONVECTOR COVERS PT-1
370	NOT USED									
371	CONFERENCE	CPT-1	RB-1/RSB-2	VWC-1	VWC-3	VWC-1	VWC-1	ACT-1	8'-0"	** RB-2 AT EAST WALL
372	OFFICE	CPT-1	RB-1/RSB-2	PT-3	PT-1	PT-1	PT-1	ACT-1/PT-6	8'-0"	** RB-2 ON NORTH WALL ** PAINT CONVECTOR COVERS PT-1
373	FINANCE	CPT-2	RB-1	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1/PT-6	8'-0"	
374	ADMIN/HR	CPT-2	RB-1	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1	8'-0"	
371	FIRE SUPPRESSION SYSTEM CONTROL	CPT-2	RB-1	VWC-1	VWC-1	VWC-1	VWC-1	ACT-1	8'-0"	

ROOM INFORMATION SCHEDULE GENERAL NOTES

- 1 MATCH: TINT DOOR AS REQUIRED WITH A CLEAR FINISH TO MATCH NEW FACTORY FINISHED DOORS.

DOOR SCHEDULE

NO.	TYPE	PAIR	HARDWARE SET REFER TO SPEC.				THICK	FINISH	LABEL	FRAME TYPE			DETAILS			REMARKS	
			SALVAGED	MATERIAL	WIDTH	HEIGHT				FR. TYPE	FR. MAT.	FR. PRGF.	FINISH	HEAD	JAMB		SILL
3001	2		315	WD	3'-0"	7'-10"	1-3/4"	MATCH	30 MIN.	A	HMT	MDP5	PT-5	D14/AS5 SHI N18/AS4 SHI	N10/4A/AS5		EXG. DOOR TO REMAIN.
3021	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.
3031	1		331	WD	3'-0"	7'-10"	1-3/4"	MATCH		A	HMT	EXG.	PT-5	N18/AS4	N10/4A/AS5		
3041	1		321	WD	3'-0"	7'-10"	1-3/4"	MATCH		EXG.	HMT	EXG.	PT-5	N18/AS4	N10/4A/AS5		
3051	1		328	WD	3'-0"	7'-10"	1-3/4"	MATCH		EXG.	HMT	EXG.	PT-5	N18/AS4	N10/4A/AS5		
3061	1		332	WD	3'-0"	7'-10"	1-3/4"	MATCH		EXG.	HMT	EXG.	PT-5	G10/AS5	N14/AS5	A10/AS5	
3071	1		329	WD	3'-0"	7'-10"	1-3/4"	MATCH		EXG.	HMT	EXG.	PT-5	N18/AS4	N10/4A/AS5		
3081	2		NO	WD	3'-0"	7'-10"	1-3/4"	FACTORY	20 MIN.	A	HMT	MDP5/MDP6	PT-5	N18/AS4	N10/4A/AS5		
3091	2		330	WD	3'-0"	7'-10"	1-3/4"	MATCH		EXG.	HMT	EXG.	PT-5	N18/AS4	N10/4A/AS5		
3131	2		316	WD	3'-0"	7'-10"	1-3/4"	MATCH	20 MIN.	A	HMT	MDP5	PT-5	N18/AS4	N10/4A/AS5		
3151	1		333	WD	3'-0"	7'-10"	1-3/4"	MATCH		EXG.	HMT	EXG.	PT-5	N18/AS4	N10/4A/AS5		
3181	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.
3191	EXG.	YES	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.
3211	EXG.		EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.				EXG. DOOR TO REMAIN.
3221	3		302	WD	3'-0"	7'-10"	1-3/4"	MATCH	20 MIN.	A	HMT	MDP1	PT-5	D14/AS5 SHI N18/AS4 SHI	N10/4A/AS5		
3231	3		301	WD	3'-0"	7'-10"	1-3/4"	MATCH	20 MIN.	A	HMT	MDP1	PT-5	D14/AS5 SHI N18/AS4 SHI	N10/4A/AS5		
3241	1		303	WD	3'-0"	7'-10"	1-3/4"	MATCH		D	HMT	MDP5/MDP6 MDP5/MDP6	PT-5	G10/AS5	N14/AS5	A10/AS5	
3251	1		NO	WD	3'-0"	7'-10"	1-3/4"	FACTORY	20 MIN.	A	HMT	MDP5/MDP6	PT-5	N18/AS4	N14/AS5		
3253	1		310	WD	3'-0"	7'-10"	1-3/4"	MATCH	20 MIN.	A	HMT	MDP5	PT-5	N18/AS4	N10/AS5		
3261	1		305	WD	3'-0"	7'-10"	1-3/4"	MATCH		D	HMT	MDP5/MDP6 MDP5/MDP6	PT-5	G10/AS5	N14/AS5	A10/AS5	
3271	1		306	WD	3'-0"	7'-10"	1-3/4"	MATCH		D	HMT	MDP5/MDP6 MDP5/MDP6	PT-5	G10/AS5	N14/AS5	A10/AS5	
3281	1		307	WD	3'-0"	7'-10"	1-3/4"	MATCH		D	HMT	MDP5/MDP6 MDP5/MDP6	PT-5	G10/AS5	N14/AS5	A10/AS5	
3283	2		NO	WD	3'-0"	7'-10"	1-3/4"	FACTORY	20 MIN.	A	HMT	MDP6	PT-5	N18/AS4	N10/4A/AS5		
3311	1		323	WD	3'-0"	7'-10"	1-3/4"	MATCH		B	HMT	MDP5/MDP6 MDP5/MDP6	PT-5	G10/AS5	N14/AS5	A10/AS5	
3321	1																

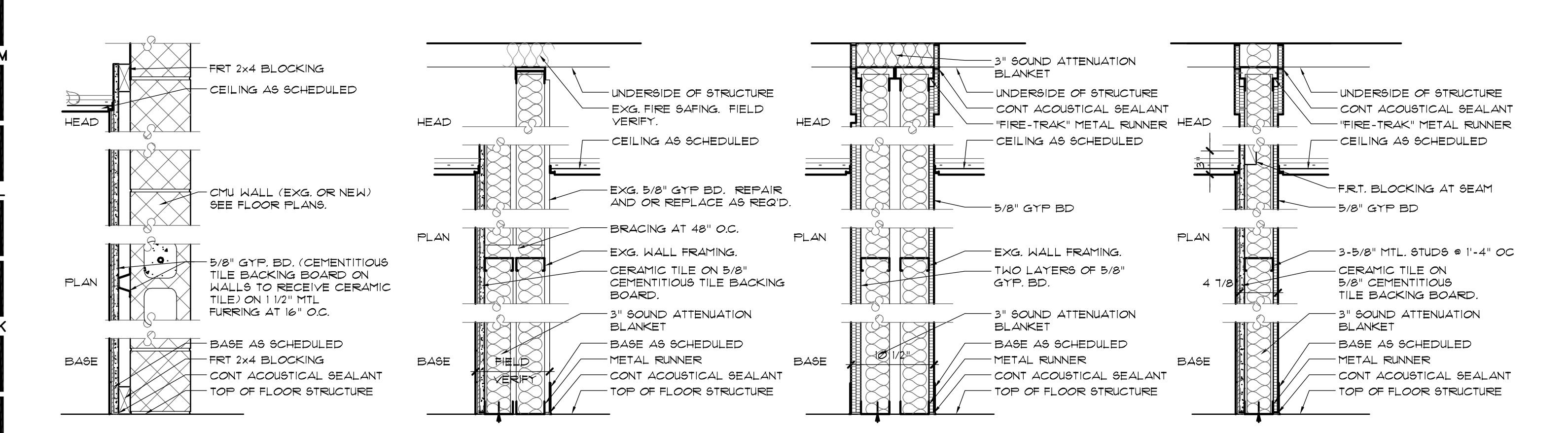


**A** STUD WALL - STC 51  
SCALE: 1-1/2" = 1'-0"

**B** PARTITION DETAIL  
SCALE: 1-1/2" = 1'-0"

**C** STUD WALL - STC 51+  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U419 SIM.  
STUD WALL - TWO LAYERS  
GYP BD, BOTH SIDES.  
SCALE: 1-1/2" = 1'-0"

**D** STUD WALL - STC 58  
SCALE: 1-1/2" = 1'-0"



**E** FURRED WALL  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U919 SIM.

**F** CHASE WALL  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U445 SIM.

**G** ISOLATION WALL - STC 61  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U445 SIM.

**H** STUD WALL - STC 50  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U442 SIM.

**I** STUD WALL - TILE ON BOTH SIDES  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U442 SIM.

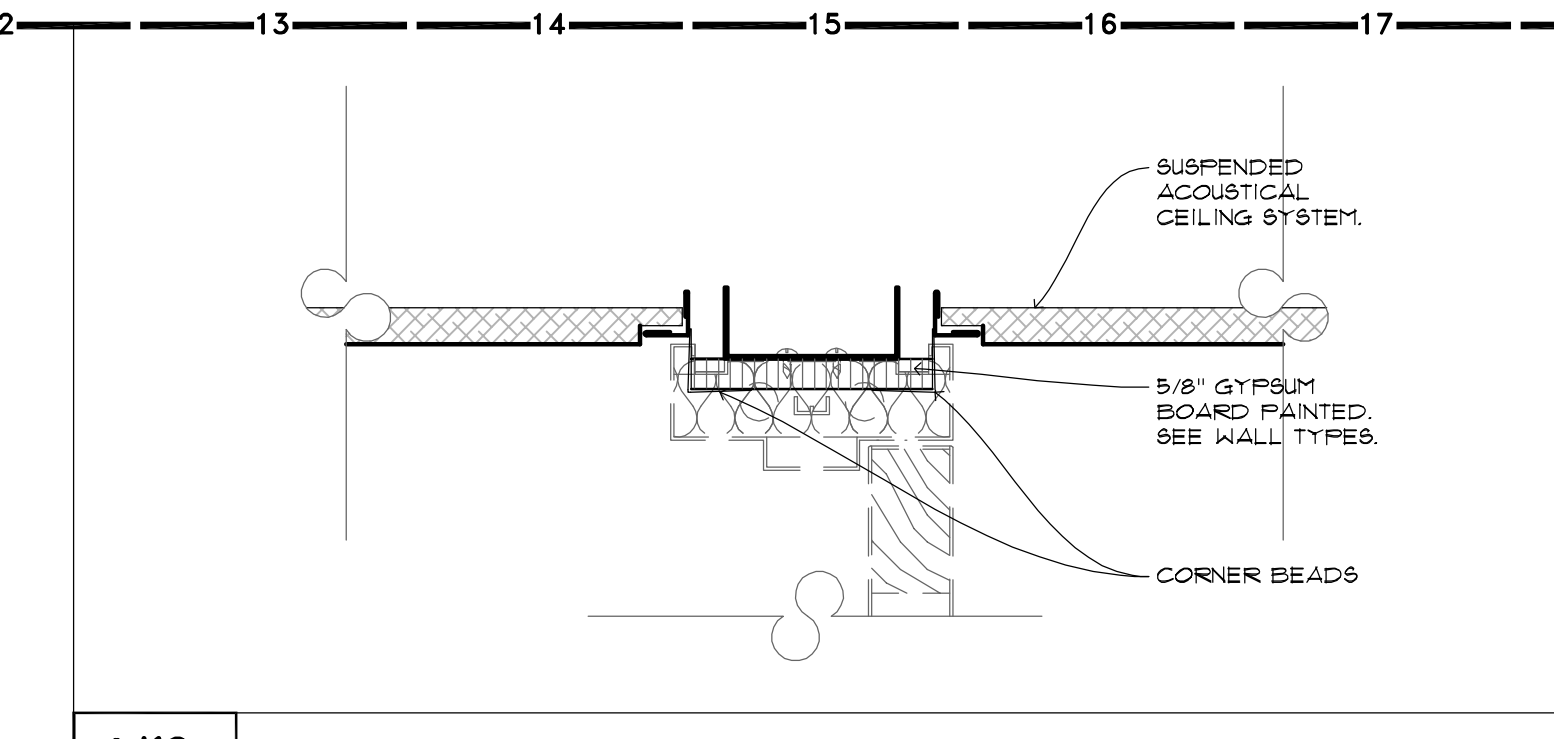
**J** STUD WALL - TILE ON BOTH SIDES  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U442 SIM.

**K** STUD WALL - 2 1/2" MTL STUDS  
SCALE: 1-1/2" = 1'-0"  
UL DESIGN U442 SIM.

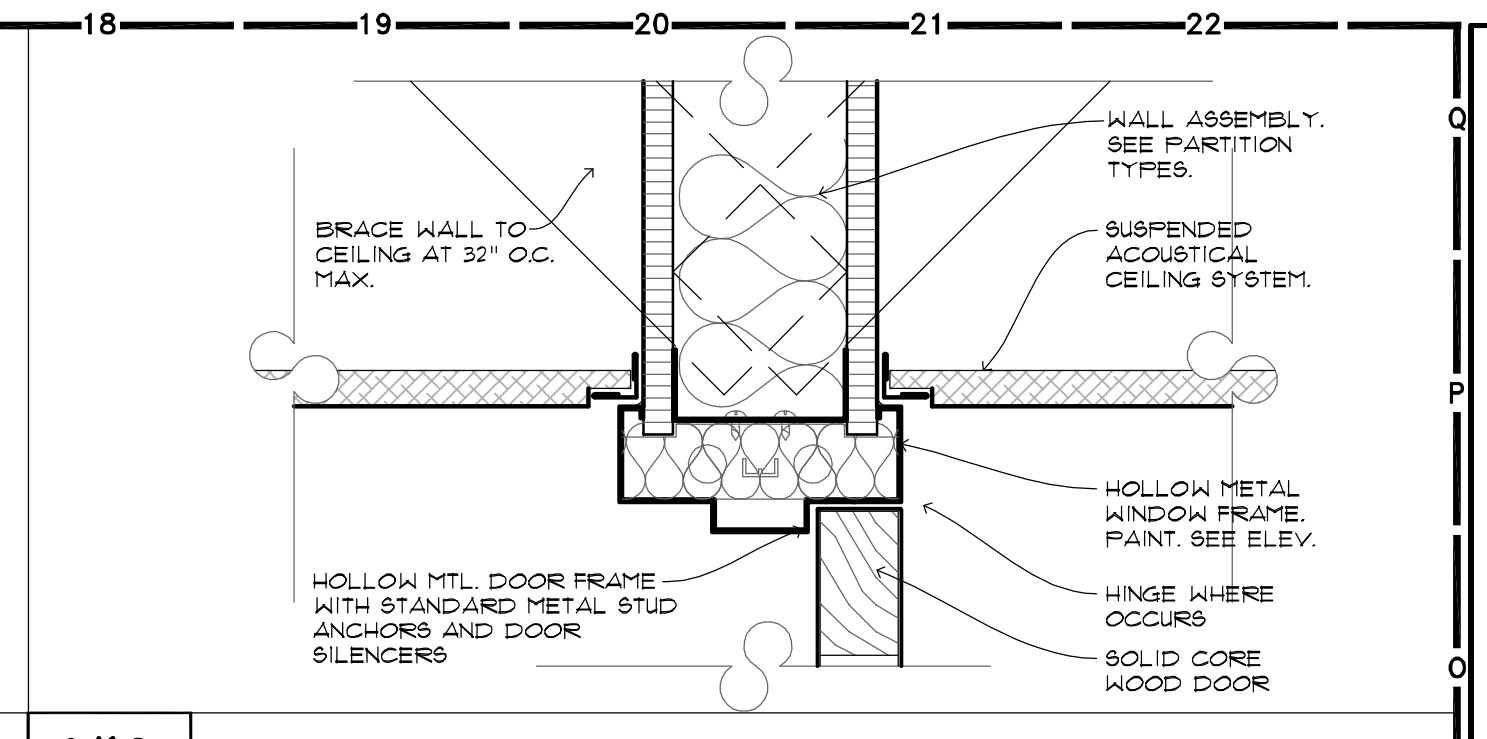
**GENERAL NOTES**

- REFER TO FINISH SCHEDULE FOR ALL SCHEDULED FINISHES.
- REFER TO FLOOR AND LIFE SAFETY PLANS FOR LOCATIONS OF FIRE RATED WALLS. FIRE RATED CONSTRUCTION SHALL BE CONTINUOUS AROUND STRUCTURAL MEMBERS, CONTIGUOUS FROM FLOOR SLAB TO UNDERSIDE OF SLAB ABOVE, AND EXTEND TO THE EXTERIOR WALLS. PROVIDE FIRE STOPPING AT JOINT CONDITIONS.
- PARTITION TYPES INDICATED ON PLANS CONTINUE ABOVE ADJACENT DOORS AND/OR OPENINGS.
- INTERIOR DIMENSIONS ARE TO FACE OF FINISH UNLESS SPECIFICALLY NOTED OTHERWISE. MECHANICAL DUCTS, AND SIMILAR ITEMS PENETRATING FIRE AND/OR SMOKE RATED CEILING AND FIRE RATED WALLS SHALL BE CORRESPONDINGLY RATED AND DUCTS DAMPERED. CABINETS, FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, ELECTRICAL DEVICES, LIGHTS AND SIMILAR EQUIPMENT, RECESSED INTO FIRE RATED WALLS OR CEILING SHALL INCLUDE FIRE RATED BACKING MATERIAL WITH CORRESPONDING FIRE RESISTIVE CONSTRUCTION TO MAINTAIN THE INTEGRITY OF THE FIRE PROTECTION OF THE WALL OR CEILING SYSTEM.
- VOIDS AND PENETRATIONS THROUGH FLOOR AND ROOF ASSEMBLIES TO ACCOMMODATE PASSING OF CONDUITS, PIPES, AND SIMILAR MATERIALS, EXCEPT THOSE IN FIRE RATED SHAFTS, SHALL BE SEALED WITH FIRESTOPPING TO MAINTAIN FIRE RATINGS OF THE FLOOR, CEILING OR ROOF ASSEMBLY.
- STUDS ARE SPACED 16" OC UNLESS OTHERWISE NOTED.
- PROVIDE 25 GA STUDS UNLESS OTHERWISE NOTED.
- PROVIDE 20 GA STUDS AT WALLS TO RECEIVE TILE.
- PROVIDE MOISTURE RESISTANT GYP BD AT TOILET ROOMS.
- STC PARTITIONS SHALL BE THOROUGHLY SEALED WITH APPLICATION OF ACOUSTICAL SEALANT AND SHALL RESULT IN TIGHT CONDITIONS.
- NO ELECTRICAL OUTLETS SHALL BE BACK TO BACK. ALL OUTLETS WILL BE STAGGERED A MIN OF 24".

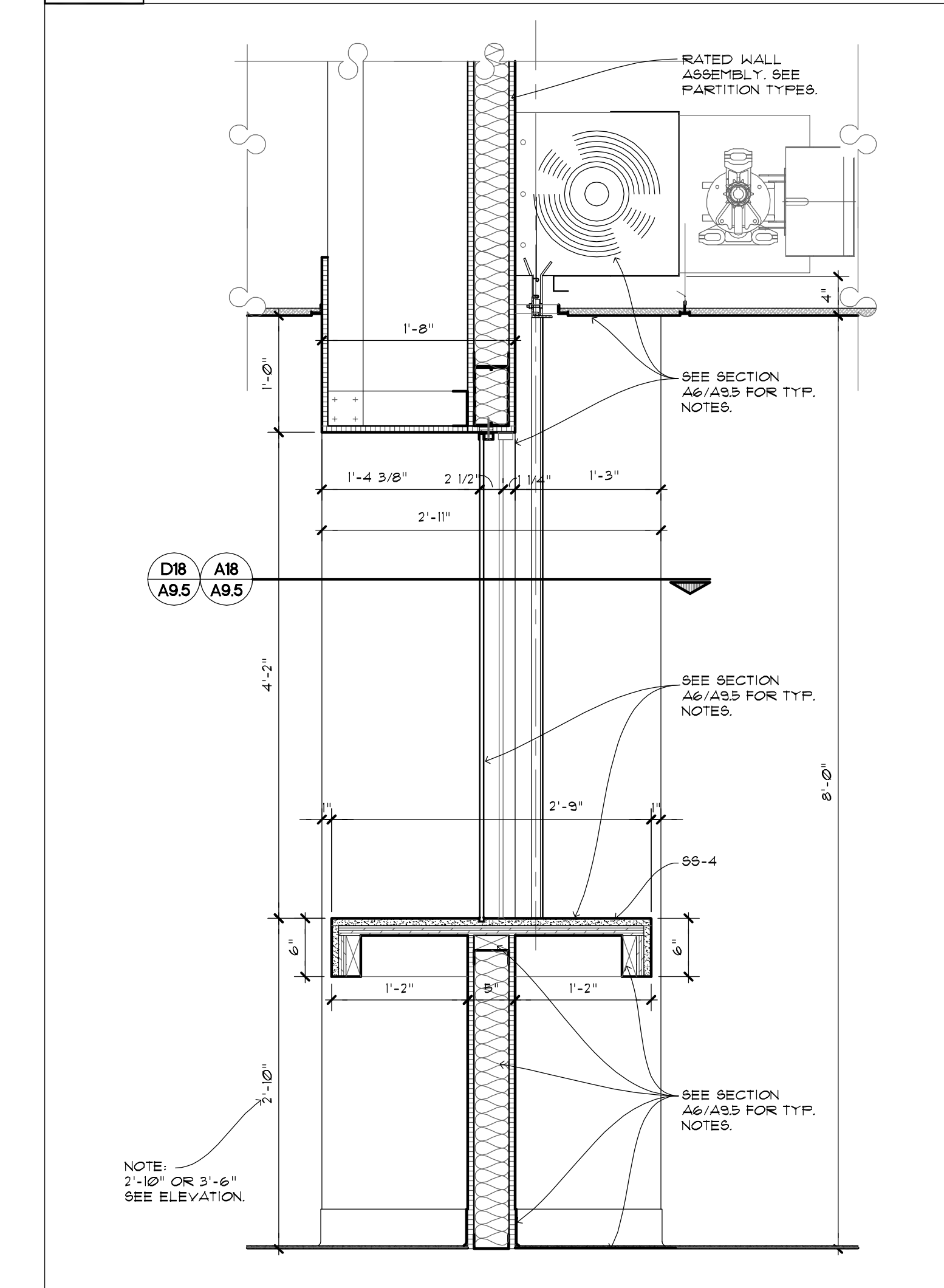
**D1** PARTITION TYPES  
SCALE: 1" = 1'-0"



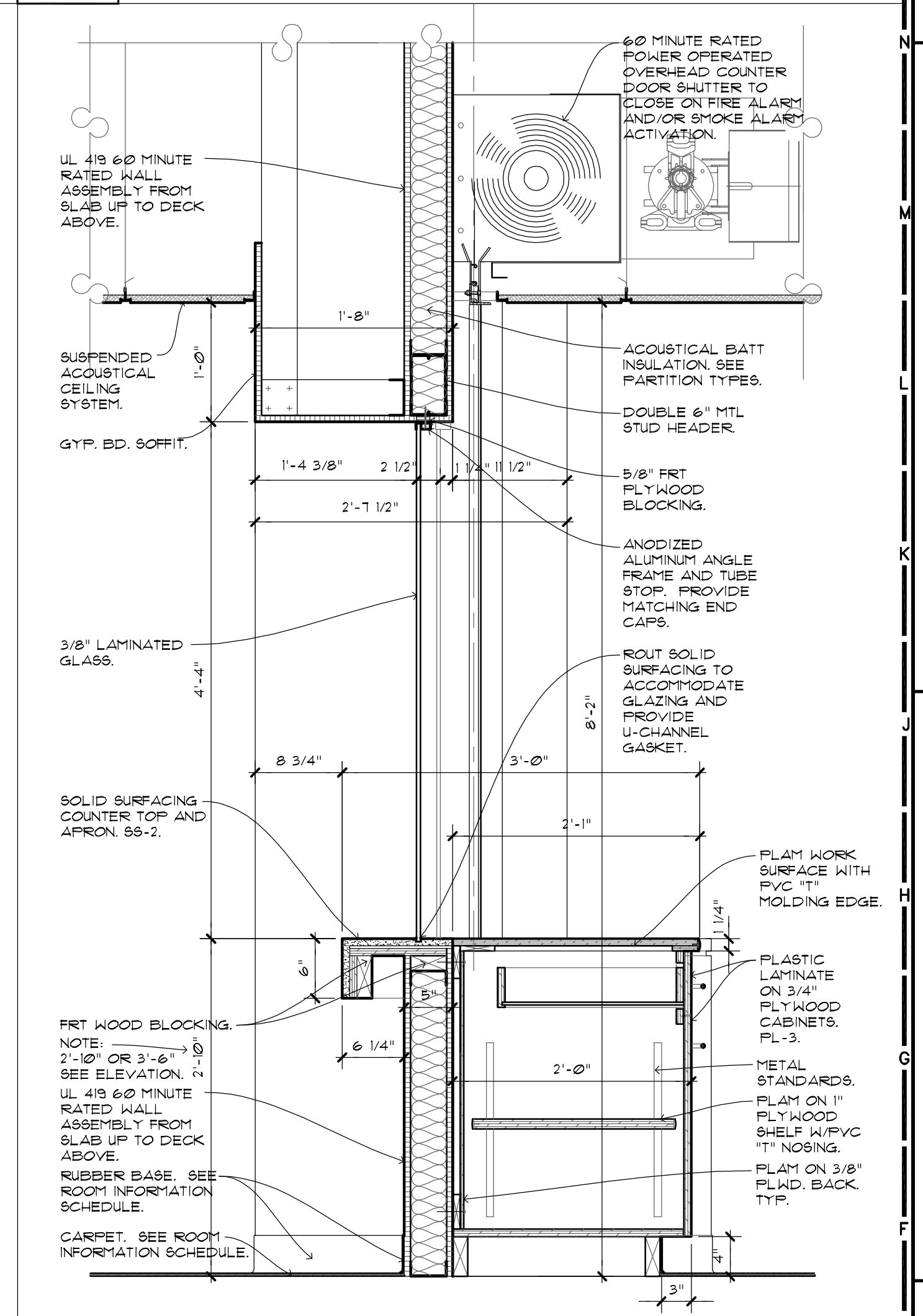
**N12** HEAD DETAIL  
SCALE: 1" = 1'-0"



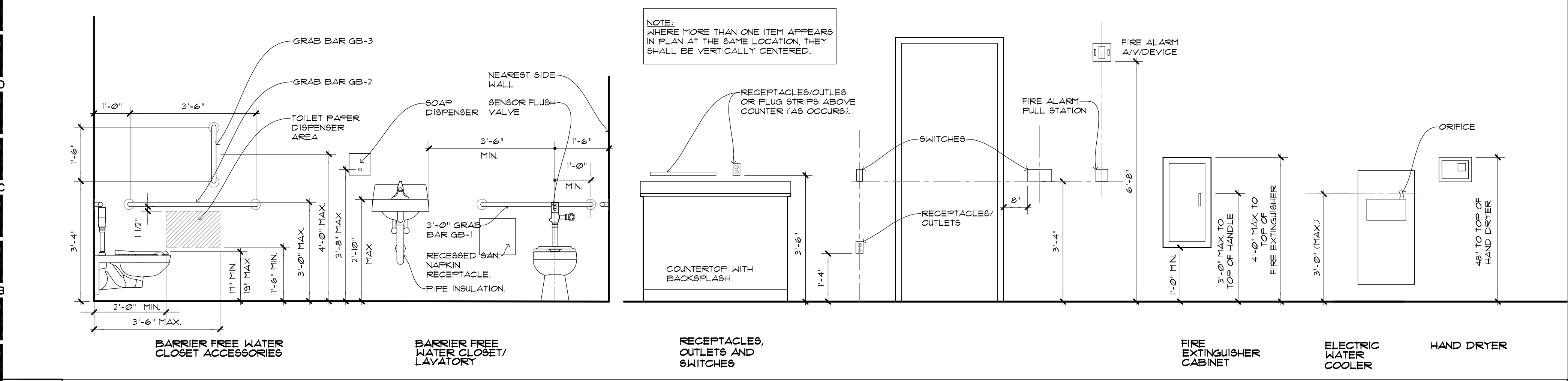
**N18** HEAD DETAIL  
SCALE: 1" = 1'-0"



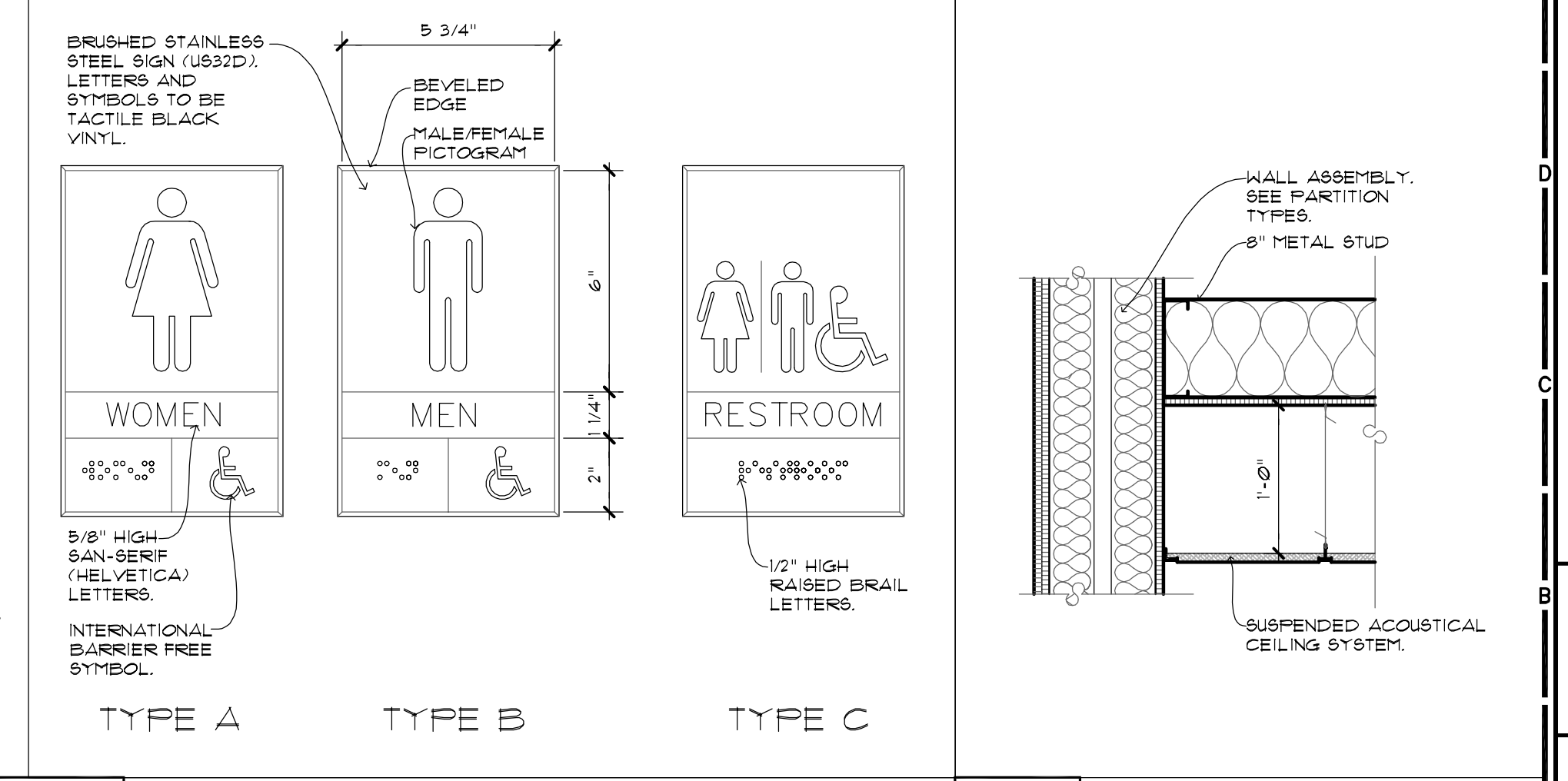
**D12** SECTION  
SCALE: 1" = 1'-0"



**D17** SECTION  
SCALE: 1" = 1'-0"

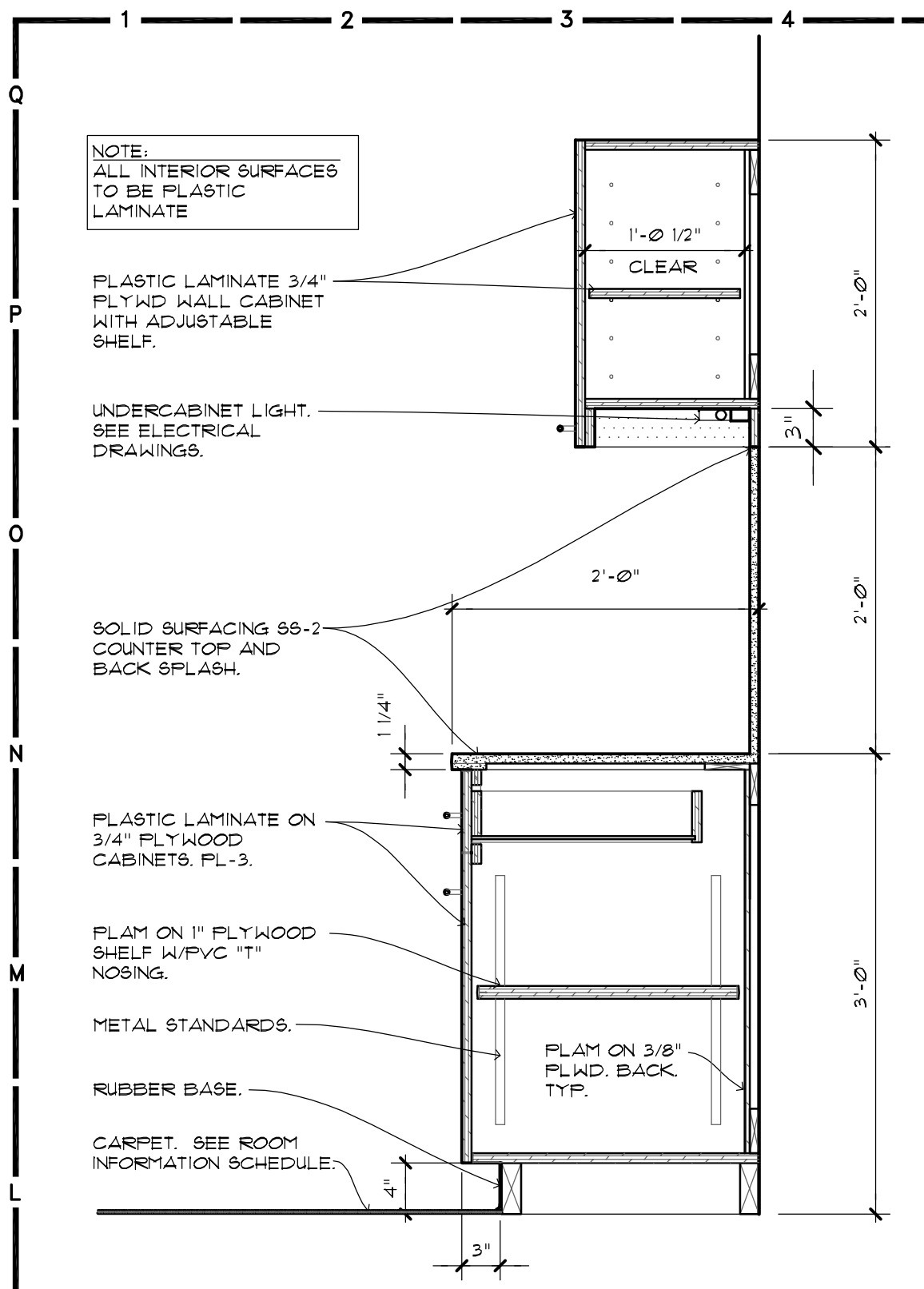


**A1** ACCESSIBILITY STANDARDS  
SCALE: 1/2" = 1'-0"

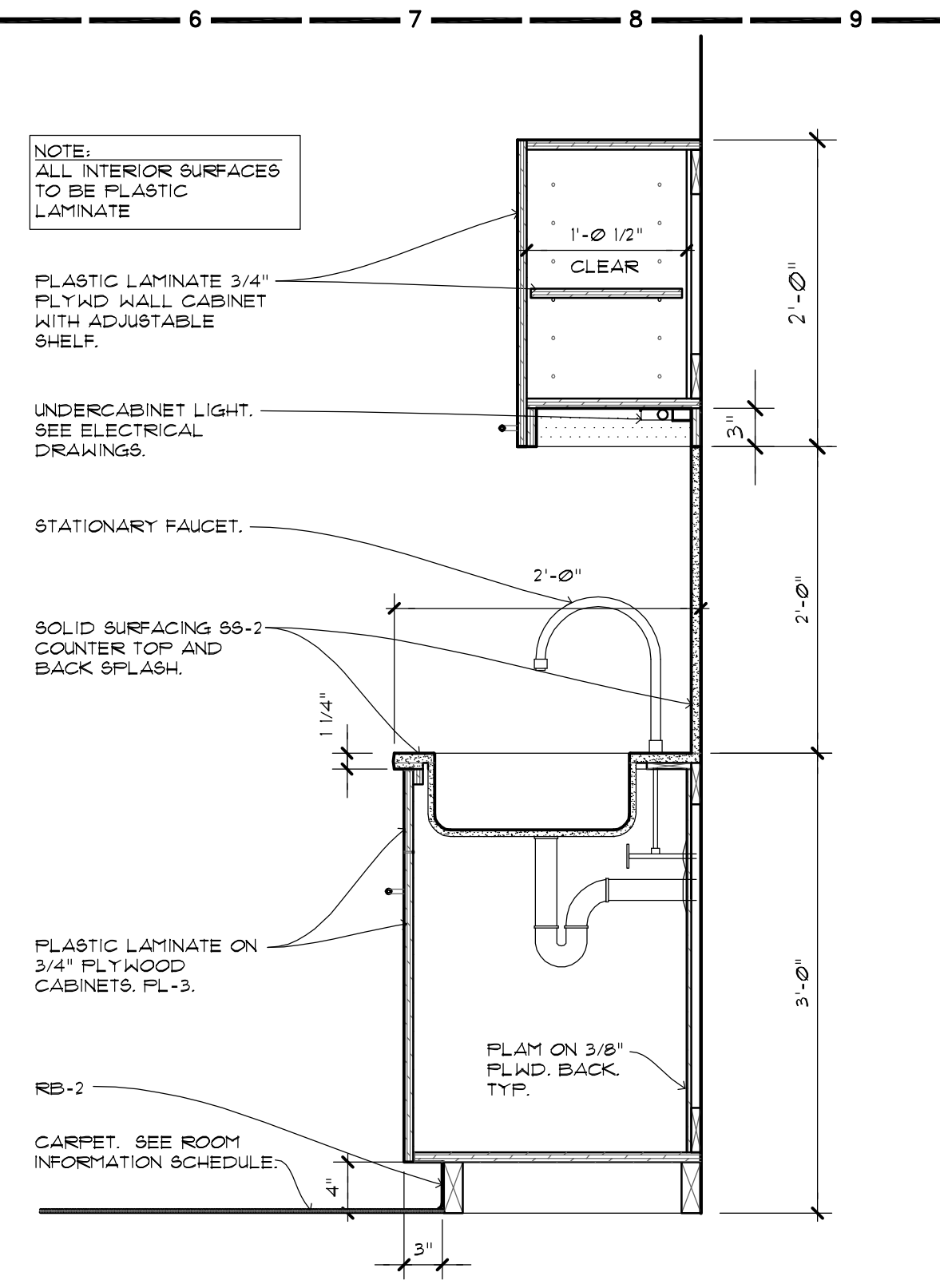


**A15** TOILET SIGNAGE  
SCALE: 3" = 1'-0"

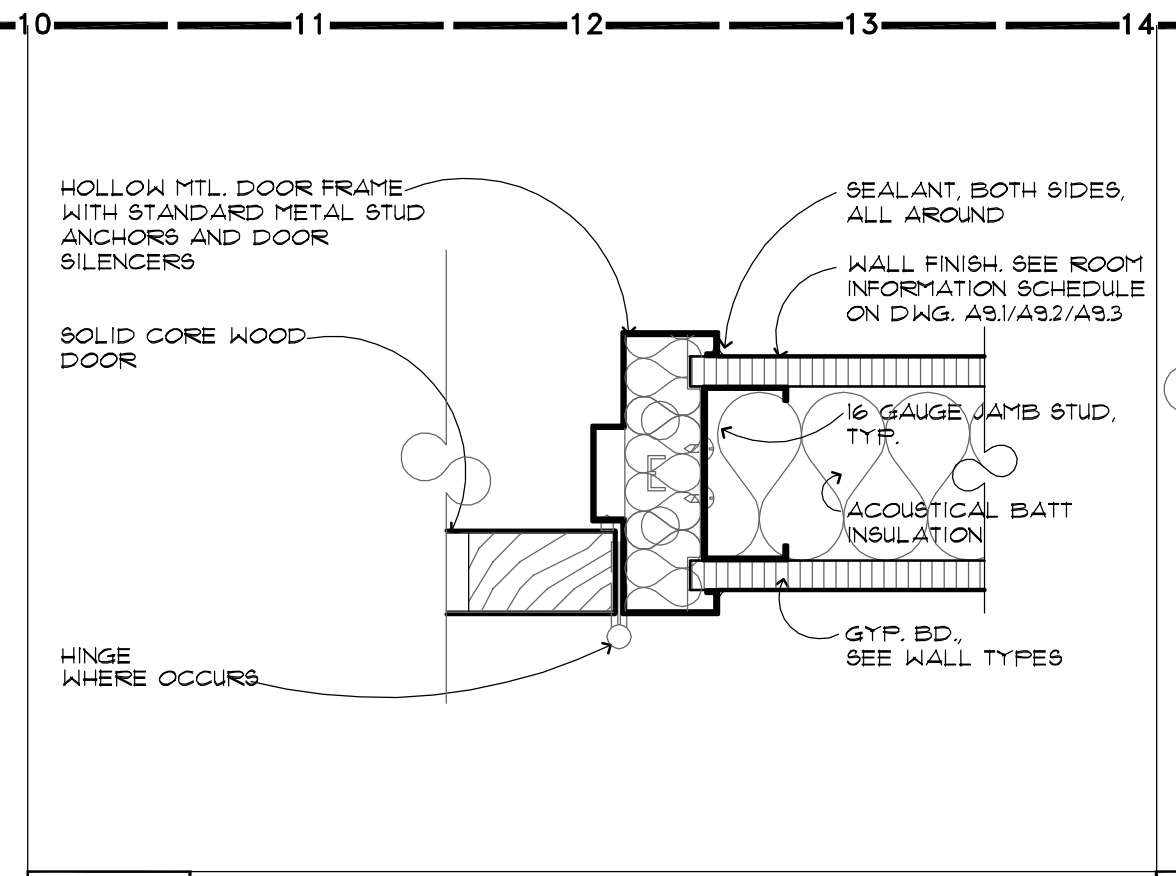
**A20** SECTION  
SCALE: 1" = 1'-0"



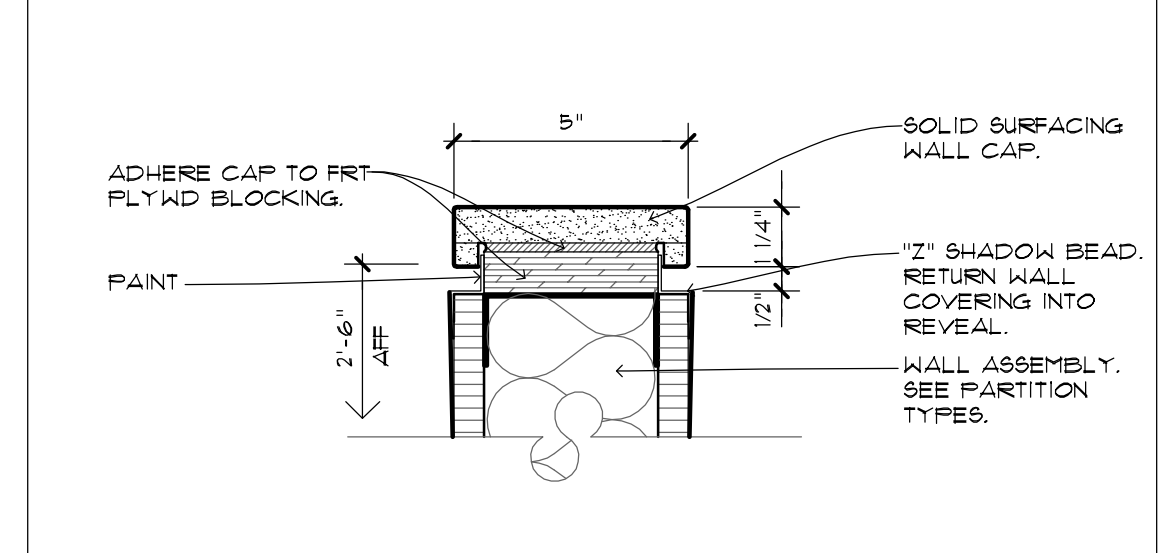
**J1** SECTION  
1" = 1'-0"



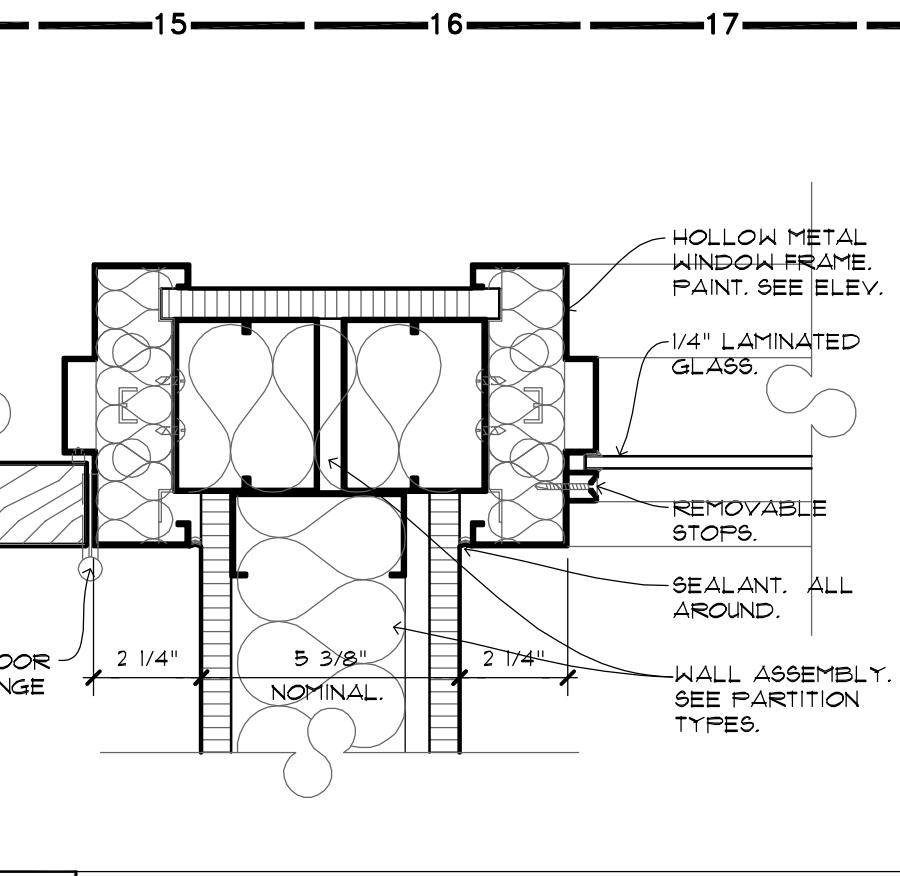
**J6** SECTION  
1" = 1'-0"



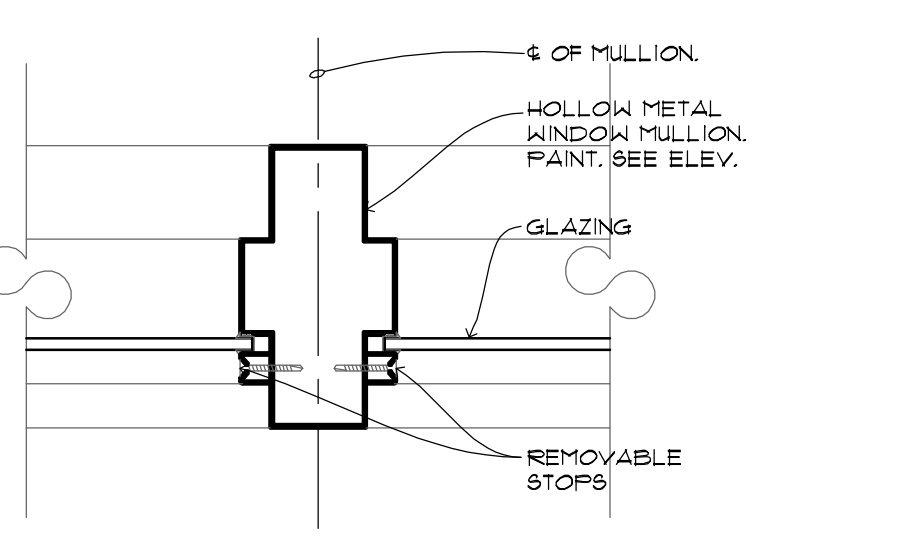
**N10** JAMB DETAIL  
3" = 1'-0"



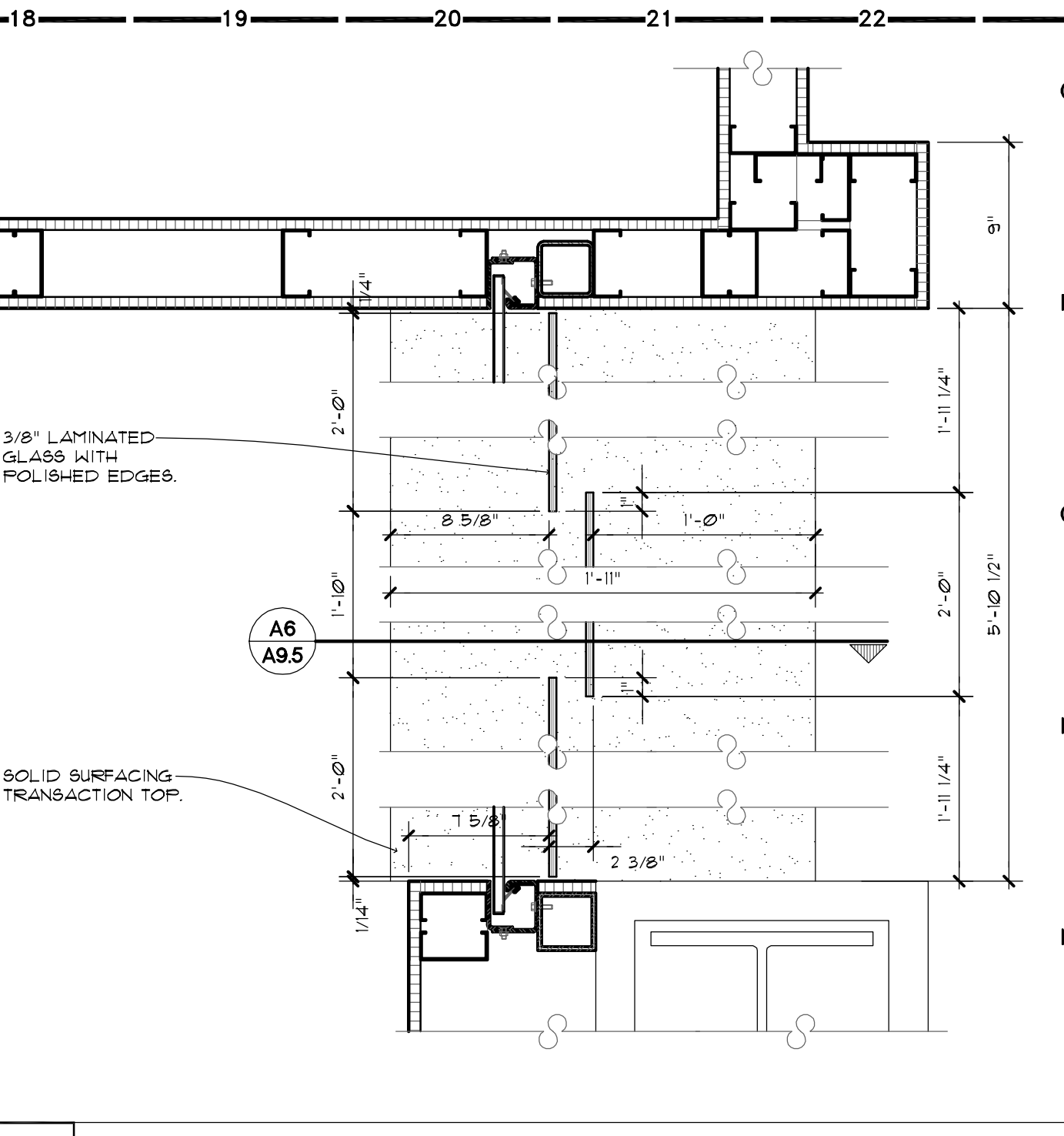
**J10** DETAIL  
3" = 1'-0"



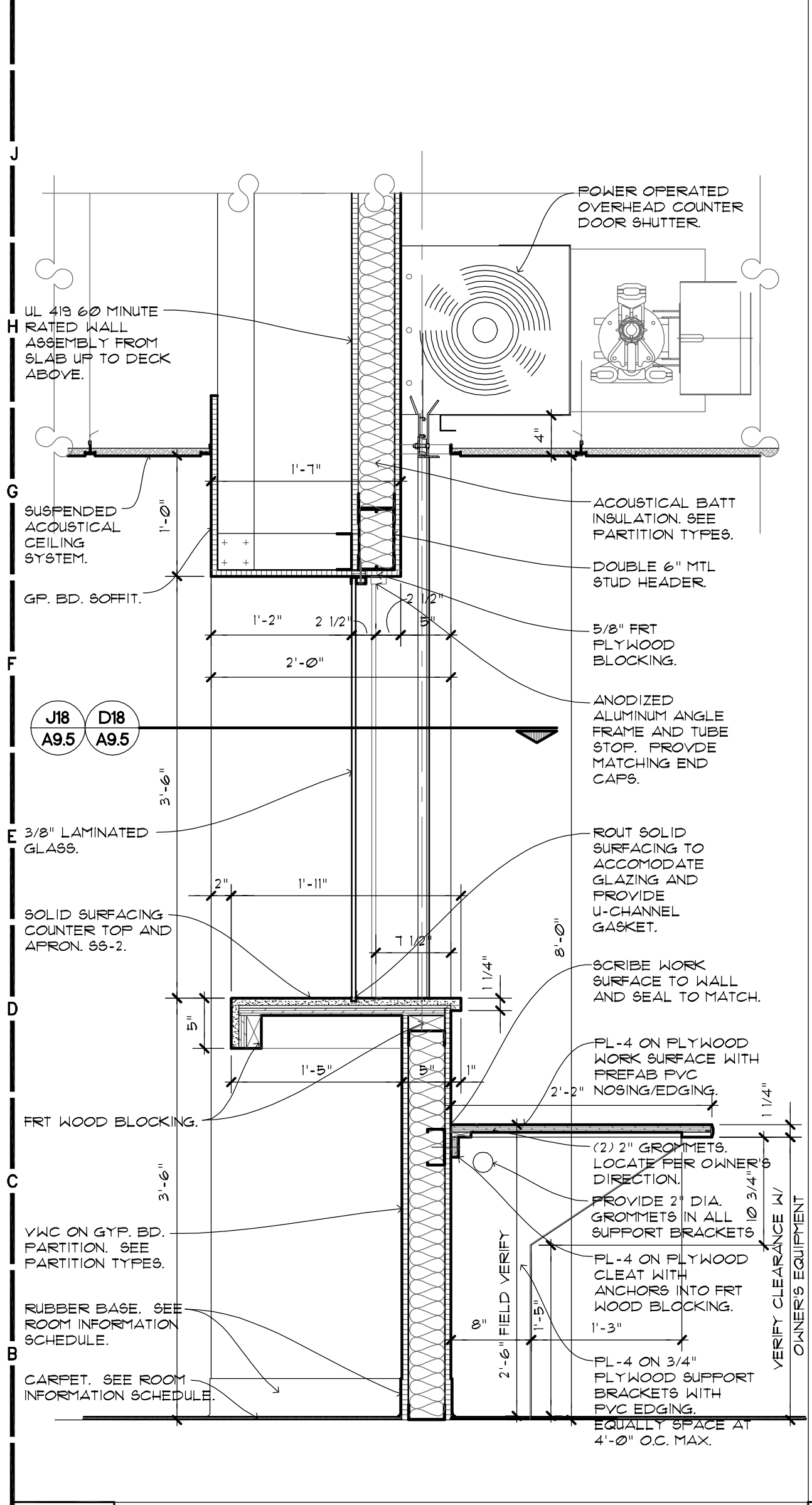
**N14** JAMB DETAIL  
3" = 1'-0"



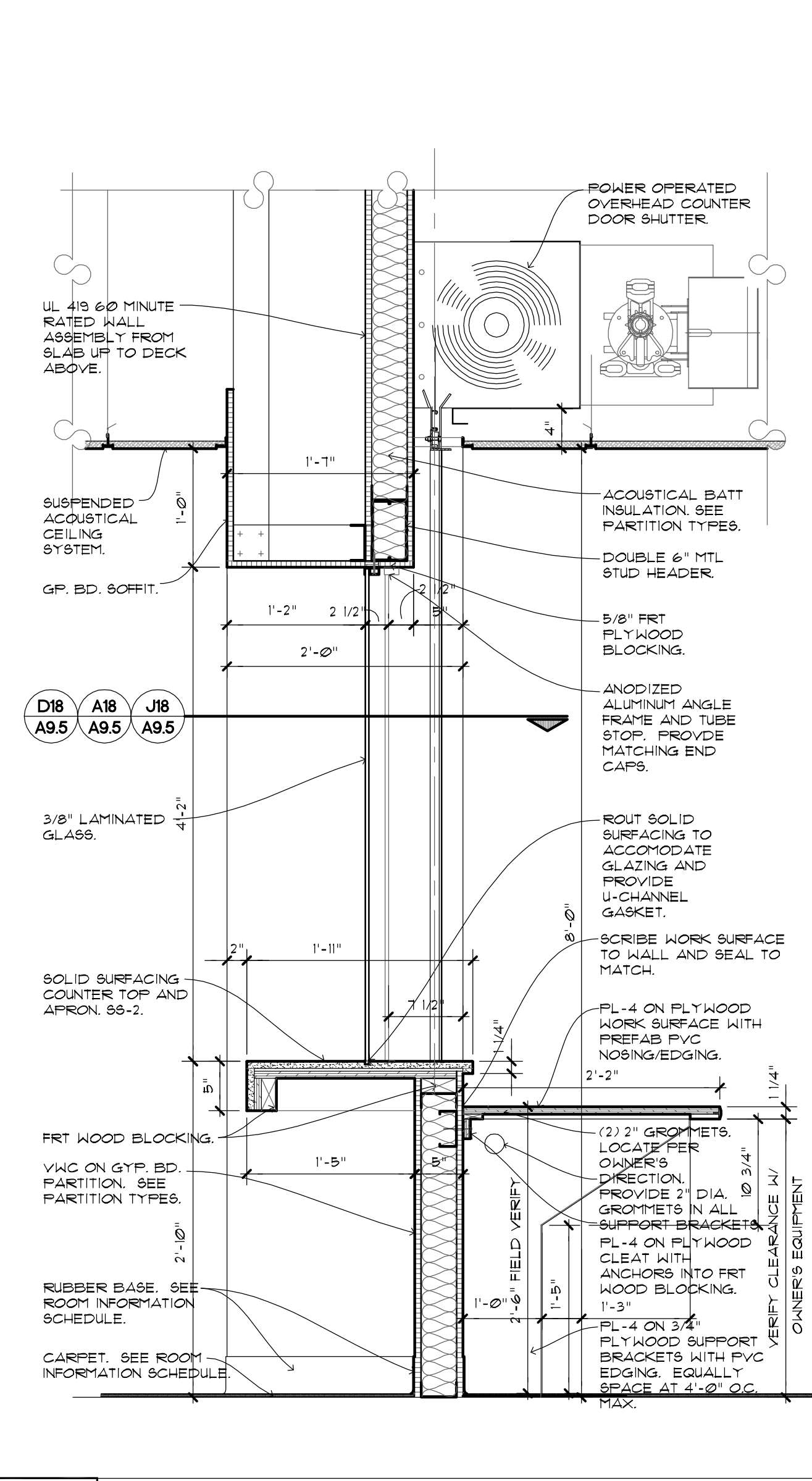
**J14** JAMB DETAIL  
3" = 1'-0"



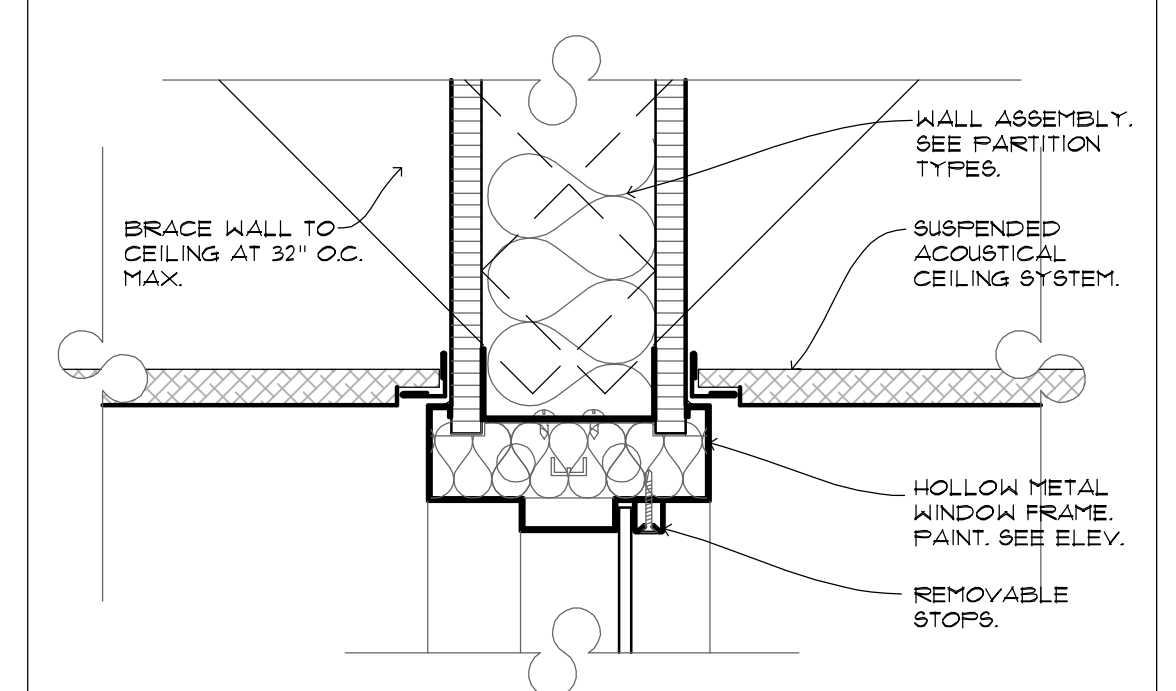
**J18** PLAN DETAIL  
1 1/2" = 1'-0"



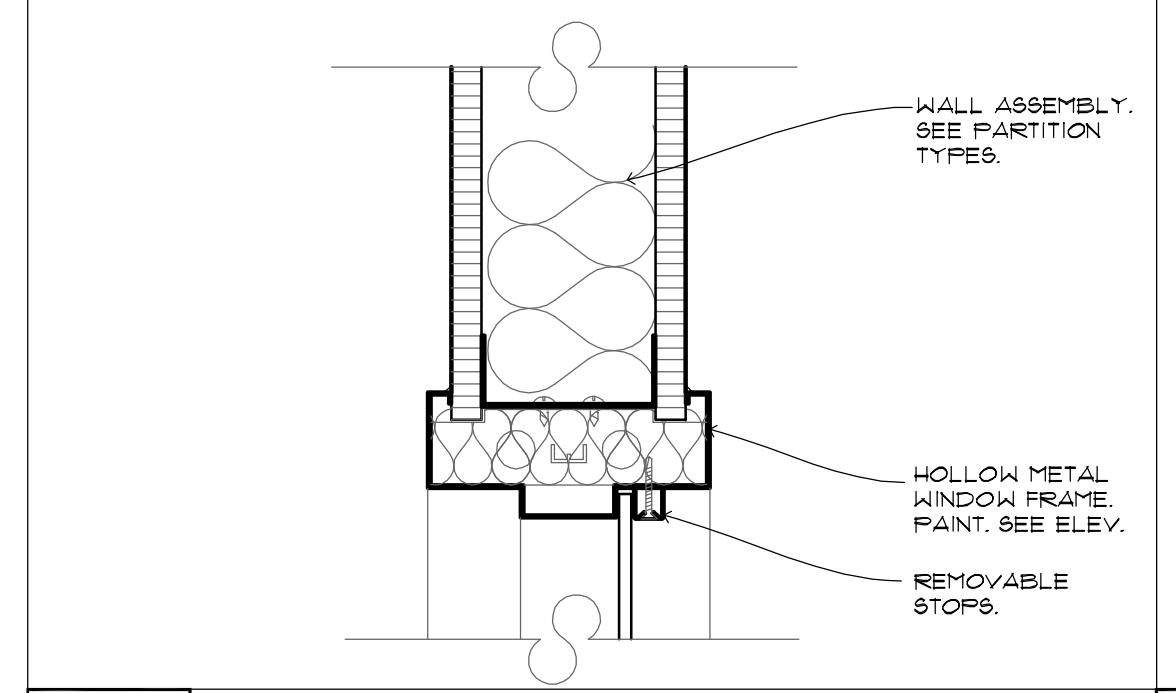
**A1** SECTION  
1" = 1'-0"



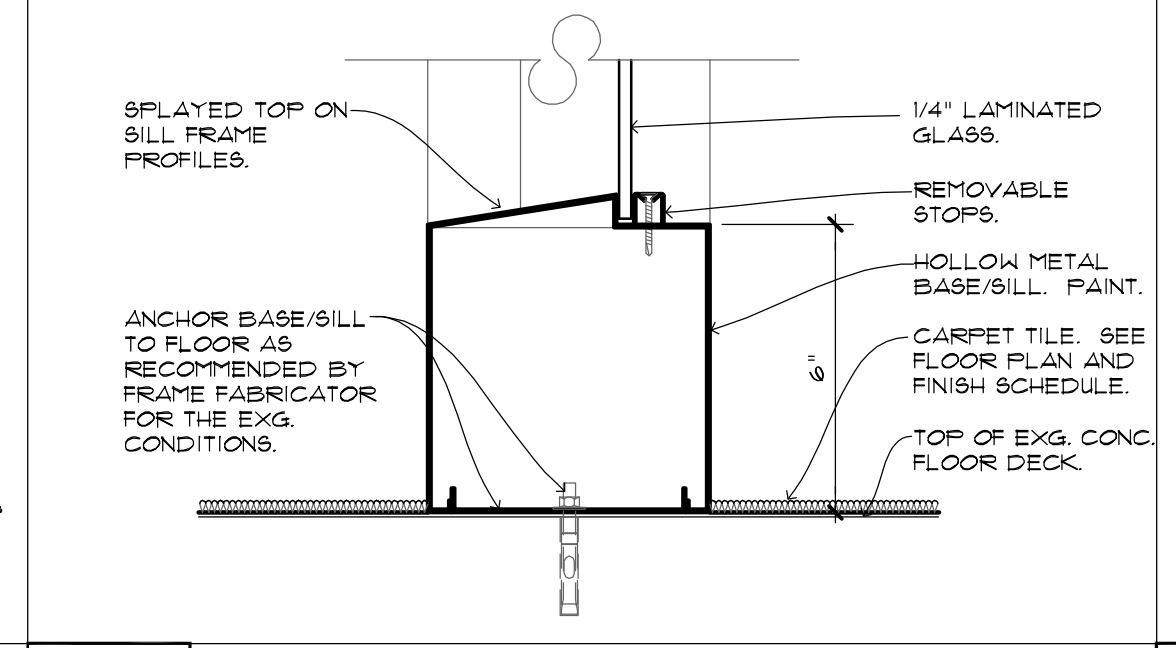
**A6** SECTION  
1" = 1'-0"



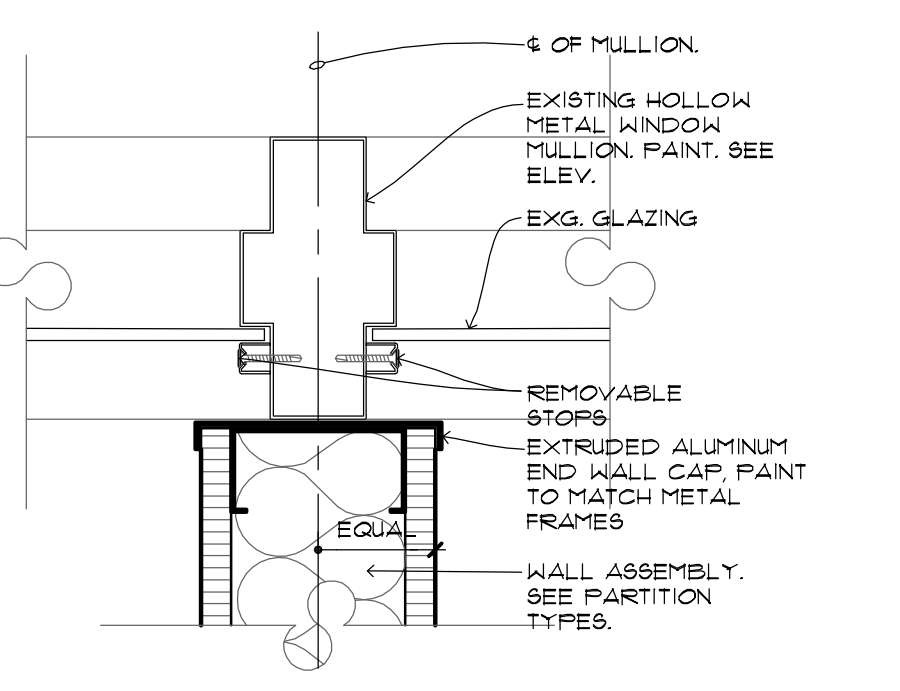
**G10** HEAD DETAIL  
3" = 1'-0"



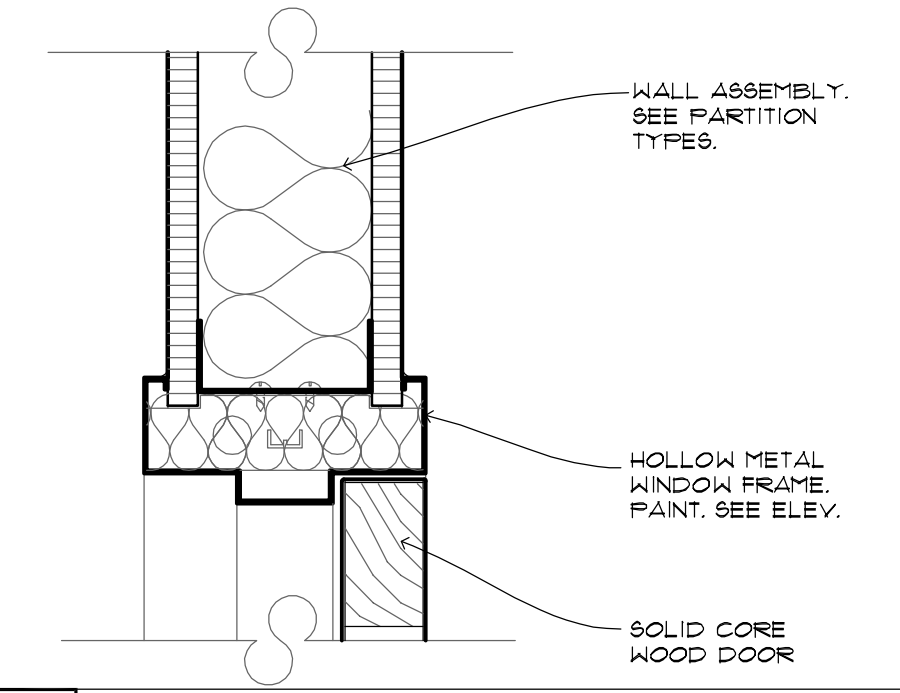
**D10** HEAD DETAIL  
3" = 1'-0"



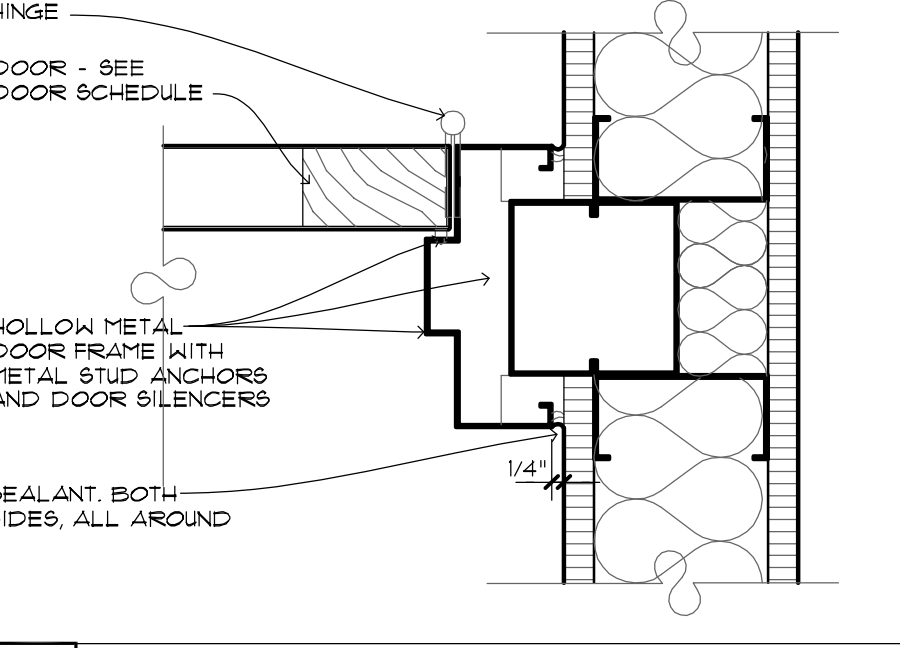
**A10** SILL DETAIL  
3" = 1'-0"



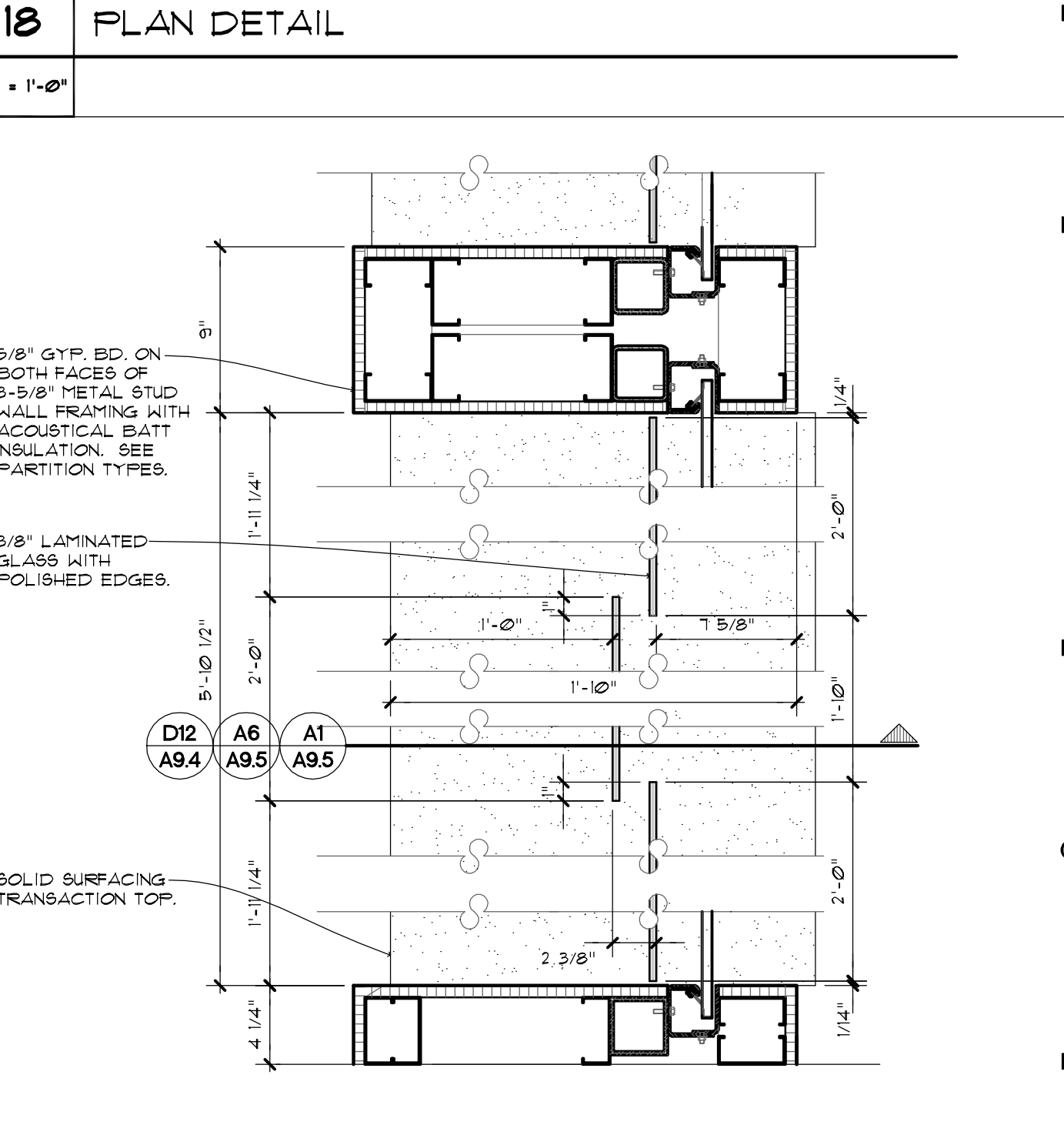
**G14** HEAD DETAIL  
3" = 1'-0"



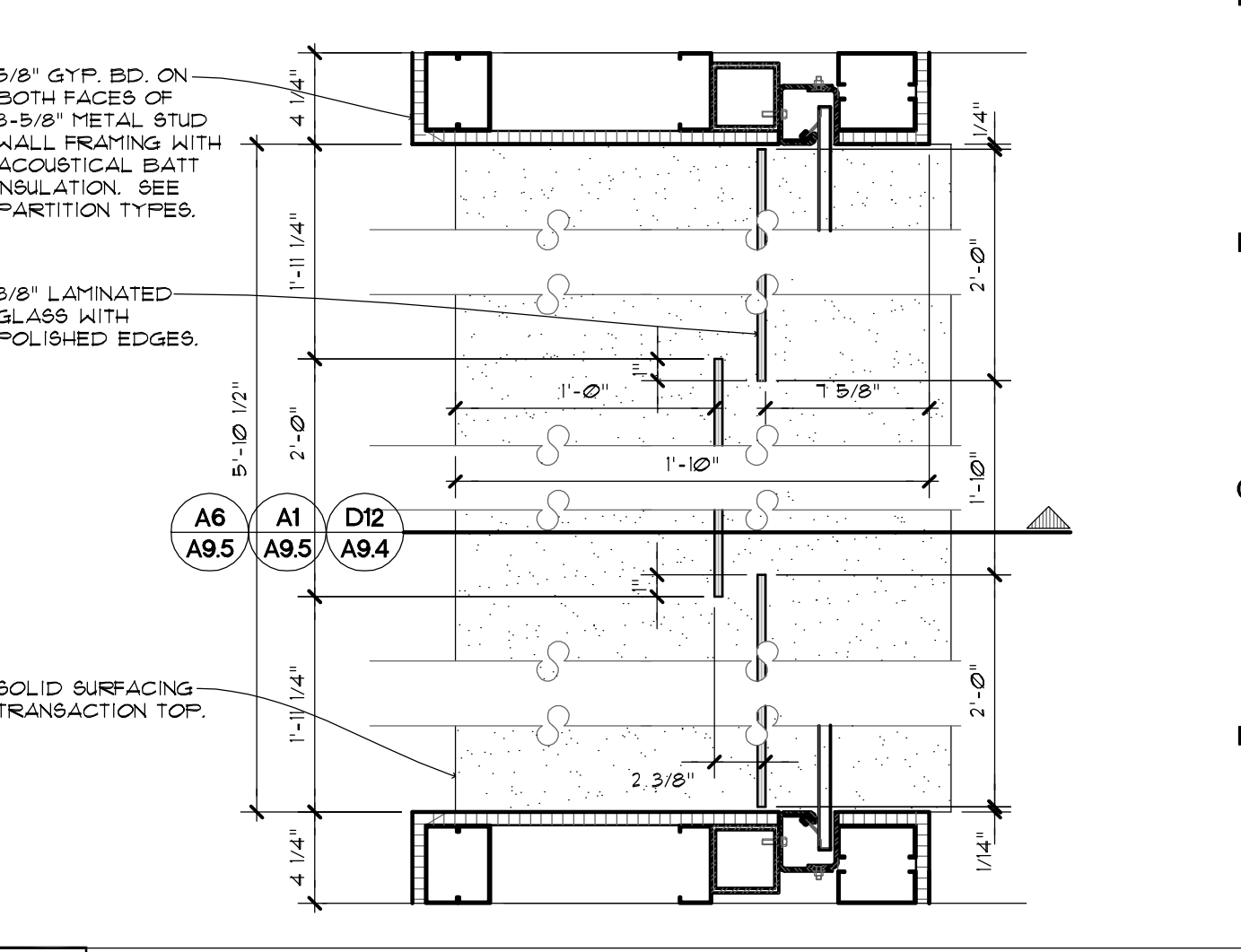
**D14** HEAD DETAIL  
1" = 1'-0"



**A14** JAMB DETAIL  
3" = 1'-0"



**D18** PLAN DETAIL  
1 1/2" = 1'-0"



**A18** PLAN DETAIL  
1 1/2" = 1'-0"

**Archiverde**  
DESIGN ARCHITECTURE INTERIORS  
139 Ashman Street  
Midland, MI 48640

**RENOVATIONS TO MIDLAND COUNTY SERVICES BUILDING**  
MICHIGAN  
MIDLAND

**INTERIOR DETAILS**

**ISSUE BIDS AND PERMITS**  
NOVEMBER 11, 2024  
Revised

**SCALE:**

**PROJECT NO.**  
20220400

**DRAWING NO.**  
A9.5

**GENERAL PLUMBING DEMOLITION NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE EXTENT OF DEMOLITION WORK SHALL BE AS REQUIRED BY THE NEW WORK.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING SYSTEMS/EQUIPMENT PRIOR TO ISSUING THEIR BID. ALL EXISTING PIPE SIZES AND ROUTINGS/LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY CONTRACTOR.
- ALL PLUMBING ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE WITH ALL RELATED ITEMS INCLUDING, BUT NOT LIMITED TO, HANGERS, SUPPORTS, CONTROLS, ETC. REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF OFF SITE. CAP ALL OPEN ENDED PIPING AND DUCTWORK.
- ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED, BY THE OWNER OR OWNER'S REPRESENTATIVE, AT LEAST (7) DAYS IN ADVANCE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING OPERATION.
- WHERE DEMOLITION OF EXISTING SERVICES ARE REQUIRED TO ACCOMMODATE THE PROJECT PHASING/SCHEDULING, AND SERVICES ARE TO BE INTERRUPTED IN AREAS THAT ARE REMAINING OCCUPIED, THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES AND/OR CONNECTIONS TO THE OCCUPIED AREAS TO MAINTAIN ITS PRESENT OPERATION. IF SYSTEM SHUT DOWNS ARE REQUIRED, THE CONTRACTOR SHALL SCHEDULE WORK TO BE PERFORMED AT UNOCCUPIED HOURS.
- ALL ITEMS TO BE REMOVED AND/OR RELOCATED SHALL BE REMOVED AND/OR RELOCATED TOGETHER WITH ALL RELATED ITEMS AS REQUIRED BY THE NEW WORK TO BE PERFORMED.
- COORDINATE ALL REMOVAL AND/OR RELOCATION WITH THE EXTENT OF THE NEW WORK AND WITH ALL OTHER TRADES INVOLVED.
- UNLESS NOTED OTHERWISE, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, CORING, PATCHING ASSOCIATED WITH THEIR WORK. CUTTING, CORING, PATCHING WORK SHALL BE PERFORMED BY A QUALIFIED SUB-CONTRACTOR AND MATCH EXISTING OR NEW FINISHES.

**GENERAL WET-PIPE FIRE SUPPRESSION NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL DESIGN & BUILD FIRE SUPPRESSION SYSTEMS COMPLETE, PER APPLICABLE CODES, PER NFPA, PER OWNER'S INSURANCE CARRIER REQUIREMENTS (CONTRACTOR TO VERIFY INSURANCE REQUIREMENTS WITH OWNER), AND PER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. F.S. SHALL PREPARE HYDRAULIC CALCULATIONS/SHOP DRAWINGS, SUBMIT TO THE AUTHORITY HAVING JURISDICTION AND OBTAIN NECESSARY APPROVALS PRIOR TO CONSTRUCTION.
- FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL RENOVATE THE EXISTING AUTOMATIC WET PIPE SPRINKLER SYSTEM CURRENTLY PROTECTING THE BUILDING AS REQUIRED TO ACCOMMODATE THE PROJECT'S BUILDING RENOVATIONS INCLUDING ALL PIPING, OFFSETS, FITTINGS, DRAINS, TEST CONNECTIONS, SPRINKLER HEADS, ETC...FOR THE PROJECT WORK AREAS SHOWN ON THE PLANS. REFER TO ARCHITECTURAL DEMOLITION & NEW WORK PLANS FOR EXTENT OF RENOVATIONS.
- FIRE SUPPRESSION SUBCONTRACTOR (F.S.) MAY REQUEST THE ORIGINAL EXISTING (E) FIRE PROTECTION PLANS/SHOP DRAWINGS FROM THE OWNER. THE EXISTING/ORIGINAL FIRE PROTECTION PLANS/SHOP DRAWINGS SHALL BE FOR REFERENCE ONLY - THE F.S. SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE ACCURACY OF THE EXISTING/ORIGINAL FIRE PROTECTION PLANS/SHOP DRAWINGS AS REQUIRED FOR BIDDING/CONSTRUCTION.
- F.S. SHALL COORDINATE THEIR WORK WITH THE WORK OF ALL OTHER TRADES. SPRINKLER PIPING SHALL NOT BE LOCATED BELOW DUCT MOUNTED AIR FLOW TERMINAL UNITS, TERMINAL UNIT HEATING COILS, OR OTHER EQUIPMENT. COORDINATE INTERFACES WITH FIRE ALARM CONTRACTOR (E.G. FLOW SWITCHES, TAMPER SWITCHES, ETC.).
- MINIMUM RUN-OUT PIPE SIZE TO SPRINKLER HEADS SHALL BE 1".
- CONTRACTOR SHALL LOCATE SPRINKLER HEADS CENTERED IN CEILING TILES IN TWO DIRECTIONS UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES.
- REFER TO DIVISION 21 SPECIFICATIONS FOR OTHER REQUIREMENTS.

**GENERAL NOTES FOR CLEAN-AGENT (NOVEC 1230) FIRE PROTECTION WORK:**

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE CLEAN-AGENT (NOVEC 1230) WORK REQUIRED FOR THIS PROJECT. THE OWNER WILL DIRECT HIRE THE CLEAN-AGENT FIRE PROTECTION SUBCONTRACTOR (F.P.) = HEALY FIRE PROTECTION INC. (ORION, MI 48359; 248-373-7800) WHO SHALL DESIGN & BUILD CLEAN-AGENT FIRE PROTECTION SYSTEMS WORK FOR THIS PROJECT COMPLETE, PER APPLICABLE CODES, PER NFPA, PER OWNER'S INSURANCE CARRIER REQUIREMENTS (CONTRACTOR TO VERIFY INSURANCE REQUIREMENTS WITH OWNER), AND PER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. F.P. SHALL PREPARE HYDRAULIC CALCULATIONS/SHOP DRAWINGS, SUBMIT TO THE AUTHORITY HAVING JURISDICTION AND OBTAIN NECESSARY APPROVALS PRIOR TO CONSTRUCTION.
- CLEAN-AGENT FIRE PROTECTION SUBCONTRACTOR (F.P.) SHALL RENOVATE THE EXISTING CLEAN-AGENT (NOVEC 1230) SYSTEM CURRENTLY PROTECTING THE EXISTING 3RD FLOOR IT-DATA CENTER ROOM (APPROX. 870 SQ.FT) AS REQUIRED TO ACCOMMODATE THE PROJECT'S BUILDING RENOVATIONS INCLUDING:
  - DESIGN/BUILD A NEW NOVEC 1230 SYSTEM TO PROTECT THE NEW DATA CENTER ROOM IT 359 (APPROX. 600 SQ.FT).
  - REMOVAL OF EXISTING NOVEC 1230 SYSTEM CURRENTLY INSTALLED TO PROTECT THE EXISTING IT DATA CENTER ROOM (APPROX. 870 SQ.FT), AFTER THE NEW NOVEC SYSTEM IS INSTALLED TO PROTECT THE NEW DATA CENTER ROOM IT 359 (APPROX. 600 SQ.FT).
  - RENOVATE THE EXISTING CLEAN-AGENT NOVEC 1230 SYSTEM EQUIPMENT/PIPING/CONTROLS/ETC...WITHIN THE EXISTING/CURRENT NOVEC SYSTEM CLOSET AS REQUIRED TO RELOCATE THE ACCESS DOOR TO THE NOVEC SYSTEM CLOSET AS SHOWN ON THE PLANS.
  - COORDINATE PHASING OF THIS CLEAN AGENT F.P. WORK, WITH ALL OTHER SUBCONTRACTOR TRADES, AS NEEDED TO MINIMIZE DOWNTIME OF THE OWNER'S IT-DATA CENTER SYSTEM.
  - INCLUDING ALL PIPING, OFFSETS, FITTINGS, AGENT CONTAINERS, MANUAL STATIONS, DETECTORS, DISCHARGE NOZZLES, CONTROL PANEL & CONTROLS, ETC...REQUIRED FOR THE PROJECT WORK AREAS SHOWN ON THE PLANS. REFER TO ARCHITECTURAL & PLUMBING DEMOLITION/NEW WORK PLANS FOR EXTENT OF RENOVATIONS.
- REFER TO DIVISION 21 SPECIFICATIONS FOR OTHER REQUIREMENTS.

**GENERAL PLUMBING NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL SCOPE OF WORK. CONTRACTOR SHALL PROVIDE PLUMBING SYSTEMS AND RELATED EQUIPMENT COMPLETE AND INCLUDE ALL NECESSARY OFFSETS, FITTINGS, AND OTHER COMPONENTS REQUIRED DUE TO INTERFERENCES, SPACE CONSTRAINTS, ETC.
- PLUMBING SYSTEMS SHALL BE INSTALLED PER CURRENT MICHIGAN PLUMBING CODE, INTERNATIONAL FUEL GAS CODE, MICHIGAN MECHANICAL CODE, AND APPLICABLE BUILDING CODES (I.E. MICHIGAN BUILDING CODES, NFPA CODES, ETC.).
- COORDINATE THE INSTALLATION OF PLUMBING WORK WITH ALL OTHER TRADES. CONTRACTOR SHALL VERIFY ALL MECHANICAL, PLUMBING AND ELECTRICAL CLEARANCES PRIOR TO FABRICATION OF ANY NEW WORK. PIPING SHALL NOT BE LOCATED DIRECTLY OVER ELECTRICAL EQUIPMENT AND PANELS, OR INTERFERE WITH ELECTRICAL/MECHANICAL EQUIPMENT CLEARANCE SPACES.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION/HEIGHTS OF FIXTURES (STANDARD AND BARRIER FREE), SINKS, TOILETS, LAVATORIES, ETC. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILS ON CASEWORK, FURNITURE, ETC.
- ALL CLEANOUTS INSTALLED IN SANITARY WASTE AND VENT PIPING SHALL HAVE CODE REQUIRED CLEARANCES PROVIDED.
- ALL FIXTURES / EQUIPMENT SHALL BE PROVIDED WITH ISOLATION/STOP VALVES, INSTALLED IN ACCESSIBLE LOCATIONS.
- ALL FLOOR DRAINS SUBJECT TO LOSS OF SEAL (I.E. RESTROOMS, STORAGE ROOMS, ETC.) SHALL BE PROTECTED BY A TRAP SEAL PRIMER, OR TRAP PROTECTOR (WHERE ALLOWED BY CODE).
- COORDINATE ALL FLOOR, WALL, AND ROOF PENETRATIONS, ETC. WITH ARCHITECTURAL/STRUCTURAL TRADES PRIOR TO ROUGH-IN. UNLESS NOTED OTHERWISE, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, CORING, PATCHING ASSOCIATED WITH THEIR WORK. CUTTING, CORING, PATCHING WORK SHALL BE PERFORMED BY A QUALIFIED SUB-CONTRACTOR AND MATCH EXISTING OR NEW FINISHES.
- UNLESS OTHERWISE NOTED, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL NEW PENETRATIONS THROUGH ALL WALLS WITH FIRE CAULK IN ACCORDANCE WITH CURRENT BUILDING CODE REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR LOCATION/RATINGS OF FIRE RATED ASSEMBLIES.

**PLUMBING ABBREVIATION LIST**

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AAV	AIR ADMITTANCE VALVE	INL	INLET
AFF	ABOVE FINISHED FLOOR	IW	INDIRECT WASTE
ASR	AUTOMATIC SPRINKLER RISER	KW	KILOWATT
BFP	BACKFLOW PREVENTER	LAV	LAVATORY
BHP	BRAKE HORSEPOWER	LWT	LEAVING WATER TEMPERATURE
BMS	BUILDING MANAGEMENT SYSTEM	MAX	MAXIMUM
BPI	BI POLAR IONIZER	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
BTU	BRITISH THERMAL UNIT	M.C.	MECHANICAL CONTRACTOR
BTUH	BRITISH THERMAL UNITS PER HOUR	MECH	MECHANICAL
CAP	CAPACITY	MFR	MANUFACTURER
CFH	CUBIC FEET PER HOUR	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	MISC	MISCELLANEOUS
CI	CAST IRON	MS	MOP SINK
CO	CLEAN OUT	NC	NORMALLY CLOSED
COND	CONDENSATE	NIC	NOT IN CONTRACT
CONT	CONTINUATION OR CONTINUED	NO	NORMALLY OPEN
CONTR	CONTRACTOR	NOM	NOMINAL
COORD	COORDINATE	OC	ON CENTER/CENTER TO CENTER
COS	CENTRAL OPERATOR STATION	OD	OUTSIDE DIAMETER
CW	DOMESTIC COLD WATER	ORC	OVERFLOW ROOF DRAIN CONDUCTOR
DB	DRY BULB TEMPERATURE	ORD	OVERFLOW ROOF DRAIN
DDC	DIRECT DIGITAL CONTROL	PC	PUMPED CONDENSATE
DEG	DEGREES	P.C.	PLUMBING CONTRACTOR
DF	DRINKING FOUNTAIN	PD	PRESSURE DROP
DN	DOWN	PRI	PRIOR TO ROUGH-IN
DWH	DOMESTIC WATER HEATER	PRV	PRESSURE REDUCING VALVE
DW&V	DRAINAGE WASTE & VENT	PSIA	POUNDS PER SQUARE INCH (ABSOLUTE)
(E)	EXISTING	PSIG	POUNDS PER SQUARE INCH (GAUGE)
E.C.	ELECTRICAL CONTRACTOR	(R)	RELOCATED
ELEC	ELECTRICAL	RC	RAIN CONDUCTOR
ELEV	ELEVATION	RD	ROOF DRAIN
ESH	EMERGENCY SHOWER	RDC	ROOF DRAIN CONDUCTOR
EWB	ENTERING WET BULB TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	SAN	SANITARY WASTE
F	FIRE SUPPRESSION PIPING	SD	STORM DRAIN
(F)	FUTURE	SK	SINK
F.A.	OWNER DIRECT FIRE ALARM SUBCONTRACTOR	SPHD	SPRINKLER HEAD
FD	FLOOR DRAIN	SPKR	SPRINKLER
FFD	FUNNEL FLOOR DRAIN	SPKR.STP	SPRINKLER STANDPIPE
FLA	FULL LOAD AMPS	SqFt	SQUARE FOOT/SQUARE FEET
FLR	FLOOR	SS	SERVICE SINK
F.P.	OWNER DIRECT FIRE PROTECTION CONTRACTOR (FOR CLEAN AGENT NOVEC 1230 WORK)	ST	STORM WATER
FPM	FEET PER MINUTE	T.D.	TEMPERATURE CONTROLS SUBCONTRACTOR
F.S.	FIRE SUPPRESSION SUBCONTRACTOR (FOR WET PIPE FIRE SUPPRESSION WORK)	TYP	TYPICAL
FS	FLOOR SINK	U/G	UNDERGROUND (BELOW GRADE)
FT	FEET	UL	GALLONS PER HOUR
G	GAS (NATURAL GAS/PROPANE)	UON	UNLESS OTHERWISE NOTED
GPH	GALLONS PER HOUR	UR	URINAL
GPM	GALLONS PER MINUTE	V	VENT
HB	HOSE BIB	VFD	VARIABLE FREQUENCY DRIVE
HP	HORSEPOWER	VS	VENT STACK
HR	HOUR	VSD	VARIABLE SPEED DRIVE
HTG	HEATING	VTR	VENT THRU ROOF
HW	DOMESTIC HOT WATER	W	WASTE
HWR	DOMESTIC HOT WATER RETURN	WB	WET BULB TEMPERATURE
HYD	HYDRANT	WC	WATER CLOSET
ID	INSIDE DIAMETER	WCO	WALL CLEAN OUT
I.E.	INVERT ELEVATION	WG	WATER GAUGE
IN	INCHES	WH	WALL HYDRANT
		W&V	WASTE & VENT

**PLUMBING SYMBOL LIST**

SYMBOL	DESCRIPTION
	PIPE ELBOW UP
	PIPE ELBOW DOWN
	DIRECTION OF FLOW
	UNION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	FLEXIBLE CONNECTION (PIPE)
	PIPE CAP OR PLUG
	CIRCULATING PUMP
	PLUG VALVE
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE (SWING)
	CHECK VALVE (SPRING)
	PLUG VALVE
	BALANCE VALVE
	COMBINATION BALANCE VALVE & FLOW MEASURING DEVICE
	STRAINER (Y-TYPE)
	STRAINER (BLOW OFF TYPE)
	TRAP (PLAN VIEW)
	FLOOR DRAIN (PLAN VIEW)
	FLOOR DRAIN (ELEVATION)
	FUNNEL FLOOR DRAIN (PLAN VIEW)
	FUNNEL FLOOR DRAIN (ELEVATION)
	ROOF DRAIN SUMP
	CLEAN OUT (IN FLOOR)
	CLEAN OUT (IN LINE)
	BACKFLOW PREVENTER
	HOSE BIBB (INTERIOR - NON FREEZEPROOF)
	WALL HYDRANT (EXTERIOR - FREEZEPROOF)
	SAMESE CONNECTION (WALL MOUNTED)
	PRESSURE RELIEF VALVE
	PRESSURE REDUCING VALVE
	PRESSURE AND TEMPERATURE RELIEF VALVE
	PRESSURE REGULATING VALVE
	PRESSURE AND TEMPERATURE TEST PLUG
	PRESSURE GAUGE AND COCK
	THERMOMETER
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	DOMESTIC HOT WATER RETURN PIPING
	DOMESTIC TEMPERED DOMESTIC HOT WATER PIPING
	SANITARY WASTE PIPING
	STORM SEWER PIPING
	RAIN CONDUCTOR PIPING
	SANITARY VENT PIPING
	GAS PIPING (NATURAL GAS OR PROPANE)
	NON POTABLE COLD WATER
	FIRE PROTECTION/SUPPRESSION PIPING
	FLOW SWITCH
	WET-PIPE FIRE SUPPRESSION SPRINKLER HEAD

NOTE:  
ALL CEILING SPACES ARE RETURN AIR PLENUM.  
ALL PIPING ROUTED THRU THE CEILING PLENUM SPACE SHALL BE INSULATED/JACKETED PER SPECS.

**PLUMBING DRAWING INDEX**

- PO.1 PLUMBING & FIRE SUPPRESSION TITLE SHEET
- P1.1 FIRST FLOOR PLUMBING PLAN - SANITARY DEMOLITION
- P1.2 SECOND FLOOR PLUMBING PLAN - SANITARY DEMOLITION
- P1.3 THIRD FLOOR PLUMBING PLAN - SANITARY DEMOLITION
- P2.1 FIRST FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION DEMOLITION
- P2.2 SECOND FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION DEMOLITION
- P2.3 THIRD FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION DEMOLITION
- P3.1 FIRST FLOOR PLUMBING PLAN - SANITARY NEW WORK
- P3.2 SECOND FLOOR PLUMBING PLAN - SANITARY NEW WORK
- P3.3 THIRD FLOOR PLUMBING PLAN - SANITARY NEW WORK
- P4.1 FIRST FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION NEW WORK
- P4.2 SECOND FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION NEW WORK
- P4.3 THIRD FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION NEW WORK
- P5.1 PLUMBING DETAILS

**METHODS OF NOTATION**

- EQUIPMENT DESIGNATION (I.E. EXHAUST FAN NUMBER 1)
- CONSTRUCTION KEYED NOTE NUMBER
- DEMOLITION KEYED NOTE NUMBER
- EXISTING SYSTEM COMPONENT TO BE REMOVED
- NEW SYSTEM COMPONENT
- EXISTING SYSTEM COMPONENT TO REMAIN
- POINT OF NEW CONNECTION



PREPARED UNDER THE SUPERVISION OF:  
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RENOVATIONS TO  
MIDLAND COUNTY SERVICES BUILDING  
MICHIGAN  
MIDLAND

PLUMBING & FIRE SUPPRESSION  
TITLE SHEET

ISSUE PERMITS & BIDS  
11-11-2024  
Revised

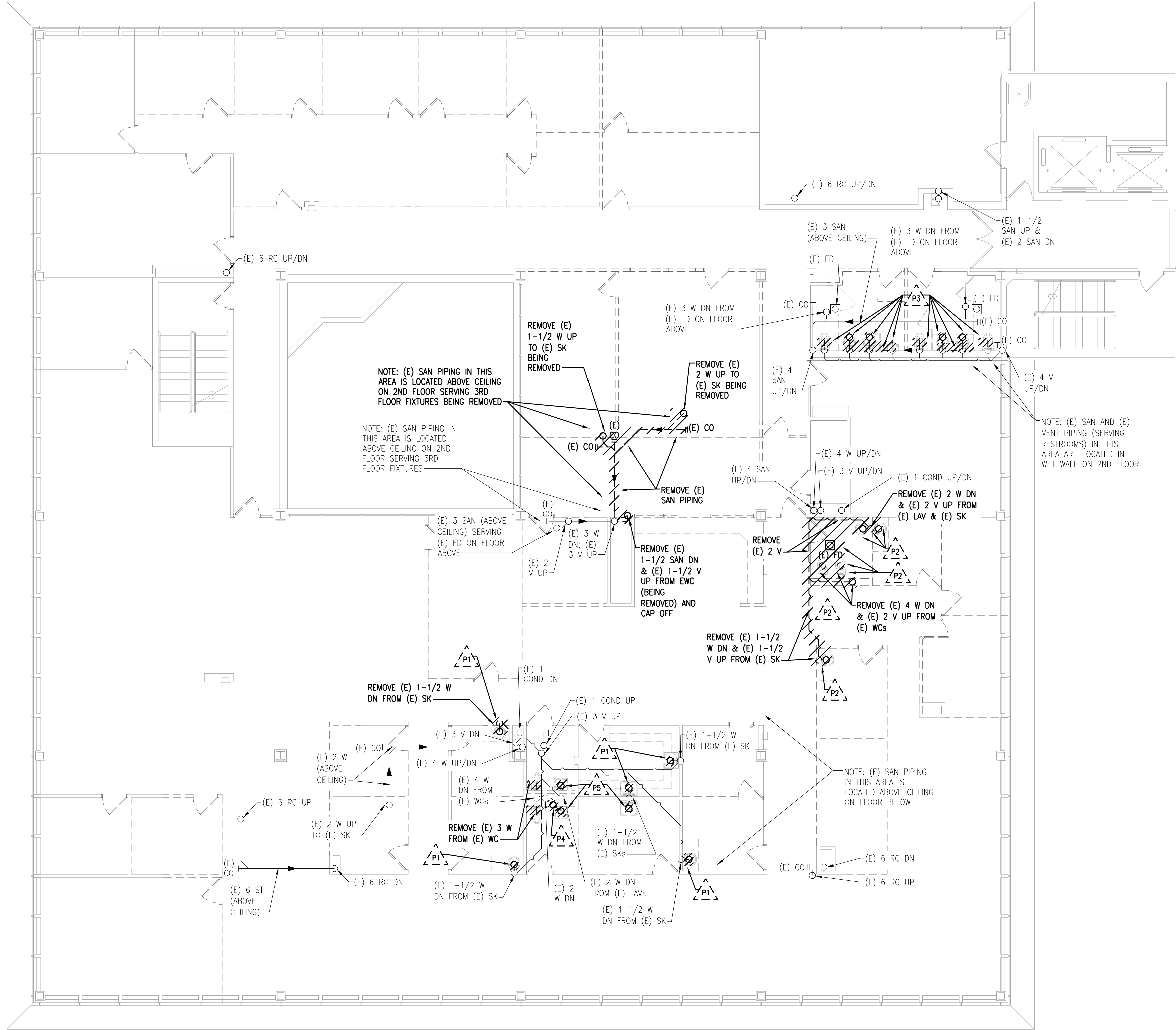
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**P0.1**







**KEYED SANITARY PLUMBING DEMOLITION NOTES:**

- P1** REMOVE (E) 1-1/2 SAN & VENT FROM (E) SINK/LAV BEING REMOVED AND PREPARE TO RECONNECT/EXTEND OR CAP OFF AS REQUIRED TO ACCOMMODATE NEW WORK. REFER TO NEW WORK PLANS.
- P2** REMOVE (E) SAN WASTE AND (E) VENTING FROM (E) SINKS, (E) LAVATORIES, (E) FD, AND (E) WATER CLOSETS BEING REMOVED. CAP OFF (E) SAN/W PIPING AS REQUIRED TO ACCOMMODATE NEW WORK. REFER TO NEW WORK PLANS.
- P3** REMOVE (E) SANITARY (SAN) WASTE (W) AND (E) VENTING FROM EXISTING (E) LAVATORIES, (E) WALL HUNG WATER CLOSETS, AND (E) WALL HUNG URINAL BEING REMOVED AND PREPARE TO EXTEND OR CAP OFF (E) SAN/(E) VENTING AS REQUIRED TO ACCOMMODATE NEW WORK. COORDINATE DEMOLITION LIMITS OF (E) WET WALL AS REQUIRED TO ACCOMMODATE RENOVATIONS. REFER TO NEW WORK PLANS.
- P4** REMOVE (E) SANITARY (SAN) WASTE (W) FROM EXISTING (E) SINK BEING REMOVED ON THE 3RD FLOOR AND PREPARE TO CAP OFF.
- P5** REMOVE (E) 1-1/2 SAN FROM (E) SINK/LAV BEING REMOVED AND PREPARE TO CAP OFF. NOTE: SAN/VENT SERVES OTHER NEARBY FIXTURES THAT ARE TO REMAIN INTACT - REFER TO NEW WORK PLANS.
- P6** CONTRACTOR TO VERIFY LOCATION OF (E) 6 RC UP/DN AND RELOCATE AS REQUIRED TO ACCOMMODATE THE REMOVAL OF PORTION OF CHASE. COORDINATE WITH M.C. AND ARCHITECT.
- P7** REMOVE (E) GARBAGE DISPOSER AND PREPARE TO RECONNECT TO NEW - REFER TO NEW WORK PLANS AND FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.

PLAN NORTH  
**SECOND FLOOR PLUMBING PLAN - SANITARY DEMOLITION**  
 SCALE: 1/8" = 1'-0"

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RENOVATIONS TO  
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**SECOND FLOOR PLUMBING PLAN -  
 SANITARY DEMOLITION**

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**P1.2**







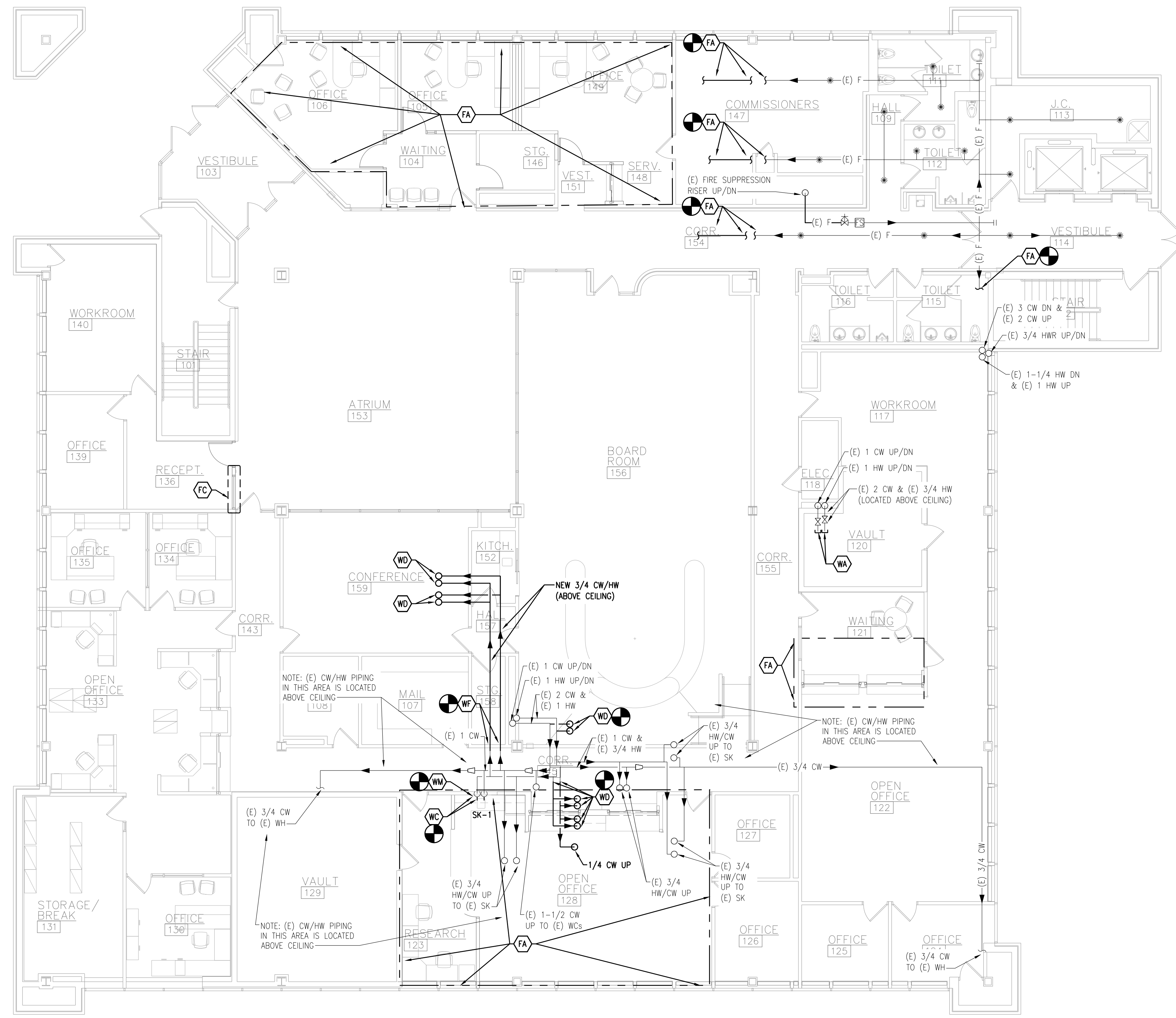












**FIRST FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION NEW WORK**

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

**KEYED DOMESTIC WATER PLUMBING CONSTRUCTION NOTES:**

- ⓌA CAP OFF EXISTING (E) PIPE WATER TIGHT.
- ⓌB CAP OFF (E) 1/2 CW/HW SERVING SINK THAT WAS REMOVED WHILE KEEPING INTACT (E) 3/4 CW/HW DN AS IT SERVES ANOTHER (E) SINK (IN ADJACENT ROOM) THAT IS TO REMAIN.
- ⓌC RECONNECT/EXTEND (E) 1/2 CW/HW AS REQUIRED TO CONNECT TO NEW SINK/LAVATORY.
- ⓌD NEW 3/4 CW/HW UP TO NEW LAVATORY/SINK ON FLOOR ABOVE. EXTEND AS REQUIRED FROM (E) CW/HW.
- ⓌE NEW 3/4 CW/HW DOWN. CONNECT NEW 1/2 CW/HW TO NEW LAVATORY/SINK.
- ⓌF CONNECT TO (E) 1/2 CW/HW (LOCATED IN 1ST FLOOR CEILING SPACE BELOW), INCREASE TO 3/4 CW/HW & EXTEND TO SERVE NEW SINKS.
- ⓌG CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV), EXTEND/MODIFY (E) CW/HW FROM (E) PIPES IN WET WALL TO SERVE NEW RESTROOMS.
- ⓌH CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV) IN NEW LOCATION. EXTEND (E) CW/HW IN (E) WET WALL/ABOVE CEILING TO SERVE NEW LAVATORY.
- ⓌI CONNECT NEW 1-1/2 CW TO NEW WATER CLOSET (WC-1). CONNECT TO/EXTEND FROM CW IN (E) WET WALL TO SERVE NEW RESTROOM.
- ⓌJ CONNECT TO AND EXTEND (E) CW/HW IN WET WALL AS REQUIRED TO ACCOMMODATE THE RENOVATIONS.
- ⓌK CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV-2). CONNECT TO/EXTEND FROM CW/HW IN (E) WET WALL TO SERVE NEW RESTROOMS.
- ⓌL CONNECT NEW 3/4 CW TO NEW URINAL (UR-1). CONNECT TO/EXTEND FROM CW IN (E) WET WALL TO SERVE NEW RESTROOMS.
- ⓌM REINSTALL & RECONNECT EXISTING (E) INSTANT HOT WATER DISPENSER SYSTEM THAT WAS REMOVED FROM PREVIOUS SINK IN THIS AREA.
- ⓌN INSTALL NEW CW/HW TAPS FOR EACH BATHROOM GROUP. EXTEND OUT FROM EXISTING WET WALL INTO ACCESSIBLE CEILING ABOVE NEARBY CONFERENCE ROOM, AND INSTALL NEW BALL VALVES TO ISOLATE (E) RESTROOM GROUP'S CW/HW MAINS (IN WET WALL) FROM THE (E) CW/HW RISER MAINS (IN WET WALL) SERVING ALL RESTROOMS ON ALL FLOORS. COORDINATE THE EXTENT OF WALL REMOVAL & REPLACEMENT REQUIRED TO ACCESS & MODIFY THE (E) CW/HW MAINS WITHIN THE EXISTING WET WALL WITH CONCRETE/CARPENTER TRADES PRIOR TO ROUGH-IN.

**KEYED FIRE SUPPRESSION-PROTECTION CONSTRUCT NOTES:**

- ⓌA FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL MODIFY THE BUILDING'S EXISTING (E) WET PIPE FIRE SUPPRESSION SPRINKLER SYSTEM AS REQUIRED TO PROTECT ALL OF THE 1ST FLOOR, 2ND FLOOR, AND 3RD FLOOR RENOVATION PROJECT WORK AREAS. REFER TO ARCHITECTURAL PLANS FOR WORK SCOPE AREAS. REFER TO DIVISION 21000 SPECIFICATIONS.
- ⓌB NOT USED
- ⓌC FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL PROVIDE NEW WET PIPE FIRE SUPPRESSION SPRINKLERS AS NEEDED TO WASH/PROTECT BOTH SIDES OF NEW GLAZING IN NOTED AREAS. REFER TO ARCHITECTURAL PLANS FOR DETAILS ON GLAZING LOCATION/SIZES/FIRE RATINGS, ETC.
- ⓌD SPECIAL CLEAN AGENT FIRE PROTECTION SUBCONTRACTOR (F.P.) SHALL MODIFY THE (E) CLEAN AGENT (NOVAC 1230) FIRE PROTECTION SYSTEM EQUIPMENT/PIPING, ETC. AS REQUIRED TO RELOCATE THE IT DATA CENTER FROM EXISTING IT ROOM 371 TO NEW IT ROOM 359, AFTER THE NEW DATA CENTER IS CONSTRUCTED/OPERATING. OWNER WILL DIRECT HIRE THIS WORK - CONTACT OWNER'S CURRENT F.P. (HEALEY FIRE PROTECTION @ 248-373-7800) FOR WORK ON THE SPECIAL CLEAN AGENT FIRE PROTECTION WORK NEEDED FOR THIS PROJECT.
- ⓌE SPECIAL CLEAN AGENT FIRE PROTECTION SUBCONTRACTOR (F.P.) SHALL REVERSE/RELOCATE ANY (E) CLEAN AGENT (NOVAC 1230) FIRE PROTECTION SYSTEM EQUIPMENT/PIPING/CONTROLS, ETC. AS REQUIRED TO RELOCATE THE DOOR TO/FOR THE CLEAN AGENT FIRE PROTECTION CLOSET AS SHOWN ON THE PLANS TO ACCESS FROM NEW IT 358. OWNER WILL DIRECT HIRE THIS WORK - CONTACT OWNER'S CURRENT F.P. (HEALEY FIRE PROTECTION @ 248-373-7800) FOR WORK ON THE SPECIAL CLEAN AGENT FIRE PROTECTION WORK NEEDED FOR THIS PROJECT.

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RENOVATIONS TO  
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FIRST FLOOR PLUMBING PLAN -  
WATER & FIRE SUPPRESSION  
NEW WORK

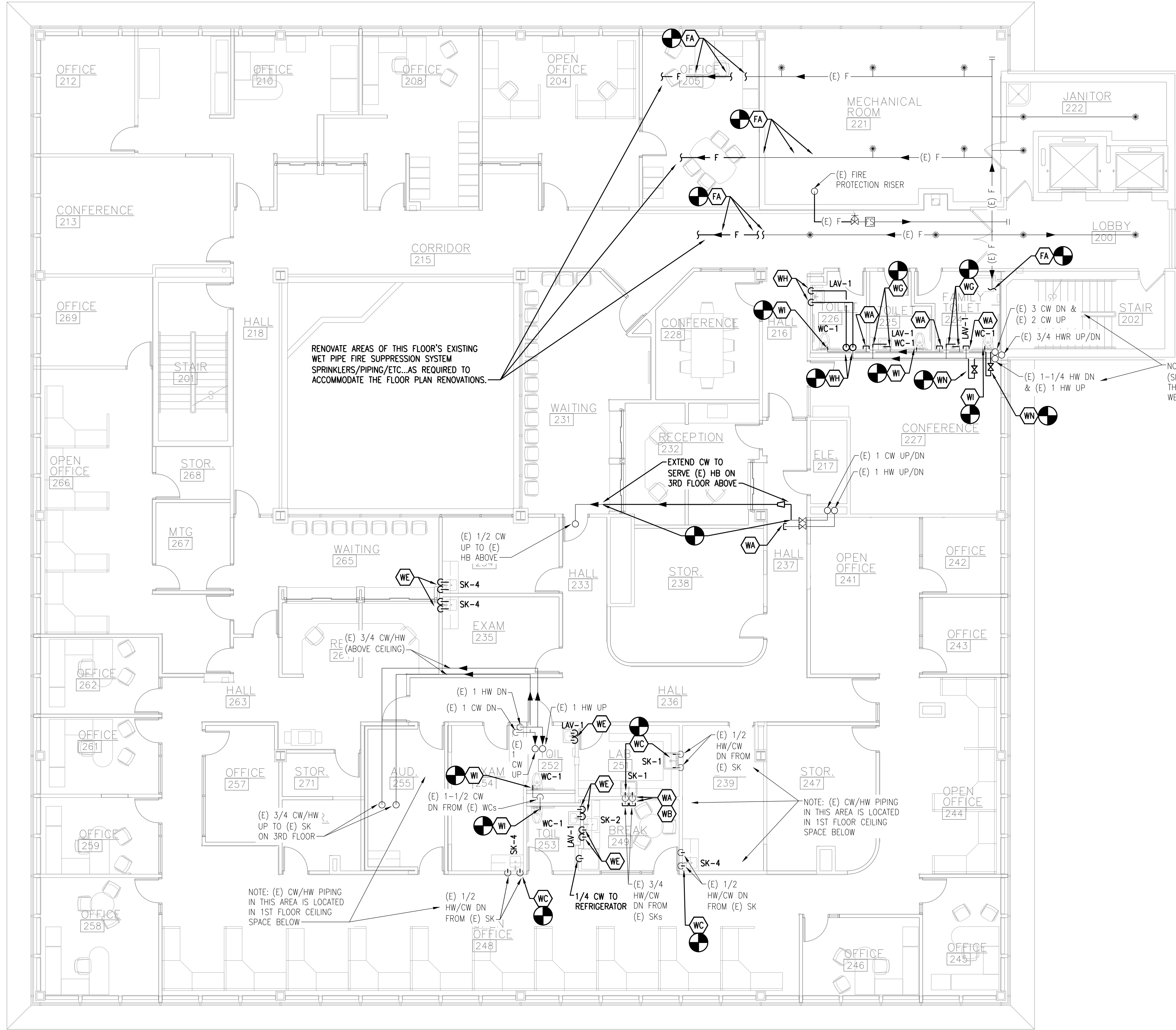
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**KEYED DOMESTIC WATER PLUMBING CONSTRUCTION NOTES:**

- ⊖WA CAP OFF EXISTING (E) PIPE WATER TIGHT.
- ⊖WB CAP OFF (E) 1/2 CW/HW SERVING SINK THAT WAS REMOVED WHILE KEEPING INTACT (E) 3/4 CW/HW DN AS IT SERVES ANOTHER (E) SINK (IN ADJACENT ROOM) THAT IS TO REMAIN.
- ⊖WC RECONNECT/EXTEND (E) 1/2 CW/HW AS REQUIRED TO CONNECT TO NEW SINK/LAVATORY.
- ⊖WD NEW 3/4 CW/HW UP TO NEW LAVATORY/SINK ON FLOOR ABOVE. EXTEND AS REQUIRED FROM (E) CW/HW.
- ⊖WE NEW 3/4 CW/HW DOWN. CONNECT NEW 1/2 CW/HW TO NEW LAVATORY/SINK.
- ⊖WF CONNECT TO (E) 1/2 CW/HW (LOCATED IN 1ST FLOOR CEILING SPACE BELOW). INCREASE TO 3/4 CW/HW & EXTEND TO SERVE NEW SINKS.
- ⊖WG CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV). EXTEND/MODIFY (E) CW/HW FROM (E) PIPES IN WET WALL TO SERVE NEW RESTROOMS.
- ⊖WH CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV) IN NEW LOCATION. EXTEND (E) CW/HW IN (E) WET WALL/ABOVE CEILING TO SERVE NEW LAVATORY.
- ⊖WI CONNECT NEW 1-1/2 CW TO NEW WATER CLOSET (WC-1). CONNECT TO/EXTEND FROM CW IN (E) WET WALL TO SERVE NEW RESTROOM.
- ⊖WJ CONNECT TO AND EXTEND (E) CW/HW IN WET WALL AS REQUIRED TO ACCOMMODATE THE RENOVATIONS.
- ⊖WK CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV-2). CONNECT TO/EXTEND FROM CW/HW IN (E) WET WALL TO SERVE NEW RESTROOMS.
- ⊖WL CONNECT NEW 3/4 CW TO NEW URINAL (UR-1). CONNECT TO/EXTEND FROM CW IN (E) WET WALL TO SERVE NEW RESTROOMS.
- ⊖WM REINSTALL & RECONNECT EXISTING (E) INSTANT HOT WATER DISPENSER SYSTEM THAT WAS REMOVED FROM PREVIOUS SINK IN THIS AREA.
- ⊖WN INSTALL NEW CW/HW TAPS FOR EACH BATHROOM GROUP. EXTEND OUT FROM EXISTING WET WALL INTO ACCESSIBLE CEILING ABOVE NEARBY CONFERENCE ROOM, AND INSTALL NEW BALL VALVES TO ISOLATE (E) RESTROOM GROUP'S CW/HW MAINS (IN WET WALL) FROM THE (E) CW/HW RISER MAINS (IN WET WALL) SERVING ALL RESTROOMS ON ALL FLOORS. COORDINATE THE EXTENT OF WALL REMOVAL & REPLACEMENT REQUIRED TO ACCESS & MODIFY THE (E) CW/HW MAINS WITHIN THE EXISTING WET WALL WITH CONCRETE/CARPENTER TRADES PRIOR TO ROUGH-IN.

NOTE: (E) CW/HW PIPING (SERVING RESTROOMS) IN THIS AREA IS LOCATED IN WET WALL ON 2ND FLOOR

**KEYED FIRE SUPPRESSION-PROTECTION CONSTRUCT NOTES:**

- ⊖FA FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL MODIFY THE BUILDING'S EXISTING (E) WET PIPE FIRE SUPPRESSION SPRINKLER SYSTEM AS REQUIRED TO PROTECT ALL OF THE 1ST FLOOR, 2ND FLOOR, AND 3RD FLOOR RENOVATION PROJECT WORK AREAS. REFER TO ARCHITECTURAL PLANS FOR WORK SCOPE AREAS. REFER TO DIVISION 21000 SPECIFICATIONS.
- ⊖FB NOT USED
- ⊖FC FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL PROVIDE NEW WET PIPE FIRE SUPPRESSION SPRINKLERS AS NEEDED TO WASH/PROTECT BOTH SIDES OF NEW GLAZING IN NOTED AREAS. REFER TO ARCHITECTURAL PLANS FOR DETAILS ON GLAZING LOCATION/SIZES/FIRE RATINGS, ETC.
- ⊖FD SPECIAL CLEAN AGENT FIRE PROTECTION SUBCONTRACTOR (F.P.) SHALL MODIFY THE (E) CLEAN AGENT (NOVAC 1230) FIRE PROTECTION SYSTEM EQUIPMENT/PIPING, ETC. AS REQUIRED TO RELOCATE THE IT DATA CENTER FROM EXISTING IT ROOM 371 TO NEW IT ROOM 359, AFTER THE NEW DATA CENTER IS CONSTRUCTED/OPERATING. OWNER WILL DIRECT HIRE THIS WORK - CONTACT OWNER'S CURRENT F.P. (HEALEY FIRE PROTECTION @ 248-373-7800) FOR WORK ON THE SPECIAL CLEAN AGENT FIRE PROTECTION WORK NEEDED FOR THIS PROJECT.
- ⊖FE SPECIAL CLEAN AGENT FIRE PROTECTION SUBCONTRACTOR (F.P.) SHALL REVERSE/RELOCATE ANY (E) CLEAN AGENT (NOVAC 1230) FIRE PROTECTION SYSTEM EQUIPMENT/PIPING/CONTROLS, ETC. AS REQUIRED TO RELOCATE THE DOOR TO/FOR THE CLEAN AGENT FIRE PROTECTION CLOSET AS SHOWN ON THE PLANS TO ACCESS FROM NEW IT 358. OWNER WILL DIRECT HIRE THIS WORK - CONTACT OWNER'S CURRENT F.P. (HEALEY FIRE PROTECTION @ 248-373-7800) FOR WORK ON THE SPECIAL CLEAN AGENT FIRE PROTECTION WORK NEEDED FOR THIS PROJECT.



**SECOND FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION NEW WORK**

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



SCALE: AS NOTED

PROJECT NO. 20220400

DRAWING NO. P4.2

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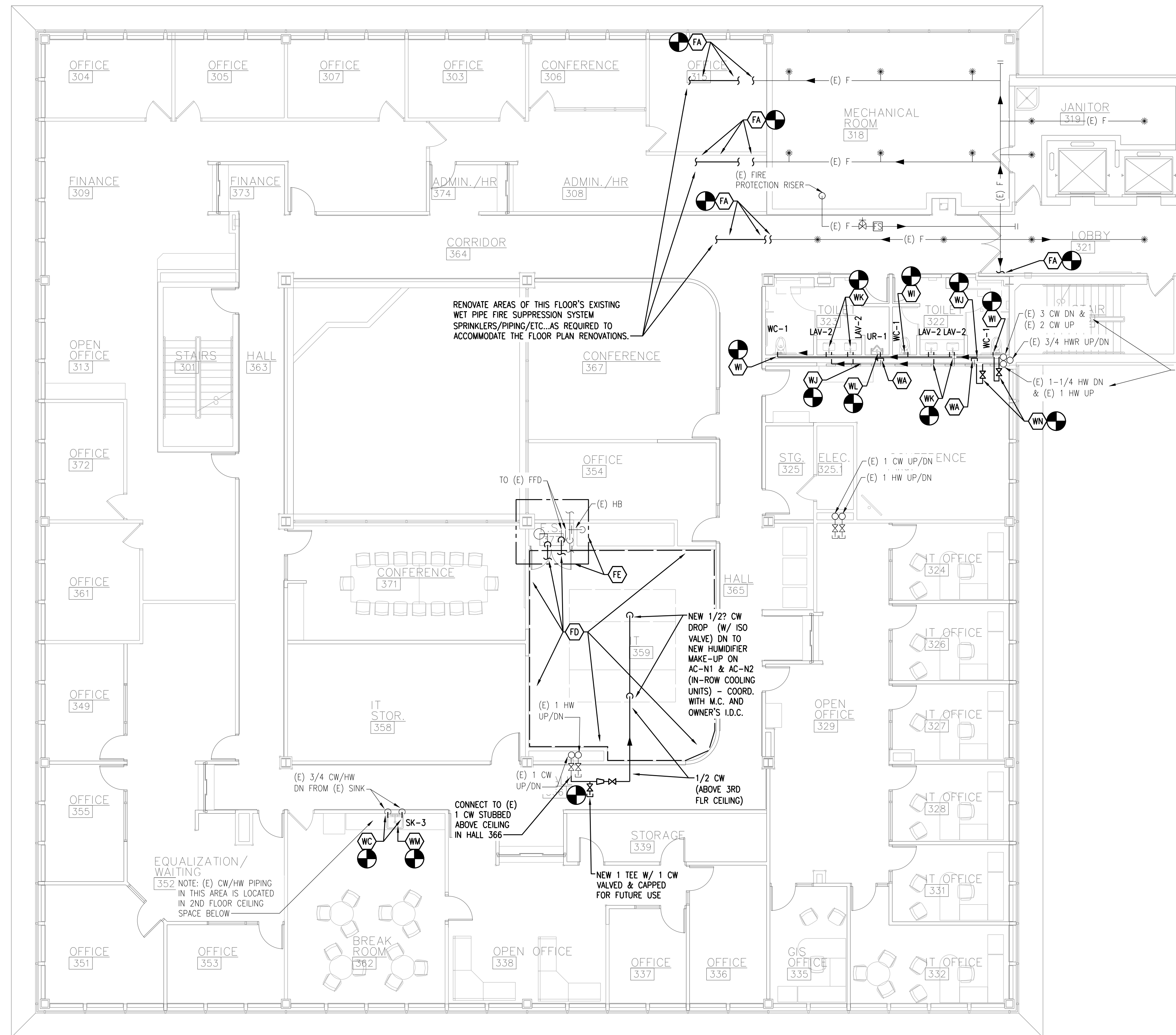
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RENOVATIONS TO  
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SECOND FLOOR PLUMBING PLAN -  
WATER & FIRE SUPPRESSION  
NEW WORK

ISSUE PERMITS & BIDS  
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Revised

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**KEYED DOMESTIC WATER PLUMBING CONSTRUCTION NOTES:**

- ⓌA CAP OFF EXISTING (E) PIPE WATER TIGHT.
- ⓌB CAP OFF (E) 1/2 CW/HW SERVING SINK THAT WAS REMOVED WHILE KEEPING INTACT (E) 3/4 CW/HW DN AS IT SERVES ANOTHER (E) SINK (IN ADJACENT ROOM) THAT IS TO REMAIN.
- ⓌC RECONNECT/EXTEND (E) 1/2 CW/HW AS REQUIRED TO CONNECT TO NEW SINK/LAVATORY.
- ⓌD NEW 3/4 CW/HW UP TO NEW LAVATORY/SINK ON FLOOR ABOVE. EXTEND AS REQUIRED FROM (E) CW/HW.
- ⓌE NEW 3/4 CW/HW DOWN. CONNECT NEW 1/2 CW/HW TO NEW LAVATORY/SINK.
- ⓌF CONNECT TO (E) 1/2 CW/HW (LOCATED IN 1ST FLOOR CEILING SPACE BELOW). INCREASE TO 3/4 CW/HW & EXTEND TO SERVE NEW SINKS.
- ⓌG CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV). EXTEND/MODIFY (E) CW/HW FROM (E) PIPES IN WET WALL TO SERVE NEW RESTROOMS.
- ⓌH CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV) IN NEW LOCATION. EXTEND (E) CW/HW IN (E) WET WALL/ABOVE CEILING TO SERVE NEW LAVATORY.
- ⓌI CONNECT NEW 1-1/2 CW TO NEW WATER CLOSET (WC-1). CONNECT TO/EXTEND FROM CW IN (E) WET WALL TO SERVE NEW RESTROOM.
- ⓌJ CONNECT TO AND EXTEND (E) CW/HW IN WET WALL AS REQUIRED TO ACCOMMODATE THE RENOVATIONS.
- ⓌK CONNECT NEW 1/2 CW/HW TO NEW LAVATORY (LAV-2). CONNECT TO/EXTEND FROM CW/HW IN (E) WET WALL TO SERVE NEW RESTROOMS.
- ⓌL CONNECT NEW 3/4 CW TO NEW URINAL (UR-1). CONNECT TO/EXTEND FROM CW IN (E) WET WALL TO SERVE NEW RESTROOMS.
- ⓌM REINSTALL & RECONNECT EXISTING (E) INSTANT HOT WATER DISPENSER SYSTEM THAT WAS REMOVED FROM PREVIOUS SINK IN THIS AREA.
- ⓌN INSTALL NEW CW/HW TAPS FOR EACH BATHROOM GROUP. EXTEND OUT FROM EXISTING WET WALL INTO ACCESSIBLE CEILING ABOVE NEARBY CONFERENCE ROOM, AND INSTALL NEW BALL VALVES TO ISOLATE (E) RESTROOM GROUP'S CW/HW MAINS (IN WET WALL) FROM THE (E) CW/HW RISER MAINS (IN WET WALL) SERVING ALL RESTROOMS ON ALL FLOORS. COORDINATE THE EXTENT OF WALL REMOVAL & REPLACEMENT REQUIRED TO ACCESS & MODIFY THE (E) CW/HW MAINS WITHIN THE EXISTING WET WALL WITH CONCRETE/CARPENTER TRADES PRIOR TO ROUGH-IN.

**KEYED FIRE SUPPRESSION-PROTECTION CONSTRUCTION NOTES:**

- ⓌA FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL MODIFY THE BUILDING'S EXISTING (E) WET PIPE FIRE SUPPRESSION SPRINKLER SYSTEM AS REQUIRED TO PROTECT ALL OF THE 1ST FLOOR, 2ND FLOOR, AND 3RD FLOOR RENOVATION PROJECT WORK AREAS. REFER TO ARCHITECTURAL PLANS FOR WORK SCOPE AREAS. REFER TO DIVISION 21000 SPECIFICATIONS.
- ⓌB NOT USED
- ⓌC FIRE SUPPRESSION SUBCONTRACTOR (F.S.) SHALL PROVIDE NEW WET PIPE FIRE SUPPRESSION SPRINKLERS AS NEEDED TO WASH/PROTECT BOTH SIDES OF NEW GLAZING IN NOTED AREAS. REFER TO ARCHITECTURAL PLANS FOR DETAILS ON GLAZING LOCATION/SIZES/FIRE RATINGS, ETC.
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**THIRD FLOOR PLUMBING PLAN - WATER & FIRE SUPPRESSION NEW WORK**

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



SCALE: AS NOTED  
 PROJECT NO. 20220400  
 DRAWING NO. P4.3

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 Midland, MI 48640

RENOVATIONS TO  
 MIDLAND COUNTY SERVICES BUILDING  
 MIDLAND MICHIGAN

THIRD FLOOR PLUMBING PLAN -  
 WATER & FIRE SUPPRESSION  
 NEW WORK

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised

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**PLUMBING FIXTURE SCHEDULE**

FIXTURE MARK	MANUFACTURER SERIES NUMBER	FIXTURE AND TRIM DESCRIPTION					ACCESSORIES, FEATURES, AND NOTES
<b>LAVATORIES</b>							
		BOWL TYPE	FAUCET	TRAP	TAIL-PIECE		
LAV-1	KOHLER "GREENWICH" K-2032 (BARRIER FREE)	WHITE VITREOUS CHINA WALL HUNG WITH CONCEALED ARM SUPPORTS	ADA APPROVED SENSOR FAUCET	1-1/2" CHROME PLATED	1-1/2" CHROME PLATED ADA COMPLIANT		FAUCET = ZURN "AQUASENSE" #Z6915-XL-ACA; 4" CENTER-DECK MOUNTED; 0.5 GPM VANDAL-RESISTANT LAMINAR AERATOR (-N); CHROME/CAST BRASS; 6-VDC PLUG-IN POWER CONVERTER (-ACA) & CONNECTOR WIRE (-CWB). PROVIDE GRID STRAINER DRAIN.
LAV-2	FAUCET & DRAIN ONLY LAV BOWL BY OTHERS - INTEGRATED INTO COUNTER (BARRIER FREE)	N/A	ADA APPROVED SENSOR FAUCET	1-1/2" CHROME PLATED	1-1/2" CHROME PLATED ADA COMPLIANT		FAUCET = ZURN "AQUASENSE" #Z6915-XL-ACA; 4" CENTER-DECK MOUNTED; 0.5 GPM VANDAL-RESISTANT LAMINAR AERATOR (-N); CHROME/CAST BRASS; 6-VDC PLUG-IN POWER CONVERTER (-ACA) & CONNECTOR WIRE (-CWB). PROVIDE GRID STRAINER DRAIN.
<b>SINKS</b>							
		BOWL TYPE	FAUCET	TRAP	TAIL-PIECE		
SK-1	FAUCET & DRAIN ONLY SK BOWL BY OTHERS - INTEGRATED INTO COUNTER BARRIER FREE	N/A	ADA APPROVED (SEE NOTES)	1-1/2" ADJUSTABLE CHROME PLATED P-TRAP	1-1/2" CHROME PLATED ADA COMPLIANT		FAUCET = ZURN MODEL "Z871B4-XL" 8" CENTERSET DECK FAUCET WITH 5.5" GOOSENECK SWING SPOUT & 4 INCH INDEX-COLORED LEVER HANDLES. PROVIDE REMOVABLE STRAINER.
SK-2	FAUCET & DRAIN ONLY SK BOWL BY OTHERS - INTEGRATED INTO COUNTER BARRIER FREE	N/A	ADA APPROVED (SEE NOTES)	1-1/2" ADJUSTABLE CHROME PLATED P-TRAP	1-1/2" CHROME PLATED ADA COMPLIANT		FAUCET = ZURN MODEL "Z871C4-XL" 8" CENTERSET DECK MOUNT; 8" GOOSENECK SWING SPOUT; 4 INCH INDEX-COLORED LEVER HANDLES. PROVIDE REMOVABLE STRAINER.
SK-3	FAUCET & DRAIN ONLY SK BOWL BY OTHERS - INTEGRATED INTO COUNTER BARRIER FREE	N/A	ADA APPROVED (SEE NOTES)	1-1/2" ADJUSTABLE CHROME PLATED P-TRAP	1-1/2" CHROME PLATED ADA COMPLIANT		FAUCET = ZURN MODEL "Z871C4-XL" 8" CENTERSET DECK MOUNT; 8" GOOSENECK SWING SPOUT; 4 INCH LEVER HANDLES; PROVIDE REMOVABLE STRAINER. PROVIDE INSINKERATOR LC50-11 FOOD WASTE DISPOSER (6A @ 120V/1Ø). RE-INSTALL EXISTING HOT WATER DISPENSER FROM BELOW PREVIOUS SINK TO BELOW NEW SINK.
SK-4	FAUCET & DRAIN ONLY SK BOWL BY OTHERS - INTEGRATED INTO COUNTER BARRIER FREE	N/A	ADA APPROVED (SEE NOTES)	1-1/2" ADJUSTABLE CHROME PLATED P-TRAP	1-1/2" CHROME PLATED ADA COMPLIANT		FAUCET = ZURN AQUASENSE MODEL "ZG6920" SINGLE HOLE CENTERSET DECK MOUNTED SENSOR FAUCET WITH 5.5" GOOSENECK FIXED SPOUT; PLUG-IN CONVERTER (-ACA); OPTIONAL 4" COVER-PLATE. PROVIDE REMOVABLE STRAINER.
<b>WATER CLOSETS AND URINALS</b>							
		BOWL TYPE	OUTLET	FLUSH VALVE	SEAT	CARRIER	
UR-1	KOHLER "BARDON" ADA-BARRIER FREE	WHITE - WALL HUNG WASH-OUT	BACK	BATTERY SENSOR 1.0 GPF	N/A	ADJUSTABLE HIGH EXTENSION	WHITE COLOR. PROVIDE WALL HANGER CONCEALED IN WET WALL BEHIND FIXTURE. BATTERY FLUSH VALVE (ZURN ZER6003AV-CPM)
WC-1	KOHLER "KINGSTON ULTRA" ADA-BARRIER FREE	WHITE - WALL HUNG ELONGATED SIPHON JET	BACK	BATTERY SENSOR - ZURN ZER6003AV-CPM 1.6 GPF	(SEE NOTES)	ADJUSTABLE EXTENSION CARRIER HEAVY DUTY (750 LBS)	SEAT SHALL BE ANTI-MICROBIAL PLASTIC OPEN FRONT SEAT. PROVIDE/INSTALL NEW WATER CLOSET WALL HANGER/SUPPORTS CONCEALED IN THE (E) WET WALL BEHIND FIXTURE - P.C. SHALL FIELD VERIFY/CONFIRM EXISTING WET WALL CONDITIONS (E.G. EXISTING WET WALL ROUGH-IN SIZES/LOCATIONS, ETC.) PRIOR TO ORDERING NEW WC & WALL CARRIER. P.C. SHALL COORDINATE EXTENT OF WET WALL DEMO & NEW WORK REQUIRED WITH CMU/FRAMING TRADES PRIOR TO DEMO/ROUGH-IN

NOTES:  
 1. ALL PLUMBING FIXTURES, EQUIPMENT, TRIM AND FITTINGS SHALL COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS AND CODES, INCLUDING, BUT NOT LIMITED TO, WATER AND ENERGY CONSERVATION CODES, ADA REQUIREMENTS.  
 2. REFER TO SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS OF FIXTURES AND TRIM.  
 3. PROVIDE/INSTALL POINT OF USE "ASSE 1070 LISTED" THERMOSTATIC MIXING VALVES ON SUPPLIES TO ALL ADA ACCESSIBLE LAVATORIES AND SINKS.  
 4. INSTALL ADA "LAV-SHIELDS" ON WALL MOUNTED LAVS/SINKS TO COMPLETELY CONCEAL EXPOSED TRAPS, SUPPLIES, AND MIXING VALVES.  
 5. INSTALL ADA "LAV-GUARDS" ON EXPOSED DRAIN/SUPPLY PIPING BELOW COUNTER DROP-IN LAVS/SINKS TO COVER TRAPS, SUPPLIES, AND MIXING VALVES.  
 6. COORDINATE FIXTURE FINISHES/COLORS WITH ARCHITECT PRIOR TO ORDERING.  
 7. FLUSH VALVE HANDLES ARE TO BE LOCATED ON OPEN SIDE OF BARRIER FREE WATER CLOSETS - REFER TO ARCHITECTURAL INTERIOR ELEVATIONS.

**PLUMBING SPECIALTIES SCHEDULE**

MARK	MANUFACTURER SERIES NUMBER	DESCRIPTION			ACCESSORIES, FEATURES, AND NOTES
<b>FLOOR DRAINS</b>					
		CONSTRUCTION	GRATE	SIZE	
FD-1	ZURN #Z-415B	ASME A112.21.1M; LACQUERED CAST IRON TWO PIECE BODY	ADJUSTABLE, ROUND, NICKEL-BRONZE STRAINER (ZURN TYPE B)	LINE SIZE SHOWN ON PLANS (MINIMUM 3")	DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, TRAP PRIMER CONNECTION, AND ADJUSTABLE ROUND NICKEL-BRONZE STRAINER. USE CLAMPING COLLAR ON FLOORS ABOVE GRADE. THIS IS A STANDARD FLOOR DRAIN USE IN TOILET ROOMS, JANITOR'S CLOSETS, SHOWERS, ETC.

NOTES:  
 1. OR APPROVED EQUAL BY JR SMITH, MIFAB, OR WADE.  
 2. REFER TO DIVISION 22 - PLUMBING SPECIFICATIONS FOR MORE INFORMATION.

**PLUMBING CONNECTION SCHEDULE**

FIXTURE TYPE	HOT WATER (HW)	COLD WATER (CW)	WASTE (W) & INDIRECT WASTE (IW)	TRAP	VENT (V)
ELECTRIC WATER COOLER/DRINKING FOUNTAIN	--	1/2"	1-1/2"	1-1/2"	1-1/2"
LAVATORY (LAV) OR HAND WASH SINK	1/2"	1/2"	1-1/2"	1-1/2"	1-1/2"
SERVICE/MOP SINK (SS / MS)	1/2"	1/2"	3"	3"	1-1/2"
SINK - RESIDENTIAL/LIGHT COMMERCIAL	1/2"	1/2"	1-1/2"	1-1/2"	1-1/2"
URINAL (FLUSH VALVE TYPE)	--	3/4"	2"	2"	1-1/2"
WATER CLOSET (FLUSH VALVE)	--	1-1/2"	3" - 4"	3" - 4"	2"

NOTES:  
 1. REFER TO DRAWINGS AND SPECIFICATIONS FOR MORE DETAILS.  
 2. NOTE THAT THE WATER SUPPLY PIPE SIZES LISTED ABOVE ARE MINIMUM SIZES FOR STANDARD COPPER TUBING, UNLESS NOTED OTHERWISE. PEX TUBING MAY BE USED FOR RUN-OUT TO FIXTURES WHERE APPROVED BY CODE (CONCEALED BELOW FLOOR AND IN WALLS). NOTE THAT IF PEX TUBING IS USED IT SHOULD BE 1/2" PIPE SIZE LARGER THAN PIPE SIZES SHOWN ON PLANS TO ACCOMMODATE FOR THE SMALLER I.D. DIMENSION.

**GENERAL MECHANICAL DEMOLITION NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE EXTENT OF DEMOLITION WORK SHALL BE AS REQUIRED BY THE NEW WORK.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING SYSTEMS/EQUIPMENT PRIOR TO ISSUING THEIR BID. ALL EXISTING PIPE/DUCT SIZES AND ROUTINGS/LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO DEMO/ROUGH-IN.
- ALL MECHANICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE WITH ALL RELATED ITEMS INCLUDING, BUT NOT LIMITED TO, HANGERS, SUPPORTS, CONTROLS, ETC. REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF OFF SITE. CAP ALL OPEN ENDED PIPING AND DUCTWORK.
- ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED, BY THE OWNER OR OWNER'S REPRESENTATIVE, AT LEAST (7) DAYS IN ADVANCE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING OPERATION.
- WHERE DEMOLITION OF EXISTING SERVICES ARE REQUIRED TO ACCOMMODATE THE PROJECT PHASING/SCHEDULING, AND SERVICES ARE TO BE INTERRUPTED IN AREAS THAT ARE REMAINING OCCUPIED, THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES AND/OR CONNECTIONS TO THE OCCUPIED AREAS TO MAINTAIN ITS PRESENT OPERATION. IF SYSTEM SHUT DOWNS ARE REQUIRED, THE CONTRACTOR SHALL SCHEDULE WORK TO BE PERFORMED AT UNOCCUPIED HOURS.
- ALL ITEMS TO BE REMOVED AND/OR RELOCATED SHALL BE REMOVED AND/OR RELOCATED TOGETHER WITH ALL RELATED ITEMS AS REQUIRED BY THE NEW WORK TO BE PERFORMED.
- COORDINATE ALL REMOVAL AND/OR RELOCATION WITH THE EXTENT OF THE NEW WORK AND WITH ALL OTHER TRADES INVOLVED.
- UNLESS NOTED OTHERWISE, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, CORING, PATCHING ASSOCIATED WITH THEIR WORK. CUTTING, CORING, PATCHING WORK SHALL BE PERFORMED BY A QUALIFIED SUB-CONTRACTOR AND MATCH EXISTING OR NEW FINISHES.
- TEMPERATURE CONTROLS WORK SHOWN IS DIAGRAMMATIC AND INDICATE THE GENERAL SCOPE OF WORK. TEMPERATURE CONTROLS WORK WILL BE DESIGN/BUILD BY THE OTHERS - OWNER'S EXISTING/PREFERRED TEMPERATURE CONTROLS SUB (T.C.) = RON LARSON AT COMMERCIAL CONTROLS SYSTEMS INC (989-797-4644). M.C. SHALL COORDINATE THE TEMP. CONTROLS WORK THAT IS REQUIRED WITH OWNER'S T.C. PRIOR TO DEMOLITION & ROUGH-IN.

**GENERAL MECHANICAL NEW WORK NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL SCOPE OF WORK. CONTRACTOR SHALL PROVIDE ALL MECHANICAL SYSTEMS AND ASSOCIATED EQUIPMENT COMPLETE AND INCLUDE ALL NECESSARY OFFSETS, FITTINGS, AND OTHER COMPONENTS REQUIRED DUE TO INTERFERENCES, SPACE CONSTRAINTS, CODES, ETC.
- MECHANICAL SYSTEMS SHALL BE INSTALLED PER THEN CURRENT MICHIGAN MECHANICAL CODE, MICHIGAN PLUMBING CODE, INTERNATIONAL FUEL GAS CODE, APPLICABLE NFPA BUILDING CODES (E.G. 101, 90A, ETC.), AND APPLICABLE BUILDING CODES (E.G. MICHIGAN BUILDING CODE, ETC.).
- CONTRACTOR SHALL VERIFY REQUIREMENTS OF ALL EQUIPMENT WITH SHOP DRAWING SUBMITTALS PRIOR TO INSTALLATION. NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN SHOP DRAWINGS AND PLANS.
- COORDINATE THE INSTALLATION OF MECHANICAL WORK WITH ALL OTHER TRADES. VERIFY ALL MECHANICAL, PLUMBING AND ELECTRICAL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK. DUCTWORK, PIPING, ETC. SHALL NOT BE LOCATED DIRECTLY OVER ELECTRICAL PANELS/EQUIPMENT, OR INTERFERE WITH MECHANICAL/ELECTRICAL EQUIPMENT CLEARANCES.
- COORDINATE ALL FLOOR, WALL, AND ROOF PENETRATIONS, ETC. WITH ARCHITECTURAL/STRUCTURAL TRADES PRIOR TO ROUGH-IN. UNLESS NOTED OTHERWISE, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, CORING, PATCHING ASSOCIATED WITH THEIR WORK. CUTTING, CORING, PATCHING WORK SHALL BE PERFORMED BY A QUALIFIED SUB-CONTRACTOR AND MATCH EXISTING OR NEW FINISHES. ANY ROOFING WORK REQUIRED (E.G. SUPPORT FOR NEW CURB ON ROOF, REL/RF/S & ELECTRICAL PENETRATIONS VIA A PIPE PORTAL WITH 12" H ROOF CURB, ETC.) SHALL BE SUBCONTRACTED TO A QUALIFIED ROOFING CONTRACTOR AS REQUIRED TO MAINTAIN WARRANTY OF OWNER'S EXISTING ROOF.
- UNLESS OTHERWISE NOTED, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR SEALING NEW PENETRATIONS THROUGH ALL WALLS (INCLUDING EXISTING WALLS) WITH FIRE CAULK (& FIRE DAMPER IF IN A RATED WALL) IN ACCORDANCE WITH CURRENT BUILDING CODE REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR FIRE RATED WALLS AND ASSEMBLY RATINGS.
- TEMPERATURE CONTROLS WORK SHOWN IS DIAGRAMMATIC AND INDICATE THE GENERAL SCOPE OF WORK. TEMPERATURE CONTROLS WORK WILL BE DESIGN/BUILD BY THE OTHERS - OWNER'S EXISTING/PREFERRED TEMPERATURE CONTROLS SUB (T.C.) = RON LARSON AT COMMERCIAL CONTROLS SYSTEMS INC (989-797-4644). M.C. SHALL COORDINATE THE TEMP. CONTROLS WORK THAT IS REQUIRED WITH OWNER'S T.C. PRIOR TO DEMOLITION & ROUGH-IN.

**MECHANICAL ABBREVIATION LIST**

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A/C	AIR CONDITIONING	KW	KILOWATT
AC	AIR CONDITIONER	LAT	LEAVING AIR TEMPERATURE
AFF	ABOVE FINISHED FLOOR	LDB	LEAVING DRY BULB TEMPERATURE
APD	AIR PRESSURE DROP	LWB	LEAVING WET BULB TEMPERATURE
A/S	AIR SEPARATOR	LWT	LEAVING WATER TEMPERATURE
BFP	BACKFLOW PREVENTER	MA	MIXED AIR
BHP	BRAKE HORSEPOWER	MAX	MAXIMUM
BMS	BUILDING MANAGEMENT SYSTEM	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
BTU	BRITISH THERMAL UNIT	M.C.	MECHANICAL CONTRACTOR
BTUH	BRITISH THERMAL UNITS PER HOUR	MCA	MINIMUM CIRCUIT AMPS
CFH	CUBIC FEET PER HOUR	MECH	MECHANICAL
CFM	CUBIC FEET PER MINUTE	MFR	MANUFACTURER
COND	CONDENSATE	MIN	MINIMUM
CONTR	CONTRACTOR	MISC	MISCELLANEOUS
COORD	COORDINATE	NC	NORMALLY CLOSED
COS	CENTRAL OPERATOR STATION	N.C.	NOISE CRITERIA
CP	CIRCULATING PUMP	NOT IN CONTR	NOT IN CONTRACT
CU	CONDENSING UNIT	NO	NORMALLY OPEN
CUH	CABINET UNIT HEATER	NOM	NOMINAL
CW	DOMESTIC COLD WATER	OA	OUTSIDE/OUTDOOR AIR
DB	DRY BULB TEMPERATURE	OC	ON CENTER/CENTER TO CENTER
DDC	DIRECT DIGITAL CONTROL	PC	PUMPED CONDENSATE
DEG	DEGREES	P.C.	PLUMBING CONTRACTOR
DN	DOWN	PD	PRESSURE DROP
DW&V	DRAINAGE WASTE & VENT	PR	PRIOR TO ROUGH-IN
(E)	EXISTING	PRV	PRESSURE REDUCING VALVE
EA	EXHAUST AIR	PSIA	POUNDS PER SQUARE INCH (ABSOLUTE)
EAT	ENTERING AIR TEMPERATURE	PSIG	POUNDS PER SQUARE INCH (GAUGE)
E.C.	ELECTRICAL CONTRACTOR	RA	RETURN AIR
EDB	ENTERING DRY BULB TEMPERATURE	RC	RETURN AIR GRILLE OR REGISTER
EF	EXHAUST FAN	REL	RELIEF AIR
EG	EXHAUST GRILLE OR REGISTER	REF	ROOF EXHAUST FAN
ELEC	ELECTRICAL	RFL	REFRIGERANT LIQUID
ELEV	ELEVATION	RFS	REFRIGERANT SUCTION
ESP	EXTERNAL STATIC PRESSURE	RH	RELATIVE HUMIDITY
EWB	ENTERING WET BULB TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	SA	SUPPLY AIR
EXH	EXHAUST	SAD	SUPPLY AIR DIFFUSER
F	FIRE PROTECTION	SG	SUPPLY AIR GRILLE OR REGISTER
(F)	FUTURE	SP	STATIC PRESSURE
F.A.	OWNER DIRECT FIRE ALARM SUBCONTRACTOR (DON @ VETERAN'S ALARM=989-631-1111)	SPHD	SPRINKLER HEAD
FA	FRESH AIR	SPKR	SPRINKLER
FD	FLOOR DRAIN	SqFt	SQUARE FOOT/SQUARE FEET
F.DPR	FIRE DAMPER	T.C.	OWNER DIRECT TEMP. CONTROLS CONTRACTOR (RON LARSON @ CCSI 989-797-4644)
FLA	FULL LOAD AMPS	TG	TRANSFER GRILLE
FLR	FLOOR	TSP	TOTAL STATIC PRESSURE
F.P.	OWNER DIRECT FIRE PROTECTION CONTRACTOR (FOR CLEAN AGENT NOVAC 1230 WORK)	TYP	TYPICAL
FPM	FEET PER MINUTE	U/G	UNDERGROUND (BELOW GRADE)
F/S	COMBINATION FIRE/SMOKE DAMPER	UH	UNIT HEATER
F.S.	FIRE SUPPRESSION SUBCONTRACTOR (FOR WET PIPE FIRE SUPPRESSION WORK)	UL	UNDERWRITER LABORATORY
FT	FEET	UON	UNLESS OTHERWISE NOTED
FTR	FINNED TUBE RADIATOR	V	VENT
G	GAS (NATURAL GAS/PROPANE)	VAV	VARIABLE AIR VOLUME
GPH	GALLONS PER HOUR	VD	VOLUME DAMPER
GPM	GALLONS PER MINUTE	VFD	VARIABLE FREQUENCY DRIVE
HP	HORSEPOWER	VSD	VARIABLE SPEED DRIVE
HR	HOUR	VTR	VENT THRU ROOF
HTO	HEATING	W	WASTE
HW	DOMESTIC HOT WATER	WB	WET BULB TEMPERATURE
HWHR	HOT WATER HEATING RETURN	WG	WATER GAUGE
HWHS	HOT WATER HEATING SUPPLY	XFR	TRANSFER
HWR	DOMESTIC HOT WATER RETURN		
I.E.	INVERT ELEVATION		
I.D.C.	IT/DATA CENTER INTEGRATION SUBCONTRACTOR		
IN	INCHES		
ISP	INTERNAL STATIC PRESSURE		
IW	INDIRECT WASTE		

**METHODS OF NOTATION**

	EQUIPMENT DESIGNATION (I.E. EXHAUST FAN NUMBER 1)	S-1 10ø 350-4X	SUPPLY DIFFUSER WITH SCHEDULE TAG 10" DIAMETER NECK SIZE 350 CFM TYPICAL FOR 4
	CONSTRUCTION KEYED NOTE NUMBER	R-1 22x10 640	RETURN GRILLE WITH SCHEDULE TAG 22x10 NECK SIZE 640 CFM TYPICAL FOR 2 EXHAUST GRILLE (EG) DESIGNATION SIMILAR
	DEMOLITION KEYED NOTE NUMBER	TU-2 900/250	TERMINAL UNIT (TU) VAV BOX #2 REFER TO TU SCHEDULE FOR INFO. 900 CFM MAX. AIRFLOW 250 CFM MIN. AIRFLOW (NEEDED FOR OCCUPIED VENTILATION)
	EXISTING SYSTEM COMPONENT TO BE REMOVED		
	NEW SYSTEM COMPONENT		
	EXISTING SYSTEM COMPONENT TO REMAIN		
	POINT OF NEW CONNECTION		

NOTE:  
ALL CEILING SPACES ARE RETURN AIR PLENUM.  
ALL PIPING SHALL BE INSULATED/JACKETED PER SPECIFICATIONS.  
ALL CONTROL WIRING SHALL BE PLENUM RATED CABLE.

**HOT WATER FINNED TUBE RADIATION SCHEDULE**

UNIT I.D.	CAPACITY BTUH LIN. FT.	ENTERING AIR TEMP °F	WATER			ENCLOSURE				ELEMENT				FINISH	CONSTRUCTION	MODEL NO.	REMARKS
			E.W.T. °F	AVG. °F	FLOW GPM	TYPE	LENGTH IN.	HEIGHT IN.	DEPTH IN.	TUBE DIA. IN.	HEIGHT IN.	WIDTH IN.	NO. OF TIERS				
EXISTING (E) FTR	960	65	180	170	SEE PLANS	STEEL FLAT TOP	SEE PLANS	?? VERIFY	?? VERIFY	1-1/4	4.25	4.25	1	BEIGE? VERIFY	16? GA. STEEL FIELD VERIFY	STERLING C143 (1988) FIELD VERIFY	SEE NOTES

- NOTES:  
1. CONTRACTOR SHALL FIELD VERIFY EXISTING FINNED TUBE RADIATOR MAKE/MODEL (PRIOR TO BID) AND PROVIDE NEW ENCLOSURE/COVERS AND END CAPS (GAUGE AND COLOR) TO MATCH AS REQUIRED TO ACCOMMODATE THE RENOVATION WORK.

**MECHANICAL SYMBOL LIST**

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PIPE ELBOW UP		RECTANGULAR TAKE-OFF (SINGLE LINE)
	PIPE ELBOW DOWN		RECTANGULAR TAKE-OFF (DOUBLE LINE)
	DIRECTION OF FLOW		ROUND TAKE-OFF (SINGLE LINE)
	UNION		ROUND TAKE-OFF (DOUBLE LINE)
	CONCENTRIC REDUCER		SPIN-IN FITTING (WITH VOLUME DAMPER)
	ECCENTRIC REDUCER		RECTANGULAR ELBOW (WITH TURNING VANES)
	FLEXIBLE CONNECTION (PIPE)		RADIUS RECTANGULAR ELBOW
	PIPE CAP OR PLUG		RADIUS ROUND ELBOW
	CIRCULATING PUMP		RECTANGULAR ELBOW UP
	ISOLATION VALVE		ROUND ELBOW UP
	GLOBE VALVE		DUCT UP (SINGLE LINE)
	BALL VALVE		DUCT UP (DOUBLE LINE)
	BUTTERFLY VALVE		RECTANGULAR ELBOW DOWN
	CHECK VALVE (SWING)		ROUND ELBOW DOWN
	CHECK VALVE (SPRING)		DUCT DOWN (SINGLE LINE)
	COMBO BALANCE VALVE/FLOW MEASURING DEVICE		CONCENTRIC TRANSITION (DOUBLE LINE)
	STRAINER (Y-TYPE)		CONCENTRIC TRANSITION (SINGLE LINE)
	STRAINER (BLOW OFF TYPE)		ECCENTRIC TRANSITION (DOUBLE LINE)
	TRAP (PLAN VIEW)		ECCENTRIC TRANSITION (SINGLE LINE)
	FLOOR DRAIN (PLAN VIEW)		CROSS SECTION OF SUPPLY AIR DUCT
	FLOOR DRAIN (ELEVATION)		CROSS SECTION OF EXHAUST/RETURN AIR DUCT
	FUNNEL FLOOR DRAIN (PLAN VIEW)		FLEXIBLE CONNECTION (DUCT)
	FUNNEL FLOOR DRAIN (ELEVATION)		SQUARE CEILING DIFFUSER
	ROOF DRAIN SUMP		LINEAR SLOT DIFFUSER
	CLEAN OUT (IN FLOOR)		RETURN OR EXHAUST CEILING GRILLE
	CLEAN OUT (IN LINE)		TRANSFER GRILLE (TG)
	BACKFLOW PREVENTER		SUPPLY AIR GRILLE - CEILING OR FLOOR MOUNTED
	HOSE BIBB		RETURN AIR GRILLE - CEILING OR FLOOR MOUNTED
	WALL HYDRANT		SUPPLY AIR GRILLE - SIDEWALL MOUNTED
	PRESSURE RELIEF VALVE		RETURN AIR GRILLE - SIDEWALL MOUNTED
	PRESSURE REDUCING VALVE		FIRE DAMPER (F.DPR) - HORIZONTAL
	PRESSURE AND TEMPERATURE RELIEF VALVE		FIRE DAMPER (F.DPR) - VERTICAL
	PRESSURE REGULATING VALVE		VOLUME DAMPER (MANUALLY ADJUSTABLE)
	PRESSURE AND TEMPERATURE TEST PLUG		MOTORIZED DAMPER
	PRESSURE GAUGE AND COCK		ROOF VENTILATOR (PLAN VIEW)
	THERMOMETER		
	MANUAL AIR VENT		
	AUTOMATIC AIR VENT		
	ELECTRICAL CONTROL VALVE - TWO WAY		
	ELECTRICAL CONTROL VALVE - THREE WAY		
	HOT WATER HEATING SUPPLY PIPING		
	HOT WATER HEATING RETURN PIPING		
	CONDENSATE DRAIN		
	CHILLED WATER SUPPLY PIPING		
	CHILLED WATER RETURN PIPING		
	DOMESTIC COLD WATER PIPING		
	DOMESTIC HOT WATER PIPING		
	DOMESTIC HOT WATER RETURN PIPING		
	DOMESTIC TEMPERED DOMESTIC HOT WATER PIPING		
	SANITARY WASTE PIPING		
	STORM SEWER PIPING		
	SANITARY VENT PIPING		
	GAS PIPING (NATURAL GAS OR PROPANE)		
	FIRE PROTECTION/SUPPRESSION PIPING		
	THERMOSTAT		
	TEMPERATURE SENSOR		

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M5.4	MECHANICAL DETAILS
M5.5	MECHANICAL DETAILS



PREPARED UNDER THE SUPERVISION OF:  
JUSTIN L. KOWATCH, P.E.  
MICHIGAN PE NO. 45625



**Archiverde**  
ARCHITECTURE INTERIORS  
139 Ashman Street  
Midland, MI 48640

RENOVATIONS TO  
MIDLAND COUNTY SERVICES BUILDING  
MICHIGAN

MECHANICAL TITLE SHEET

ISSUE PERMITS & BIDS  
11-11-2024  
Revised

SCALE:  
AS NOTED

PROJECT NO.  
20220400

DRAWING NO.

MO.1

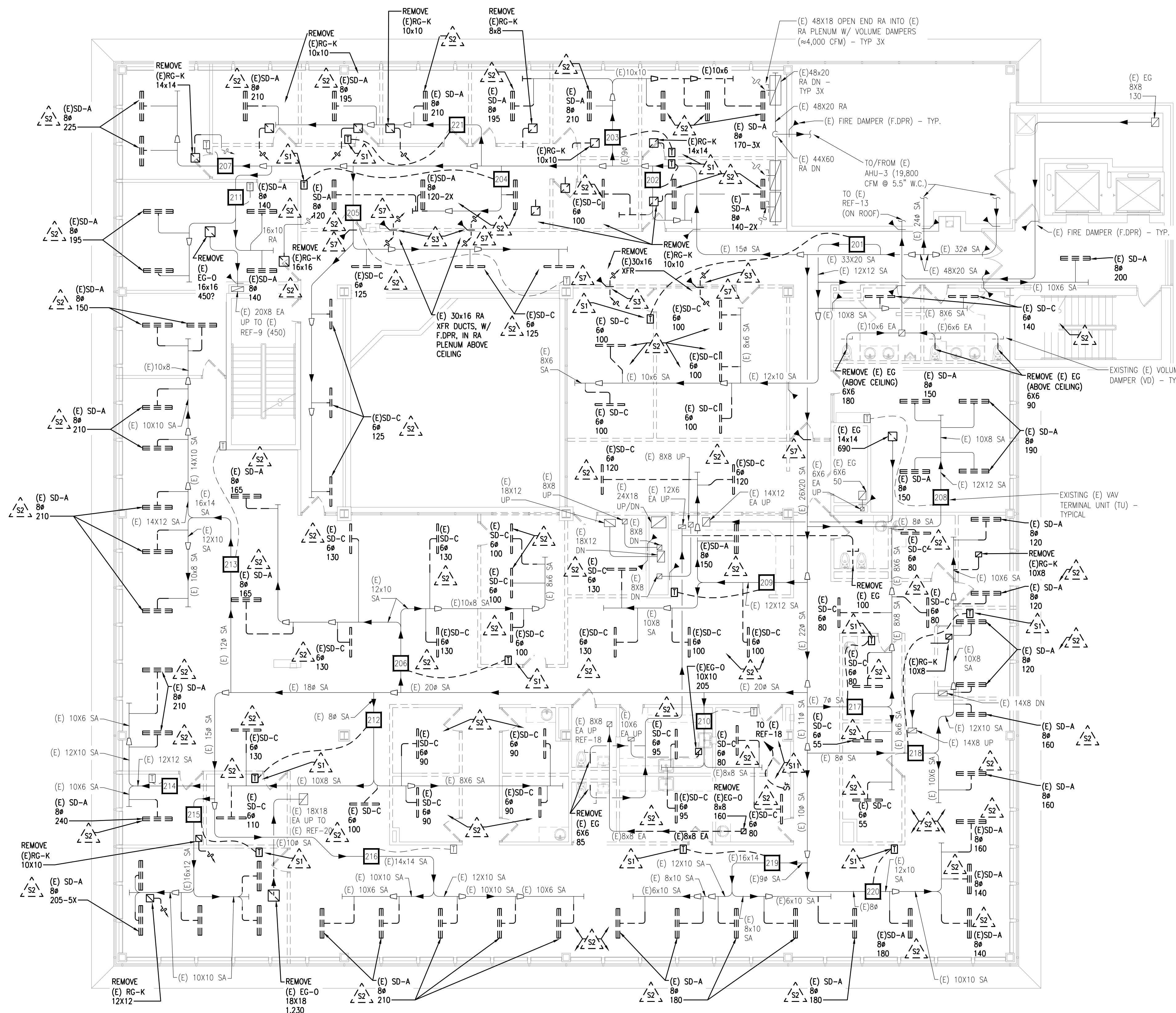












**KEYED MECHANICAL SHEET METAL DEMOLITION NOTES:**

- S1** CAREFULLY REMOVE EXISTING T-STAT/TEMP SENSOR AND PREPARE TO REUSE/RELOCATE. REFER TO NEW WORK PLANS FOR NEW RELOCATION (R).
- S2** CAREFULLY REMOVE EXISTING LINEAR SLOT SUPPLY AIR (SA) DIFFUSERS AND SALVAGE/STOCKPILE FOR REUSE/RELOCATION (R). REFER TO NEW WORK PLANS FOR NEW RELOCATION (R). TYPICAL FOR ALL LINEAR SLOT DIFFUSERS. TURN OVER TO OWNER ANY UNUSED LINEAR SLOT DIFFUSERS.
- S3** REMOVE (E) RETURN AIR (RA) TRANSFER (XFR) DUCT, WITH FIRE DAMPER, ABOVE THE CEILING TO BE REPLACED IN NEW CORRIDOR WALL.
- S4** REMOVE EXISTING (E) EXHAUST GRILLE (EG) AND ASSOCIATED DUCTWORK ABOVE THE CEILING AND CAP OFF AIR-TIGHT.
- S5** REMOVE EXISTING (E) EXHAUST GRILLE (EG) AND ASSOCIATED DUCTWORK AS REQUIRED TO ACCOMMODATE NEW EXHAUST GRILLE. REFER TO NEW WORK PLANS.
- S6** REMOVE (E) RETURN AIR (RA)/TRANSFER (XFR) AIR DUCT AS REQUIRED TO ACCOMMODATE THE NEW WORK.
- S7** REMOVE EXISTING (E) FIRE DAMPER (F.DPR) AND REPAIR/REPLACE (E) DUCTWORK AS REQUIRED TO ACCOMMODATE THE NEW WORK. REFER TO NEW WORK PLANS.
- S8** REMOVE (E) CONTROL DAMPER (OR LOCK OPEN IN PLACE) AND ASSOCIATED CONTROLS INTERLOCKED WITH (E) IT-DATA CENTER ROOM EM STOP BUTTONS. REFER TO NEW WORK PLANS. THE IT-DATA CENTER IS BEING RELOCATED TO NEW IT ROOM 359.
- S9** WORK IN THIS AREA SHALL BE COORDINATED WITH OWNER TO ENSURE NO INTERRUPTION OF EXISTING IT-DATA CENTER SERVICES. EXISTING IT EQUIPMENT/SYSTEMS (UPS, SERVERS, RACKS, ETC.) ARE TO BE REMOVED/REVISED BY THE OWNER'S IT/DATA CENTER CONTRACTOR (I.D.C.). I.D.C. SHALL COORDINATE ALL WORK IN THESE AREAS WITH OWNER & OWNER'S IT/DATA CENTER CONTRACTOR (I.D.C) PRIOR TO DEMOLITION & ROUGH-IN OF NEW WORK.
- S10** REMOVE EXISTING (E) EXHAUST GRILLE (EG) AND ASSOCIATED DUCTWORK ABOVE THE CEILING & PREPARE TO REUSE. REFER TO NEW WORK PLANS. CAREFULLY REMOVE (E) MANUAL FAN CONTROL SWITCH FOR (E) EXH FAN (EF-23, 380 CFM, ON ROOF) TO BE REUSED IN A NEW LOCATION IN OPEN IT OFFICE AREA 329 AND LABEL SWITCH AS 'IT 359-NOVEC PURGE FAN'.
- S11** REMOVE EXISTING (E) EXHAUST GRILLE (EG) AND ASSOCIATED DUCTWORK ABOVE THE CEILING & PREPARE TO REUSE. REFER TO NEW WORK PLANS. CAREFULLY REMOVE (E) MANUAL FAN CONTROL SWITCH FOR (E) EXH FAN (EF-18, 160 CFM, ON ROOF) TO BE REUSED IN A NEW LOCATION IN NEW BREAK ROOM.

PLAN NORTH  
**SECOND FLOOR MECHANICAL PLAN - SHEET METAL DEMOLITION**  
 SCALE: 1/8" = 1'-0"

JLK Engineering  
 Project Number:  
**ARC 2201-01**  
 Mechanical | Electrical | Plumbing  
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RENOVATIONS TO  
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 MIDLAND MICHIGAN

SECOND FLOOR MECHANICAL PLAN -  
 SHEET METAL DEMOLITION

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised

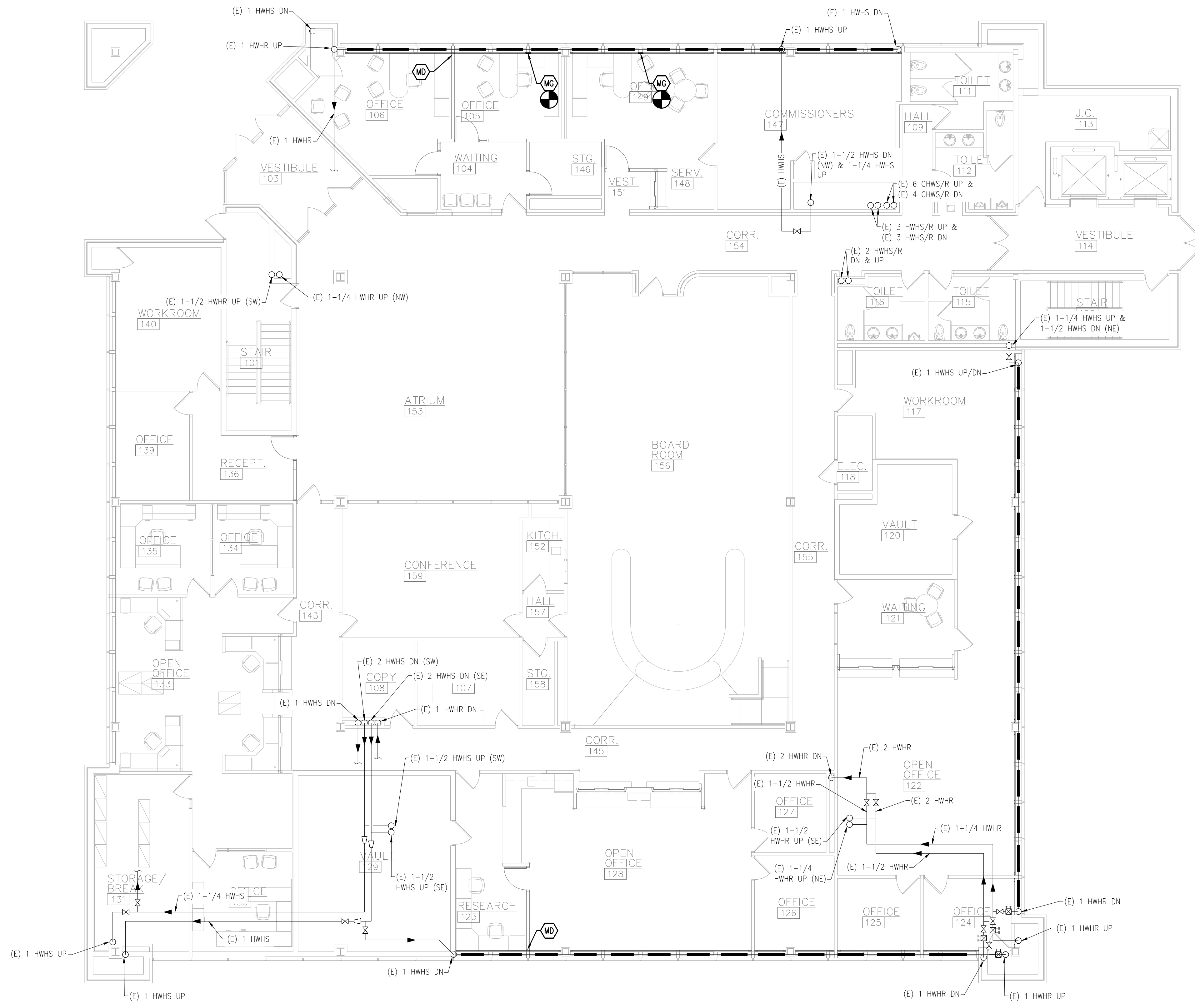
SCALE:  
 AS NOTED

PROJECT NO.  
 20220400

DRAWING NO.  
**M2.2**

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PLAN NORTH  
 FIRST FLOOR MECHANICAL PLAN - PIPING NEW WORK  
 SCALE: 1/8" = 1'-0"

**KEYED MECHANICAL PIPING CONSTRUCTION NOTES:**

- (MA) PROVIDE NEW/RELOCATED FINNED TUBE RADIATOR (FTR) ENCLOSURE/COVER /RECESSED END CAP AS REQUIRED TO ACCOMMODATE THE NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MAKE/MODEL OF FTR ENCLOSURE/COVER/RECESSED END CAP AND MATCH. REFER TO ARCHITECTURAL PLANS AND DETAILS & COORDINATE WITH BUILDING TRADES.
- (MB) RELOCATE (E) 1-STAT/TEMP-SENSOR OR PROVIDE NEW, AND EXTEND CONTROL WIRING, AS REQUIRED TO ACCOMMODATE THE NEW WORK
- (MC) RELOCATE (E) FINNED TUBE RADIATOR ELEMENT OR PROVIDE NEW, AS REQUIRED TO ACCOMMODATE THE NEW WORK WALLS.
- (MD) M.C. TO VERIFY FINNED TUBE RADIATOR (FTR) CONDITIONS AT NEW WALL LOCATION SO THAT NEW WALL WILL BE CONSTRUCTED OVER (E) RECESS AT MULLION. COORDINATE ANY MODIFICATIONS TO RECESS AND/OR ENCLOSURE/COVER TO ACCOMMODATE THE NEW WORK. REFER TO DETAILS IN ARCHITECTURAL PLANS.
- (ME) CONTRACTOR TO VERIFY LOCATION OF (E) 1 HWHR PIPES DN AND RELOCATE THEM AS REQUIRED TO ACCOMMODATE THE REMOVAL/RELOCATION OF A PORTION OF CHASE. REFER TO ARCHITECTURAL PLANS. COORDINATE WITH P.C. & ARCHITECT TRADES PRI.
- (MF) CONTRACTOR TO VERIFY LOCATION OF (E) 2 HWHS/R PIPES UP/DN AND RELOCATE THEM AS REQUIRED TO ACCOMMODATE THE RELOCATION OF CHASE. REFER TO ARCHITECTURAL PLANS. COORDINATE WITH P.C. (FOR PLUMBING PIPES IN SAME CHASE) AND ARCHITECTURAL TRADES FOR CHASE SIZE, LOCATION, ETC..
- (MG) EXISTING WALL WAS REMOVED IN THIS LOCATION. PATCH/REPAIR/CLEAN EXISTING FTR ENCLOSURE RECESS TO MATCH EXISTING CONDITIONS OR IF NOT SALVAGEABLE, PROVIDE NEW OR RELOCATED FINNED TUBE RADIATOR ENCLOSURE/ RECESSED END CAP TO ACCOMMODATE THE NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING MAKE/MODEL OF FINNED TUBE ENCLOSURE, RECESSED END CAP AND REPLACE WITH NEW/RELOCATED PIECE TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS AND DETAILS.

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 MIDLAND COUNTY SERVICES BUILDING  
 MIDLAND MICHIGAN

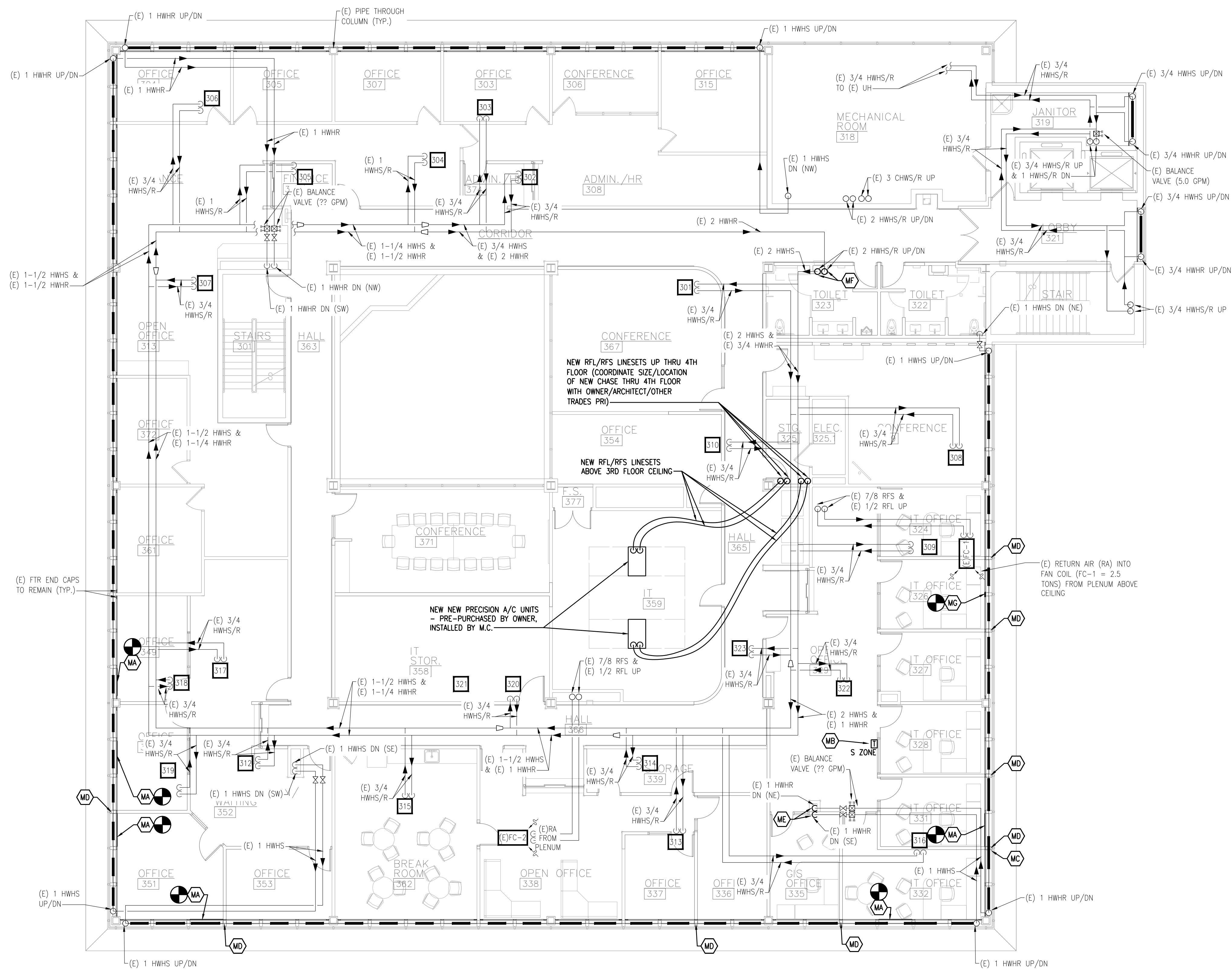
FIRST FLOOR MECHANICAL PLAN -  
 PIPING NEW WORK

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised



SCALE: AS NOTED  
 PROJECT NO. 20220400  
 DRAWING NO. M3.1





**KEYED MECHANICAL PIPING CONSTRUCTION NOTES:**

- (MA) PROVIDE NEW/RELOCATED FINNED TUBE RADIATOR (FTR) ENCLOSURE/COVER /RECESSED END CAP AS REQUIRED TO ACCOMMODATE THE NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MAKE/MODEL OF FTR ENCLOSURE/COVER/RECESSED END CAP AND MATCH. REFER TO ARCHITECTURAL PLANS AND DETAILS & COORDINATE WITH BUILDING TRADES.
- (MB) RELOCATE (E) 1-STAT/TEMP-SENSOR OR PROVIDE NEW, AND EXTEND CONTROL WIRING, AS REQUIRED TO ACCOMMODATE THE NEW WORK
- (MC) RELOCATE (E) FINNED TUBE RADIATOR ELEMENT OR PROVIDE NEW, AS REQUIRED TO ACCOMMODATE THE NEW WORK WALLS.
- (MD) M.C. TO VERIFY FINNED TUBE RADIATOR (FTR) CONDITIONS AT NEW WALL LOCATION SO THAT NEW WALL WILL BE CONSTRUCTED OVER (E) RECESS AT MULLION. COORDINATE ANY MODIFICATIONS TO RECESS AND/OR ENCLOSURE/COVER TO ACCOMMODATE THE NEW WORK. REFER TO DETAILS IN ARCHITECTURAL PLANS.
- (ME) CONTRACTOR TO VERIFY LOCATION OF (E) 1 HWHR PIPES DN AND RELOCATE THEM AS REQUIRED TO ACCOMMODATE THE REMOVAL/RELOCATION OF A PORTION OF CHASE. REFER TO ARCHITECTURAL PLANS. COORDINATE WITH P.C. & ARCHITECT TRADES PRI.
- (MF) CONTRACTOR TO VERIFY LOCATION OF (E) 2 HWHS/R PIPES UP/DN AND RELOCATE THEM AS REQUIRED TO ACCOMMODATE THE RELOCATION OF CHASE. REFER TO ARCHITECTURAL PLANS. COORDINATE WITH P.C. (FOR PLUMBING PIPES IN SAME CHASE) AND ARCHITECTURAL TRADES FOR CHASE SIZE, LOCATION, ETC..
- (MG) EXISTING WALL WAS REMOVED IN THIS LOCATION. PATCH/REPAIR/CLEAN EXISTING FTR ENCLOSURE RECESS TO MATCH EXISTING CONDITIONS OR IF NOT SALVAGEABLE, PROVIDE NEW OR RELOCATED FINNED TUBE RADIATOR ENCLOSURE/COVER/RECESSED END CAP TO ACCOMMODATE THE NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING MAKE/MODEL OF FINNED TUBE ENCLOSURE, RECESSED END CAP AND REPLACE WITH NEW/RELOCATED PIECE TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS AND DETAILS.

PLAN NORTH  
**THIRD FLOOR MECHANICAL PLAN - PIPING NEW WORK**  
 SCALE: 1/8" = 1'-0"

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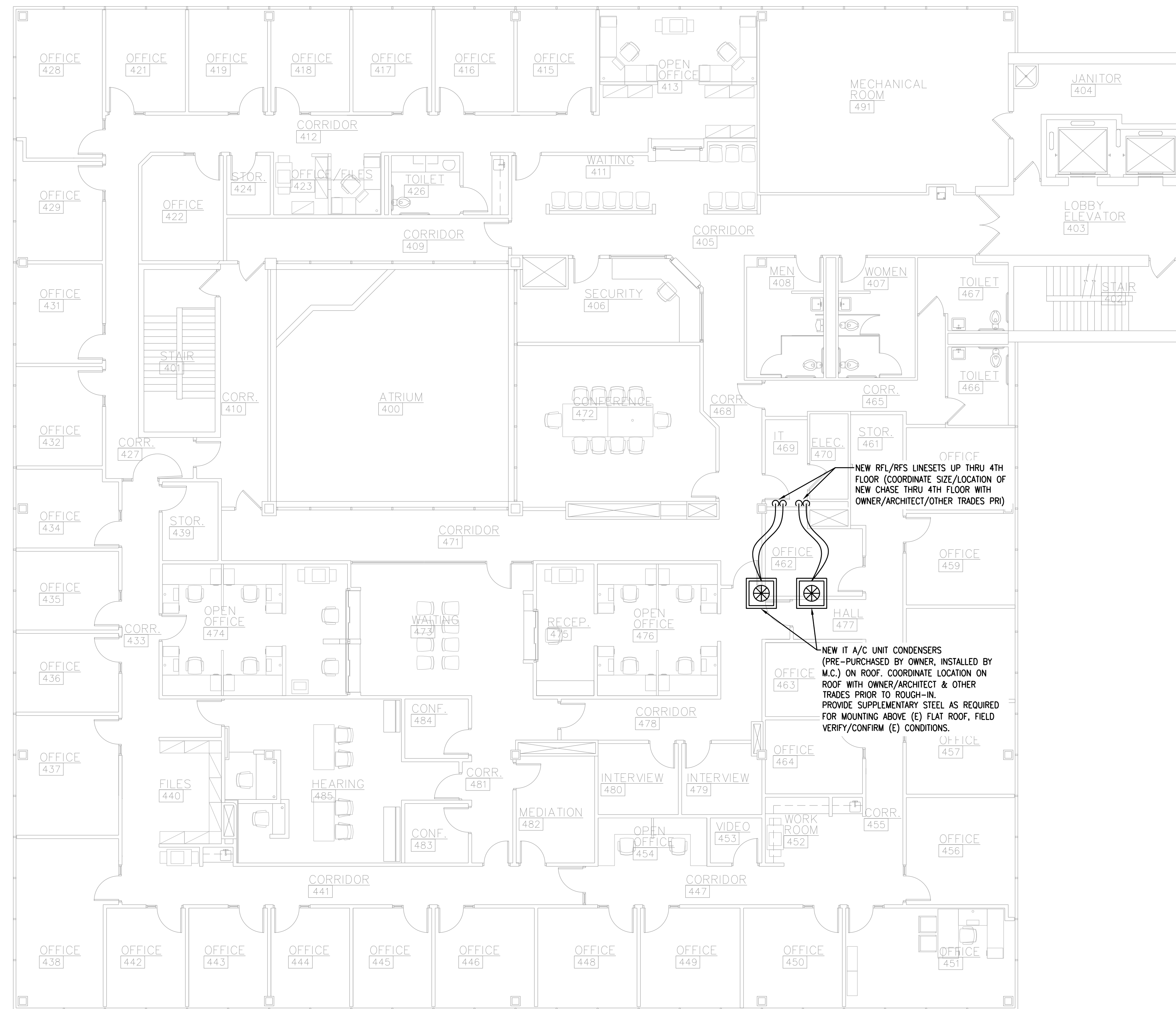
RENOVATIONS TO  
 MIDLAND COUNTY SERVICES BUILDING  
 MIDLAND MICHIGAN

THIRD FLOOR MECHANICAL PLAN -  
 PIPING NEW WORK

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised



SCALE: AS NOTED  
 PROJECT NO. 20220400  
 DRAWING NO. **M3.3**



**KEYED MECHANICAL PIPING CONSTRUCTION NOTES:**

- MA PROVIDE NEW/RELOCATED FINNED TUBE RADIATOR (FTR) ENCLOSURE/COVER /RECESSED ENDCAP AS REQUIRED TO ACCOMMODATE THE NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MAKE/MODEL OF FTR ENCLOSURE/COVER/RECESSED ENDCAP AND MATCH. REFER TO ARCHITECTURAL PLANS AND DETAILS & COORDINATE WITH BUILDING TRADES.
- MB RELOCATE (E) 1"-STAT/TEMP-SENSOR OR PROVIDE NEW, AND EXTEND CONTROL WIRING, AS REQUIRED TO ACCOMMODATE THE NEW WORK
- MC RELOCATE (E) FINNED TUBE RADIATOR ELEMENT OR PROVIDE NEW, AS REQUIRED TO ACCOMMODATE THE NEW WORK WALLS.
- MD M.C. TO VERIFY FINNED TUBE RADIATOR (FTR) CONDITIONS AT NEW WALL LOCATION SO THAT NEW WALL WILL BE CONSTRUCTED OVER (E) RECESS AT MULLION. COORDINATE ANY MODIFICATIONS TO RECESS AND/OR ENCLOSURE/COVER TO ACCOMMODATE THE NEW WORK. REFER TO DETAILS IN ARCHITECTURAL PLANS.
- ME CONTRACTOR TO VERIFY LOCATION OF (E) 1" HWHR PIPES DN AND RELOCATE THEM AS REQUIRED TO ACCOMMODATE THE REMOVAL/RELOCATION OF A PORTION OF CHASE. REFER TO ARCHITECTURAL PLANS. COORDINATE WITH P.C. & ARCHITECT TRADES PRI.
- MF CONTRACTOR TO VERIFY LOCATION OF (E) 2" HWHR/P PIPES UP/DN AND RELOCATE THEM AS REQUIRED TO ACCOMMODATE THE RELOCATION OF CHASE. REFER TO ARCHITECTURAL PLANS. COORDINATE WITH P.C. (FOR PLUMBING PIPES IN SAME CHASE) AND ARCHITECTURAL TRADES FOR CHASE SIZE, LOCATION, ETC..
- MG EXISTING WALL WAS REMOVED IN THIS LOCATION. PATCH/REPAIR/CLEAN EXISTING FTR ENCLOSURE RECESS TO MATCH EXISTING CONDITIONS OR IF NOT SALVAGEABLE, PROVIDE NEW OR RELOCATED FINNED TUBE RADIATOR ENCLOSURE/ RECESSED ENDCAP TO ACCOMMODATE THE NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING MAKE/MODEL OF FINNED TUBE ENCLOSURE, RECESSED ENDCAP AND REPLACE WITH NEW/RELOCATED PIECE TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS AND DETAILS.

JLK Engineering  
Project Number:  
**ARC 2201-01**

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The Owner's Consultant  
@JLK Engineering, PLLC

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RENOVATIONS TO  
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MIDLAND

**FOURTH FLOOR MECHANICAL PLAN - PIPING NEW WORK**

ISSUE PERMITS & BIDS  
11-11-2024  
Revised

**PLAN NORTH**  
**FOURTH FLOOR MECHANICAL PLAN - PIPING NEW WORK**  
SCALE: 1/8" = 1'-0"



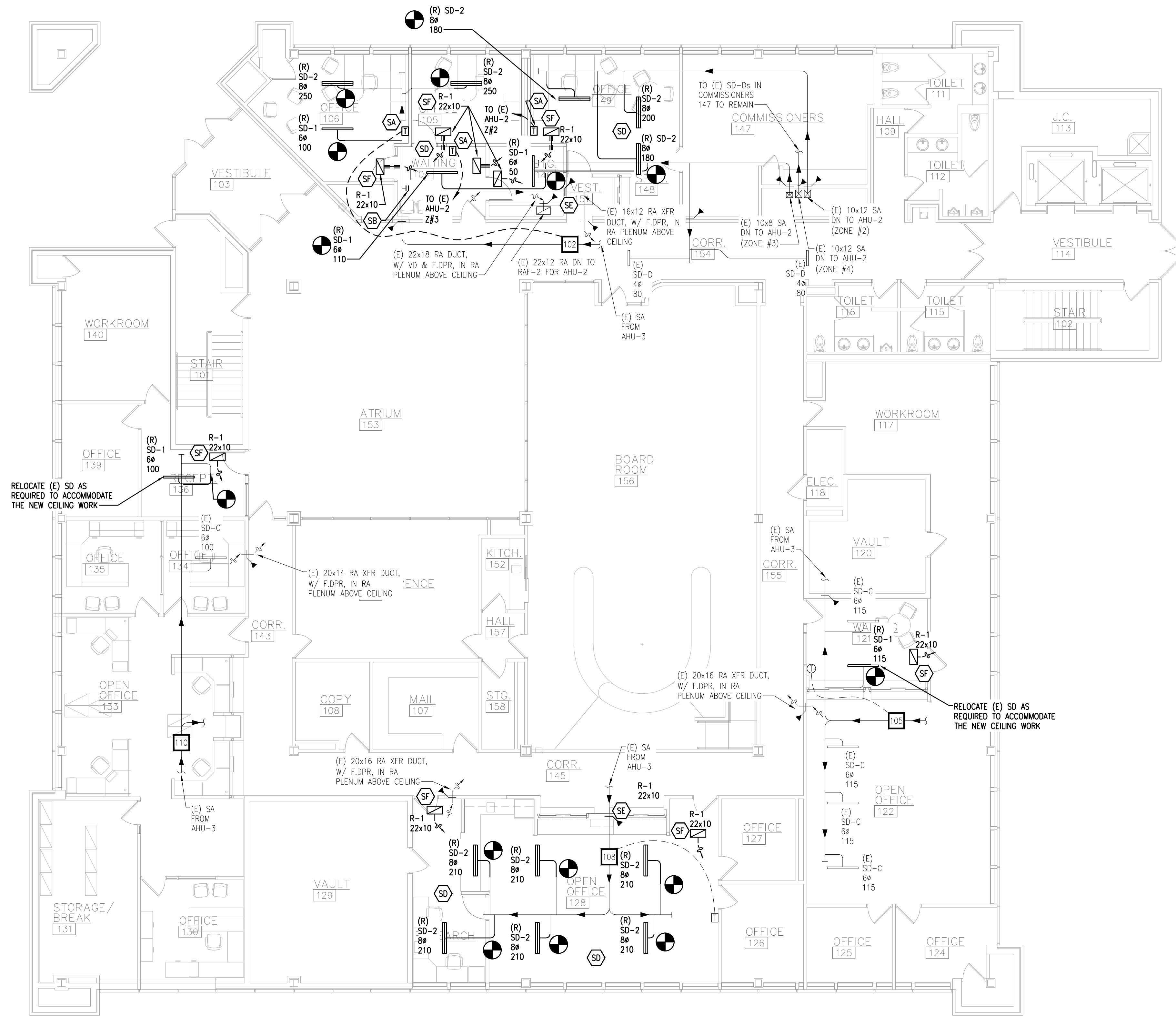
SCALE:  
AS NOTED

PROJECT NO.  
20220400

DRAWING NO.  
**M3.4**

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RELOCATE (E) SD AS REQUIRED TO ACCOMMODATE THE NEW CEILING WORK

RELOCATE (E) SD AS REQUIRED TO ACCOMMODATE THE NEW CEILING WORK



**FIRST FLOOR MECHANICAL PLAN - SHEET METAL NEW WORK**

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

**KEYED MECHANICAL SHEET METAL CONSTRUCTION NOTES:**

- SA RELOCATE (E) T-STAT/TEMP-SENSOR OR PROVIDE NEW, AND EXTEND CONTROL WIRING, AS REQUIRED TO ACCOMMODATE THE NEW WORK.
- SB CAP OFF DUCTWORK AIR TIGHT.
- SC PROVIDE DRYWALL FRAME MOUNTING KIT FOR MOUNTING GRILLE/DIFFUSER IN NEW HARD DRYWALL LD CEILING.
- SD NEW SUPPLY AIR (SA) RUN-OUT TO NEW SA DIFFUSER, MAXIMUM OF 5 FEET OF FLEX DUCT (TYPICAL), REFER TO SUPPLY AIR DIFFUSER & DUCTWORK DETAILS.
- SE NEW FIRE DAMPER (F.DPR) IN EXISTING DUCT THRU NEW FIRE RATED WALL. SHALL VERIFY LOCATION OF (E) VAV AND/OR (E) DUCTWORK AND RELOCATE VAV/REVISE (E) DUCTWORK AS REQUIRED TO ACCOMMODATE THE NEW FIRE DAMPERS IN THE NEW FIREWALL. REFER TO ARCHITECTURAL PLANS FOR FIRE ASSEMBLY RATINGS.
- SF REFER TO PLENUM RETURN AIR GRILLE/DUCT DETAIL, IF THE ROOM BEING SERVED HAS FULL HEIGHT WALLS UP TO DECK ABOVE, THEN TERMINATE XFR DUCT (ACOUSTICALLY LINED) FROM RETURN AIR GRILLE THRU WALL INTO COMMON PLENUM SPACE ABOVE CEILING SO THAT RETURN AIR CAN GET BACK TO (E) AHU.
  - FOR R-1 XFR GRILLES, USE 22"WX14"H XFR AIR DUCTS (LINED).
  - FOR R-2 XFR GRILLES, USE 22"WX14"H XFR AIR DUCTS (LINED).
  - FOR AUDIO ROOM RA XFR, REFER TO Z-DUCT (LINED) DETAIL.
- SG NEW 30x16 PLENUM RETURN AIR (RA) TRANSFER (XFR) DUCT (ACOUSTICALLY LINED WHERE SHOWN), WITH FIRE DAMPER (F.DPR) IF REQUIRED, ABOVE THE CEILING THRU FULL HEIGHT WALL (REFER TO ARCHITECTURAL PLANS FOR LOCATION OF FULL HEIGHT WALLS) FOR RA XFR BACK TO AHU. M.C. SHALL FIELD VERIFY (E) CEILING SPACE CONDITIONS & CONFIRM SIZE OF XFR DUCT PRIOR TO ORDERING FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR FIRE ASSEMBLY TYPES/RATINGS.
- SH NEW EXHAUST GRILLE E-3, 12X12, 100 CFM. CONNECT NEW E-3 TO NEARBY EXISTING 6\"/>

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RENOVATIONS TO  
MIDLAND COUNTY SERVICES BUILDING  
MICHIGAN

FIRST FLOOR MECHANICAL PLAN -  
SHEET METAL NEW WORK

ISSUE PERMITS & BIDS  
11-11-2024  
Revised

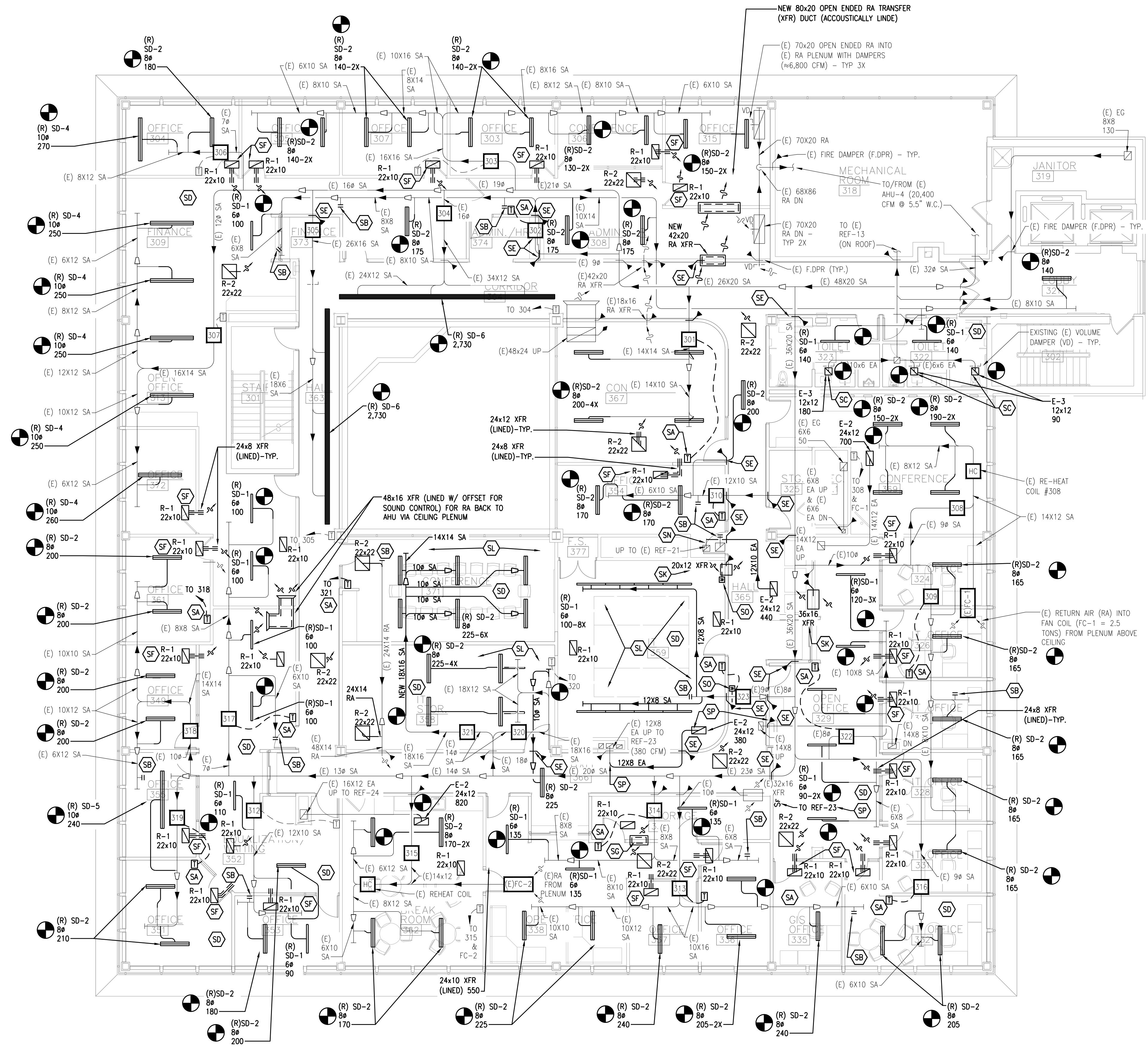
SCALE:  
AS NOTED

PROJECT NO.  
20220400

DRAWING NO.  
**M4.1**



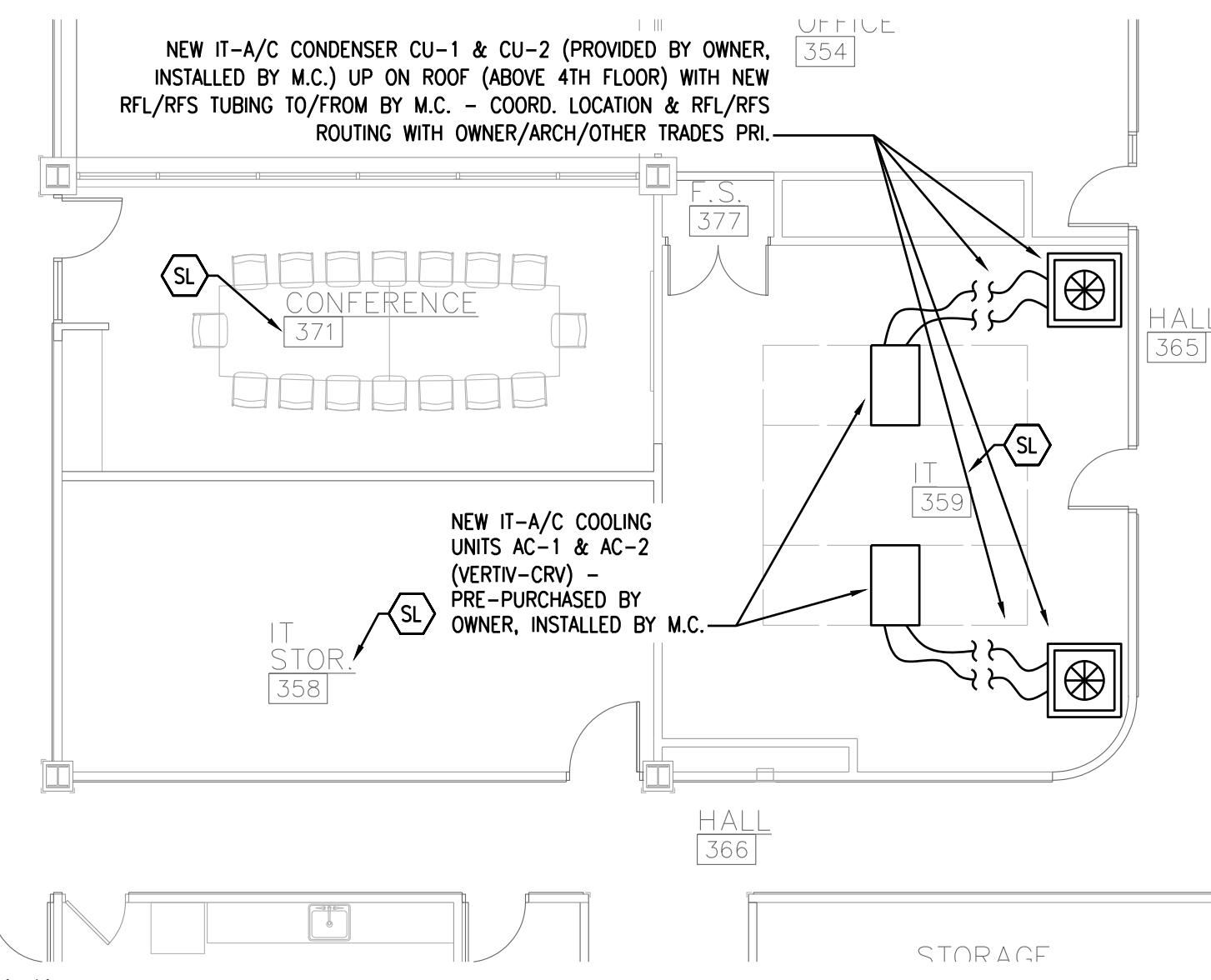




PLAN NORTH  
**THIRD FLOOR MECHANICAL PLAN - SHEET METAL NEW WORK**  
 SCALE: 1/8" = 1'-0"

**KEYED MECHANICAL SHEET METAL CONSTRUCTION NOTES:**

- (SA) RELOCATE (E) T-STAT/TEMP-SENSOR OR PROVIDE NEW, AND EXTEND CONTROL WIRING, AS REQUIRED TO ACCOMMODATE THE NEW WORK.
- (SB) CAP OFF DUCTWORK AIR TIGHT.
- (SC) PROVIDE DRYWALL FRAME MOUNTING KIT FOR MOUNTING GRILLE/DIFFUSER IN NEW HARD DRYWALL LIU CEILING.
- (SD) NEW SUPPLY AIR (SA) RUN-OUT TO NEW SA DIFFUSER, MAXIMUM OF 5 FEET OF FLEX DUCT (TYPICAL), REFER TO SUPPLY AIR DIFFUSER & DUCTWORK DETAILS.
- (SE) NEW FIRE DAMPER (F.D.P.R.) IN EXISTING DUCT THRU NEW FIRE RATED WALL, SHALL VERIFY LOCATION OF (E) VAV AND/OR (E) DUCTWORK AND RELOCATE VAV/REVISE (E) DUCTWORK AS REQUIRED TO ACCOMMODATE THE NEW FIRE DAMPERS IN THE NEW FIREWALL. REFER TO ARCHITECTURAL PLANS FOR FIRE ASSEMBLY RATINGS.
- (SF) REFER TO PLENUM RETURN AIR GRILLE/DUCT DETAIL, IF THE ROOM BEING SERVED HAS FULL HEIGHT WALLS UP TO DECK ABOVE, THEN TERMINATE XFR DUCT (ACOUSTICALLY LINED) FROM RETURN AIR GRILLE THRU WALL INTO COMMON PLENUM SPACE ABOVE CEILING SO THAT RETURN AIR CAN GET BACK TO (E) AHU.
  - FOR R-1 XFR GRILLES, USE 22\"/>
- (SG) NEW 30x16 PLENUM RETURN AIR (RA) TRANSFER (XFR) DUCT (ACOUSTICALLY LINED WHERE SHOWN), WITH FIRE DAMPER (F.D.P.R.) IF REQUIRED, ABOVE THE CEILING THRU FULL HEIGHT WALL (REFER TO ARCHITECTURAL PLANS FOR LOCATION OF FULL HEIGHT WALLS) FOR RA XFR BACK TO AHU. M.C. SHALL FIELD VERIFY (E) CEILING SPACE CONDITIONS & CONFIRM SIZE OF XFR DUCT PRIOR TO ORDERING FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR FIRE ASSEMBLY TYPES/RATINGS.
- (SH) NEW EXHAUST GRILLE E-3, 12x12, 100 CFM.
- (SI) CONNECT NEW E-3 TO NEARBY EXISTING 6x6 EXHAUST AIR (EA) DUCT AND BALANCE TO 100 CFM.
- (SL) NOT USED.
- (SM) RE-BALANCE EXISTING (E) VAV TERMINAL UNIT'S (TU'S) MINIMUM OCCUPIED AIRFLOW/DAMPER POSITION TO MATCH NEW AIRFLOW/DAMPER POSITION INDICATED IN VAV/TU SCHEDULE. TYPICAL FOR ALL (E) VAV TERMINAL UNIT'S.
- (SN) NEW RETURN AIR (RA) TRANSFER (XFR) AIR DUCT (SIZE NOTED ON PLAN, ACOUSTICALLY LINED WHERE SHOWN), WITH FIRE DAMPER (F.D.P.R.) IF REQUIRED (REFER TO ARCHITECTURAL PLANS FOR WALLS/RATINGS), ABOVE THE CEILING THRU FULL HEIGHT WALL (REFER TO ARCHITECTURAL PLANS FOR LOCATION OF FULL HEIGHT WALLS) FOR RETURN AIR TRANSFER BACK TO AHU. M.C. SHALL FIELD VERIFY (E) CEILING SPACE CONDITIONS & CONFIRM SIZE OF XFR DUCT PRIOR TO ORDERING FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR FIRE ASSEMBLY TYPES/RATINGS.
- (SO) WORK IN THIS AREA TO BE COORDINATED WITH OWNER TO ENSURE NO INTERRUPTION OF EXISTING IT SERVICES. EXISTING IT EQUIPMENT/SYSTEMS (SERVERS, RACKS, ETC.) ARE TO BE REMOVED/REVISED BY OWNERS IT/DATA CENTER CONTRACTOR (I.D.C.). M.C. SHALL COORDINATE ALL WORK IN THESE AREAS WITH OWNER & OWNER'S/DATA CENTER CONTRACTOR (I.D.C.) PRIOR TO DEMOLITION & ROUGH-IN OF NEW WORK.
- (SP) NEW 40x16 PLENUM RETURN AIR (RA) TRANSFER (XFR) DUCT (ACOUSTICALLY LINED WHERE SHOWN), WITH FIRE DAMPER (F.D.P.R.) IF REQUIRED, ABOVE THE CEILING THRU FULL HEIGHT WALL (REFER TO ARCHITECTURAL PLANS FOR LOCATION OF FULL HEIGHT WALLS) FOR RA XFR BACK TO AHU. M.C. SHALL FIELD VERIFY (E) CEILING SPACE CONDITIONS & CONFIRM SIZE OF XFR DUCT PRIOR TO ORDERING FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR FIRE ASSEMBLY TYPES/RATINGS.
- (SQ) CONNECT TO/EXTEND (E) EA DUCT TO NEW EXHAUST GRILLE IN A NEW LOCATION. MODIFY CONTROL OF (E) EXH FAN (EF-21, ON ROOF) FROM OLD MANUAL SWITCH TO CONTROL AS AN OCCUPIED SCHEDULE VIA (E) BMS. COORDINATE WITH E.C. & T.C.
- (SR) PROVIDE NEW CONTROL DAMPER AND ASSOCIATED CONTROLS TO INTERLOCK WITH NEW IT-DATA CENTER ROOM ELEVATOR STOP BUTTONS. COORDINATE REQUIREMENTS WITH I.D.C. AND F.P..



PLAN NORTH  
**IT A/C NEW WORK PLAN**  
 SCALE: 1/8" = 1'-0"







VENTILATION LOAD CALCULATIONS  
 Code: 2021 Michigan Mechanical Code  
 By: Justin Kowach, PE - J.K. Engineering  
 Project: ARS 2201  
 Project: MIDLAND COUNTY SERVICES BUILDING - 3RD FLOOR RENOVATIONS  
 Date: 11/22/2024

Room / Zone	Natural Ventilation		Occupants		Mechanical Ventilation					Zone Voz Voz = (RPA+RA)z CFM	Zone OA Voz = (RPA)z CFM
	Area (SqFt)	Provided (SqFt)	Default # Per 400.3 (1000 SqFt)	Pz Estimated OR Actual	People OA Rp CFM/Person Per 400.3	Area OA Ra CFM/SqFt Per 400.3	Exhaust Airflow CFM/Person Per 400.3	Exhaust Airflow CFM/Person Per 400.3	Ez - Zone Effectiveness per 400.3.1.2		
VAV TU-302 (12" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
321 LOBBY	205	8.2	10.0	2.1	5.0	0.06	0.0	0.0	0.8	22.6	28.2
322 TOILET	132	0.0	0.0	0.0	0.0	0.0	1.4	179.3	0.8	0.0	0.0
323 TOILET	142	0.0	0.0	0.0	0.0	0.0	1.3	160.3	0.8	0.0	0.0
328 ADMIN	362	14.5	5.0	1.6	5.0	0.06	0.0	0.0	0.8	30.4	38.5
329 FINANCE-EAST	376	15.1	5.0	1.6	5.0	0.06	0.0	0.0	0.8	32.1	40.2
VAV TU-301 (10" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
367 CONFERENCE	458	16.3	80.0	22.9	5.0	0.06	0.0	0.0	0.8	142.0	177.6
VAV TU-303 (14" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
315 OFFICE	203	8.1	5.0	1.0	5.0	0.06	0.0	0.0	0.8	17.3	21.6
326 CONFERENCE	124	5.0	80.0	22.9	5.0	0.06	0.0	0.0	0.8	28.4	35.7
303 OFFICE	142	5.7	5.0	0.7	5.0	0.06	0.0	0.0	0.8	12.1	15.1
307 OFFICE	142	5.7	5.0	0.7	5.0	0.06	0.0	0.0	0.8	12.1	15.1
305 OFFICE	133	5.3	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.3	14.1
VAV TU-306 (7" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
304 OFFICE	163	6.1	30.0	4.6	5.0	0.06	0.0	0.0	0.8	32.1	40.2
VAV TU-307 (12" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
309 FINANCE WEST	280	11.2	5.0	1.4	5.0	0.06	0.0	0.0	0.8	23.8	29.8
313 OPEN OFFICE-NORTH	290	11.7	5.0	1.2	5.0	0.06	0.0	0.0	0.8	19.8	24.4
312 OFFICE	142	5.7	5.0	0.7	5.0	0.06	0.0	0.0	0.8	12.1	15.1
VAV TU-317 (7" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
313 OPEN OFFICE-SOUTH	229	9.2	5.0	1.1	5.0	0.06	0.0	0.0	0.8	19.5	24.3
352 EQUALIZATION (NORTH)	254	10.2	5.0	1.3	5.0	0.06	0.0	0.0	0.8	21.6	27.0
VAV TU-316 (10" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
381 OFFICE	171	6.8	5.0	0.9	5.0	0.06	0.0	0.0	0.8	14.5	18.2
349 OFFICE	143	5.7	5.0	0.7	5.0	0.06	0.0	0.0	0.8	12.2	15.2
VAV TU-319 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
385 OFFICE	143	5.7	5.0	0.7	5.0	0.06	0.0	0.0	0.8	12.2	15.2
381 OFFICE	206	8.2	5.0	1.0	5.0	0.06	0.0	0.0	0.8	17.4	21.6
VAV TU-312 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
382 EQUALIZATION (SOUTH)	308	12.3	10.0	3.1	5.0	0.06	0.0	0.0	0.8	53.9	67.4
353 OFFICE	143	5.7	5.0	0.7	5.0	0.06	0.0	0.0	0.8	12.2	15.2
VAV TU-315 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
382 BREAK ROOM	483	18.5	80.0	23.2	5.0	0.06	1.8	819.5	0.8	143.5	179.4
VAV TU-314 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
338 PARTIAL OFFICE (NORTH)	183	7.3	5.0	0.9	5.0	0.06	0.0	0.0	0.8	15.5	19.4
339 STORAGE	150	6.0	5.0	0.7	5.0	0.06	0.0	0.0	0.8	18.0	22.5
VAV TU-313 (14" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
337 OFFICE	113	4.6	5.0	0.6	5.0	0.06	0.0	0.0	0.8	8.6	10.8
336 OFFICE	165	6.6	5.0	0.6	5.0	0.06	0.0	0.0	0.8	14.0	17.5
335 OFFICE	140	5.6	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.9	14.9
338 PARTIAL OFFICE (SOUTH)	240	9.6	5.0	1.2	5.0	0.06	0.0	0.0	0.8	20.4	25.5
VAV TU-316 (7" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
332 OFFICE	215	8.6	5.0	1.1	5.0	0.06	0.0	0.0	0.8	18.3	22.8
VAV TU-309 (10" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
331 OFFICE	139	5.6	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.8	14.8
327 OFFICE	139	5.6	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.8	14.8
329 OFFICE	139	5.6	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.8	14.8
324 OFFICE	139	5.6	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.8	14.8
325 OFFICE	139	5.6	5.0	0.7	5.0	0.06	0.0	0.0	0.8	11.8	14.8
VAV TU-322 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
329 OPEN OFFICE	558	22.1	5.0	2.4	5.0	0.06	0.0	0.0	0.8	47.4	59.3
VAV TU-308 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
389 CONFERENCE	455	16.2	80.0	22.8	5.0	0.06	0.0	0.0	0.8	141.1	176.3
VAV TU-310 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
354 OFFICE	240	9.6	10.0	2.4	5.0	0.06	0.0	0.0	0.8	28.4	35.0
365 HALL	445	17.7	0.0	0.0	0.0	0.06	0.0	0.0	0.8	26.6	33.2
VAV TU-323 (8" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
359 IT	598	23.9	5.0	3.0	5.0	0.06	0.0	0.0	0.8	50.8	63.9
VAV TU-305 (16" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
383 HALL 383	350	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	21.0	26.3
VAV TU-304 (16" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
364 CORRIDOR 364	805	32.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	48.3	60.4
TU-320 (14" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
366 HALL 366	437	17.5	5.0	2.0	5.0	0.06	0.0	0.0	0.8	28.2	35.8
308 IT STORAGE	408	16.3	5.0	2.0	5.0	0.12	0.0	0.0	0.8	59.2	74.0
TU-321 (14" DIA.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
371 CONFERENCE	430	17.2	80.0	21.5	5.0	0.06	0.0	0.0	0.8	133.3	166.6

SEE NOTE 4 - VAV BOX AIR TERMINAL UNIT SCHEDULE - 3RD FLOOR (E) AHU-4

UNIT I.D.	SYSTEM SERVED	AIRFLOW RANGE (CFM)		MINIMUM S.P. @ BOX	DUCT CONNECTIONS		REHEAT COIL					EXISTING TITUS MODEL NO.	REMARKS
		TU MAX. CFM	MIN. CFM OCCUPIED		INLET SIZE IN.	OUTLET SIZE IN.	MBH	EWT	GPM	WPD	EAT		
(E) TU-301	CONFERENCE 367	960	180-800	0.75	10"	14x14	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-302	LOBBY, TOILETS, ADMIN 308, FINANCE 309	1270	200-1045	1.00	12"	14x14	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-303	OFFICE 305, 307, 303, 315 & CONF 364	1490	240-1400	0.75	14"	16x16	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-304	CORRIDOR 306	2730	400-2730	0.75	16"	34x12	--	--	--	--	--	ESV-3000-6	SEE NOTES
(E) TU-305	HALL 363	2730	400-2730	0.75	16"	26x16	--	--	--	--	--	ESV-3000-6	SEE NOTES
(E) TU-306	OFFICE 304	450	100-450	0.75	7"	8x12	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-307	FINANCE 309, OFFICE 313, OFFICE 372	1280	125-1260	0.75	12"	16x14	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-308	CONFERENCE 369	680	200-680	0.75	9"	14x12	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-309	OFFICE 326, 324, 328, 327 & 331	835	125-825	0.75	10"	12x14	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-310	OFFICE 354 & HALL 365	660	110-540	0.75	8"	12x10	--	--	--	--	--	ESV-3000-2	SEE NOTES
(E) TU-312	OFFICE 353 & EQUALIZATION 352	650	100-580	0.75	9"	12x12	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-313	OPEN OFFICE 338, OFFICE 337, 336 & 335	1640	200-1340	0.75	14"	16x16	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-314	OPEN OFFICE 338 & STORAGE 339	540	80-405	0.75	8"	12x10	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-315	BREAK ROOM 362	680	200-680	0.75	9"	14x12	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-316	IT OFFICE 332	420	50-410	0.75	7"	10x10	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-317	OPEN OFFICE 313 & EQUALIZATION 352	400	80-400	0.75	7"	10x10	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-318	OFFICE 361 & 349	940	100-800	0.75	10"	14x14	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-319	OFFICE 351 & 355	730	100-660	0.75	9"	12x12	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-320	IT STORAGE 358 & HALL 366	1800	180-1125	0.75	14"	18x16	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-321	CONFERENCE 371	1800	270-1350	0.50	14"	18x16	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-322	OPEN OFFICE 329	540	100-540	0.75	8"	14x8	--	--	--	--	--	ESV-3000	SEE NOTES
(E) TU-323	IT 359	820	120-800	0.75	9"	14x12	--	--	--	--	--	ESV-3000	SEE NOTES
TOTALS =													

TEST & BALANCE SUBCONTRACTOR SHALL ADJUST THE MINIMUM OCCUPIED OUTDOOR AIR (OA) / RETURN AIR (RA) DAMPER ON (E) AHU-4 (20,400 CFM) TO SUPPLY 4,000 CFM FRESH OUTDOOR AIR TO 3RD FLOOR VAV TUS ---> 4,000 CFM OA / 20,400 TOTAL AHU SUPPLY AIR = 2







ELECTRICAL ABBREVIATION LIST

ABBREVIATION	DESCRIPTION
A	AMPS
ACC	AIR CONDITIONING CONDENSER
AF	AMP FUSE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPS INTERRUPTING CAPACITY
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COORD	COORDINATE
CP	CIRCULATION PUMP
CU	CONDENSING UNIT
DISC	DISCONNECT
DP	DISTRIBUTION PANEL
DWG	DRAWING
(E)	EXISTING
EBH	ELECTRIC BASEBOARD HEATER
EBU	EMERGENCY BATTERY UNIT
E.C.	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EML	EMERGENCY LIGHT
EMT	ELECTRICAL METALLIC TUBING
EW	ELECTRIC WATER COOLER
(F)	FUTURE
F.A.	OWNER DIRECT FIRE ALARM SUBCONTRACTOR (DON @ VETERAN'S ALARM = 989-631-1111)
F.P.	OWNER DIRECT FIRE PROTECTION SUBCONTRACTOR (FOR CLEAN AGENT NOVEC 1230 SYSTEM)
F.S.	FIRE SUPPRESSION SUBCONTRACTOR (FOR WET PIPE FIRE SUPPRESSION WORK)
FC	FAN COIL
FLA	FULL LOAD AMPS
FU	FUSE
GF1	GROUND FAULT INTERRUPTER
GRD	GROUND
GRS	GALVANIZED RIGID STEEL
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
IG	ISOLATED GROUND
IT	INFORMATION TECHNOLOGY SYSTEMS/EQUIPMENT
I.D.C.	IT/DATA CENTER INTEGRATION SUB-CONTRACTOR
JB	JUNCTION BOX
KVA	KILO VOLT-AMPERES
KW	KILOWATT
LC	LIGHTING CONTROLLER
LP	LIGHTING PANEL
M.C.	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MFS	MAX FUSE SIZE
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTR	MOTOR
NC	NORMALLY CLOSED
N.E.C.	NATIONAL ELECTRIC CODE
NF	NON-FUSIBLE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
P-A	PANEL "A"
PB	PUSHBUTTON STATION
P.C.	PLUMBING CONTRACTOR
PRI	PRIOR TO ROUGH-IN
(R)	RELOCATED
RAF	RETURN AIR FAN
REF	ROOF EXHAUST FAN
RECEPT	RECEPTACLE
RP	RECEPTACLE PANEL
RTU	ROOF TOP HVAC UNIT
SAF	SUPPLY AIR FAN
S/C	COMB. SMOKE/CARBON MONOXIDE DETECTOR
SD	SMOKE DETECTOR
SPEC	SPECIFICATION
SW	SWITCH
SWBD	SWITCHBOARD
T.C.	TEMPERATURE CONTROLS SUBCONTRACTOR
TELECOM	TELECOMMUNICATIONS
TYP	TYPICAL
UH	UNIT HEATER
UN	UNLESS OTHERWISE NOTED
UPS	UN-INTERRUPTIBLE POWER SUPPLY
U/G	UNDERGROUND (BELOW GRADE)
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
W	WATTS
WG	WIRE GUARD
WP	WEATHERPROOF
WSA	WIRE SIZE AMPS
XFMR	TRANSFORMER

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
(FA)	FIXTURE TYPE	⊘	SINGLE PHASE MOTOR
⊠	RECESSED LIGHT FIXTURE (2x4)	⊘	THREE PHASE MOTOR
⊠	RECESSED EMERGENCY LIGHT FIXTURE (2x4)	⊘	COMBINATION MOTOR STARTER WITH DISCONNECT SWITCH
⊠	SURFACE MOUNTED LIGHT FIXTURE (2x4)	VSD	VARIABLE SPEED DRIVE COMBINATION MOTOR STARTER WITH DISCONNECT SWITCH
⊠	SURFACE MOUNTED EMERGENCY LIGHT FIXTURE (2x4)	⊠	NON-FUSABLE DISCONNECT SWITCH
⊠	RECESSED LIGHT FIXTURE (2x2)	⊠	FUSIBLE DISCONNECT SWITCH
⊠	RECESSED EMERGENCY LIGHT FIXTURE (2x2)	SM	HORSE POWER RATED SWITCH
⊠	SURFACE MOUNTED LIGHT FIXTURE (2x2)	⊠	PUSH BUTTON STATION
⊠	SURFACE MOUNTED EMERGENCY LIGHT FIXTURE (2x2)	⊠	JUNCTION BOX
⊠	PENDANT OR SURFACE MOUNTED LIGHT FIXTURE	⊠	HARD WIRE POWER CONNECTION
⊠	PENDANT OR SURFACE MOUNTED EMERGENCY LIGHT FIXTURE	⊠	HARD WIRE CONNECTION AT FLOOR BOX
⊠	WALL MOUNTED LIGHT FIXTURE	⊠	CONDUIT UP
⊠	DOWNLIGHT LIGHTING FIXTURE	⊠	CONDUIT DOWN
⊠	DOWNLIGHT EMERGENCY LIGHTING FIXTURE	⊠	COMBINATION TELE/DATA OUTLET - ROUGH-IN ONLY, NO CABLE DROP
⊠	WALL MOUNTED LIGHTING FIXTURE	⊠	COMBINATION TELE/DATA OUTLET - 2 CABLE DROPS
⊠	WALL SCONCE	⊠	COMBINATION TELE/DATA OUTLET MOUNTED 6" ABOVE COUNTERTOP - 2 CABLE DROPS
⊠	EMERGENCY LIGHTING UNIT	⊠	COMBINATION TELE/DATA OUTLET IN FLOOR BOX
⊠	EXIT LIGHTING FIXTURE WITH EMERGENCY EGRESS LIGHTING AND BATTERY	⊠	2 = WITH (2) TELE/DATA OUTLETS
⊠	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS - SHADED AREA INDICATES FACE	⊠	4 = WITH (4) TELE/DATA OUTLETS
⊠	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS - SHADED AREA INDICATES FACE	⊠	DATA OR TELE OUTLET - WALL MOUNTED @ 48"
⊠	EXIT LIGHTING FIXTURE - WALL MOUNTED	⊠	TELECOMMUNICATIONS BACKBOARD
⊠	REMOTE EMERGENCY EXIT DISCHARGE LIGHT	⊠	DUPLEX RECEPTACLE
S	SINGLE POLE TOGGLE SWITCH	⊠	DUPLEX RECEPTACLE WITH DUAL USB CHARGING PORTS
S2	TWO POLE TOGGLE SWITCH	⊠	DUPLEX RECEPTACLE TAMPER RESISTANT - SIMILAR FOR ISOLATED GROUND, EMERGENCY AND GF1 RECEPTACLES
S3	3-WAY TOGGLE SWITCH	⊠	DUPLEX RECEPTACLE MOUNTED AT 48" ABOVE FLOOR (UNLESS NOTED OTHERWISE) - SIMILAR FOR ISOLATED GROUND, EMERGENCY AND GF1 RECEPTACLES
S4	4-WAY TOGGLE SWITCH	⊠	QUAD RECEPTACLE
S0	OCCUPANCY SENSOR WALL SWITCH	⊠	DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTERTOP OR AS REQUIRED TO ACCOMMODATE ELEVATIONS
Sv	VACANCY SENSOR WALL SWITCH	⊠	DUPLEX RECEPTACLE - GROUND FAULT INTERRUPTER
D	DIMMER SWITCH	⊠	DUPLEX RECEPTACLE EMERGENCY POWER
D3	3-WAY DIMMER SWITCH	⊠	DUPLEX RECEPTACLE ISOLATED GROUND
D0	OCCUPANCY SENSOR DIMMER WALL SWITCH	⊠	QUAD RECEPTACLE ISOLATED GROUND
Dv	VACANCY SENSOR DIMMER WALL SWITCH	⊠	FLOOR MOUNTED RECEPTACLE - FLUSH MOUNT
D0	DIGITAL SWITCH	⊠	F1 = WITH (1) DUPLEX RECEPTACLE
D0	DIGITAL SWITCH	⊠	F2 = WITH (2) DUPLEX RECEPTACLES
LC	LIGHTING CONTROLLER/CONTACTOR	⊠	SPECIAL RECEPTACLE - NEMA CONFIGURATION AS NOTED
C	CONTACTOR	⊠	MULTI-OUTLET RACEWAY
P	PHOTOELECTRIC CONTROLLER	⊠	TELEVISION OUTLET - ROUGH-IN ONLY
OS	CEILING OR WALL MOUNTED OCCUPANCY SENSOR	⊠	ELECTRIC STRIKE
VS	CEILING OR WALL MOUNTED VACANCY SENSOR	⊠	CARD READER/KEY PAD
PP	OCCUPANCY/VACANCY SENSOR POWER PACK	⊠	POWER SUPPLY
DS	DAYLIGHT SENSOR	⊠	
EPC	EMERGENCY POWER TRANSFER CONTROLLER (LVS MODEL "EPC-A")	⊠	
LC	TIME CLOCK	⊠	
T	T-STAT (BY OTHERS) ROUGHED IN BY E.C. @ 52" AFF WITH CONDUIT PATHWAY TO EQUIPMENT CONTROLS CONNECTION - COORD. WITH MECHANICAL TRADES	⊠	
CO2	CARBON DIOXIDE SENSOR (BY OTHERS) ROUGHED IN BY E.C. @ 52" AFF WITH CONDUIT PATHWAY TO EQUIPMENT CONTROLS CONNECTION - COORD. WITH MECHANICAL TRADES	⊠	
T	TEMPERATURE SENSOR (BY OTHERS) ROUGHED IN BY E.C. @ 52" AFF WITH CONDUIT PATHWAY TO EQUIPMENT CONTROLS CONNECTION - COORD. WITH MECHANICAL TRADES	⊠	

NOTE:  
 ALL CEILING SPACES ARE RETURN AIR PLENUM.  
 ALL PVC CONDUIT SHALL BE INSULATED/JACKETED PER BUILDING CODE.  
 ALL EXPOSED LOW VOLTAGE WIRING (E.G. FIRE ALARM, SECURITY, ETC.) SHALL BE PLENUM RATED CABLE.

**BRANCH CIRCUIT WIRE SIZE/LENGTH SCHEDULE**

MAX BRANCH CIRCUIT (AMPS)	MAX CIRCUIT LENGTH (FEET) TO LAST CONNECTION IN THE CIRCUIT					
	50	75	100	125	150	< 300
15	#10	#10	#10	#10	#8	#4
20	#10	#10	#10	#8	#6	#4

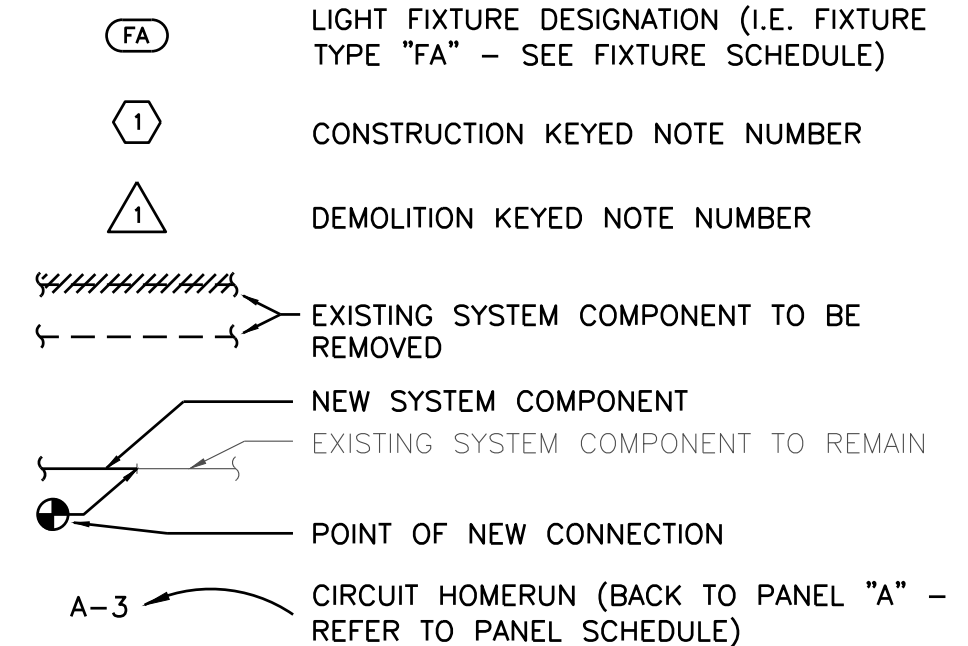
NOTES:  
 1. REFER TO SPECIFICATIONS FOR WIRE TYPE.  
 2. SCHEDULE IS BASED UPON A MAX 3% VOLTAGE DROP ON 208-240V/1Ø CIRCUITS.  
 3. FOR LENGTHS BETWEEN TABLED VALUES - USE LONGER LENGTH.

**BRANCH CIRCUIT WIRE SIZE/LENGTH SCHEDULE**

MAX BRANCH CIRCUIT (AMPS)	MAX CIRCUIT LENGTH (FEET) TO LAST CONNECTION IN THE CIRCUIT						
	50	75	100	125	150	300	
15	#12	#10	#10	#8	#6	#4	
20	#10	#10	#8	#6	#6	#3	
30	#8	#8	#6	#4	#4	#1	

NOTES:  
 1. REFER TO SPECIFICATIONS FOR WIRE TYPE.  
 2. SCHEDULE IS BASED UPON A MAX 3% VOLTAGE DROP ON 115-120V/1Ø CIRCUITS.  
 3. FOR LENGTHS BETWEEN TABLED VALUES - USE LONGER LENGTH.

METHODS OF NOTATION



STANDARD MOUNTING HEIGHTS

CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE OUTLETS, TELE/DATA AND COMMUNICATIONS OUTLETS, NOT OTHERWISE SPECIFIED:  
 • 18" AFF TO THE MIDDLE OF BOX  
 • 16" AFF TO BOTTOM OF BOX IN CMU WALLS

CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE OUTLETS ABOVE COUNTERS, NOT OTHERWISE SPECIFIED:  
 • 6" ABOVE COUNTER TO CENTER OF BOX OR AS REQUIRED TO ACCOMMODATE COUNTERS. (REFER TO ARCHITECTURAL ELEVATIONS.)

LIGHT SWITCHES, MOTOR CONTROL DEVICES, AND FIRE ALARM PULL STATIONS, NOT OTHERWISE SPECIFIED:  
 • 48" AFF TO THE MIDDLE OF BOX  
 • 48" AFF TO THE TOP OF BOX IN CMU WALLS

T-STATS, TEMP. SENSORS, CO2 SENSORS, NOT OTHERWISE SPECIFIED:  
 • 48" AFF TO THE MIDDLE OF BOX  
 • 48" AFF TO THE TOP OF BOX IN CMU WALLS

FIRE ALARM HORNS, SPEAKERS, STROBES, AND COMBINATION DEVICES, NOT OTHERWISE SPECIFIED:  
 • 96" AFF (TO TOP OF BOX) OR 6" BELOW CEILING, WHICHEVER IS LESS - BUT NO LOWER THAN 80" AFF.

GF1 RECEPTACLES IN TOILET ROOMS AND JANITOR CLOSETS, NOT OTHERWISE SPECIFIED:  
 • 48" AFF TO TOP OF BOX.

LIGHTING AND RECEPTACLE BRANCH CIRCUIT PANELBOARDS AND LIGHTING CONTROLLERS:  
 • 6"-6" AFF TO TOP OF ENCLOSURE.



PREPARED UNDER THE SUPERVISION OF:  
 JUSTIN L. KOWATCH, P.E.  
 MICHIGAN PE NO. 45825

ELECTRICAL DRAWING INDEX

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Project Number: ARC 2201-01  
 The Owner's Complete Responsibility  
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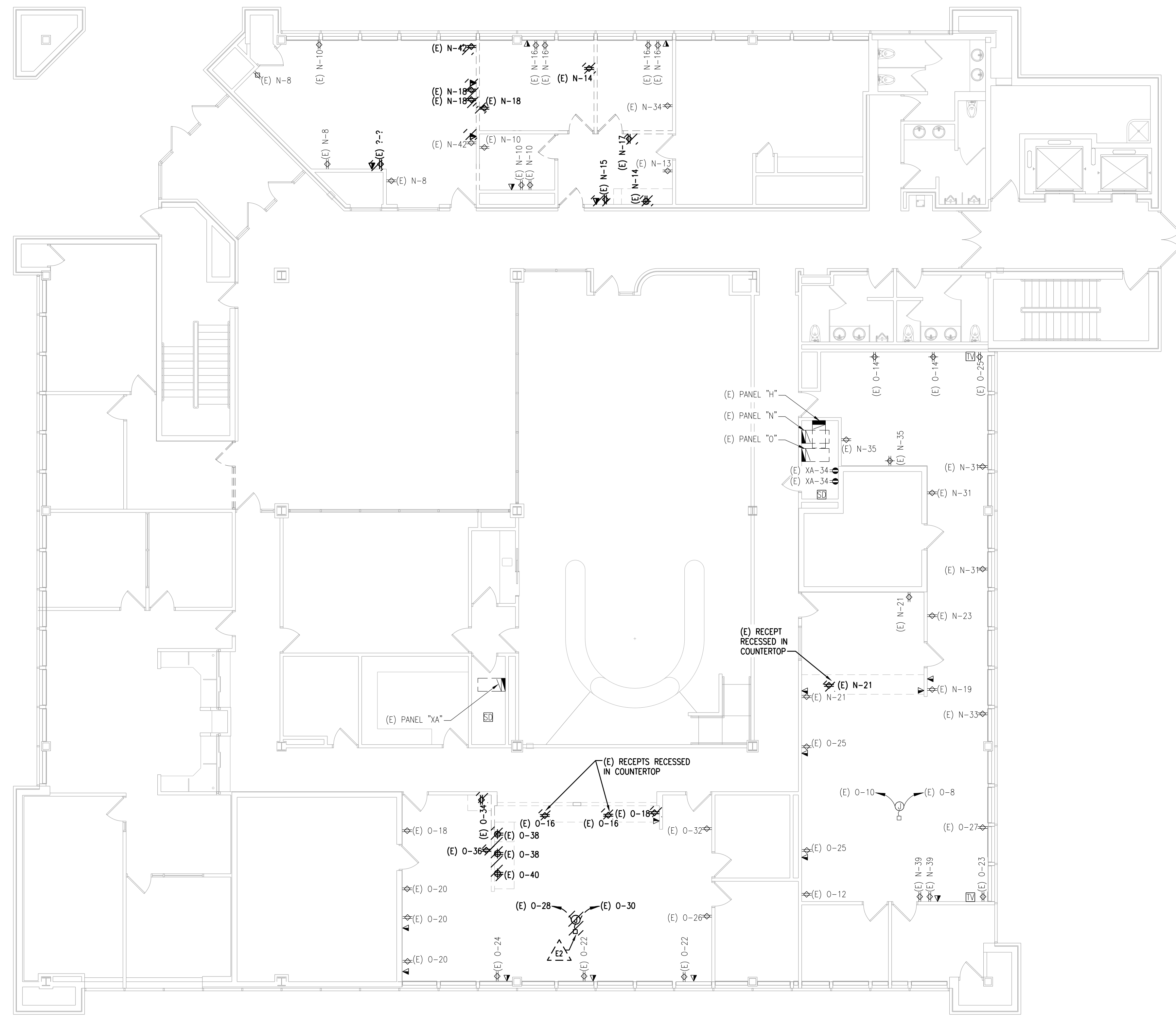
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RENOVATIONS TO  
 MIDLAND COUNTY SERVICES BUILDING  
 MIDLAND MICHIGAN

ELECTRICAL TITLE SHEET

ISSUE PERMITS & BIDS 11-11-2024 Revised

SCALE: AS NOTED  
 PROJECT NO. 20220400  
 DRAWING NO. E0.1



- KEYED ELECTRICAL POWER DEMOLITION NOTES:**
- E1 REMOVE EXISTING (E) RECEPTACLES (RECEPT) & ASSOC. CIRCUITING BACK TO PANEL. CAREFULLY REMOVE (E) TELECOM CABLING BACK TO IT CLOSET.  
NOTE: CIRCUITING ON PLANS IS BASED ON ASSUMPTIONS. E.C. SHALL VERIFY (E) CONDITIONS & CONFIRM/RECORD EXISTING CIRCUITING PRIOR TO DEMO.
  - E2 CAREFULLY REMOVE EXISTING (E) POWER POLES (FOR REUSE OR TURN OVER TO OWNER) WITH RECEPTACLES AND CIRCUITING BACK TO PANEL. REMOVE (E) TELECOM DEVICES AND CAREFULLY REMOVE TELCOM CABLING BACK TO IT CLOSET.
  - E3 ALL WORK IN THIS AREA TO BE COORDINATED WITH OWNER & OWNER'S IT/DATA-CENTER CONTRACTOR (I.D.C.) TO ENSURE NO INTERRUPTION OF IT/DATA-CENTER SERVICES TO THE OWNER. EXISTING (E) IT EQUIPMENT/SYSTEMS (UPS & DOWNSTREAM OF UPS) ARE TO BE REMOVED/REVISED BY OWNER/I.D.C. E.C. SHALL COORDINATE ALL DEMO & NEW WORK WITHIN THE (E) IT/DATA-CENTER AREA & THE NEW IT/DATA CENTER AREAS WITH THE OWNER/I.D.C.
  - E4 EXISTING FIRE ALARM SYSTEMS ARE TO BE REMOVED/REVISED BY OTHERS - OWNER'S FIRE ALARM SUBCONTRACTOR = VETERAN'S ALARM. E.C. SHALL COORD. ALL FIRE ALARM WORK WITH VETERAN'S ALARM (DON OR KELLY @ 989-631-1111) PRIOR TO DEMOLITION & ROUGH-IN OF NEW WORK.
  - E5 REMOVE EXISTING (E) RECEPTACLE FOR LAB/SAMPLE REFRIGERATOR WIRED FROM 20A BREAKER IN EMERGENCY PANEL XA? AND PREPARE TO REUSE CKT IN NEW LOCATION. REFER TO NEW WORK PLAN.
  - E6 REMOVE EXISTING (E) POWER FOR COOK TOP & OVEN WIRED FROM 50A/2P BREAKER IN PANEL R. REMOVE WIRING BACK TO SOURCE. TURN OFF BREAKER & UPDATE PANEL SCHEDULE.
  - E7 CAREFULLY REMOVE ANY (E) CLEAN AGENT (NOVEC) FIRE SUPPRESSION SYSTEM EQUIPMENT CONTROLS/WIRING/ETC. AS REQUIRED TO ACCOMMODATE RELOCATING THE DOOR TO THE CLEAN AGENT CLOSET TO THE SOUTH WALL. REFER TO NEW WORK PLANS.
  - E8 REMOVE EXISTING (E) RECEPTACLE - TO BE REPLACED WITH NEW. EXISTING CIRCUITING TO REMAIN. REFER TO NEW WORK PLANS.
  - E9 CAREFULLY REMOVE (E) CLEAN AGENT (NOVEC) FIRE ALARM SYSTEM DEVICES/PANEL/ETC. AS REQUIRED TO ACCOMMODATE RELOCATING THE CLEAN AGENT SYSTEM TO A NEW LOCATION IN A NEW ROOM NEARBY. REFER TO NEW WORK PLANS.

PLAN NORTH  
**FIRST FLOOR ELECTRICAL PLAN - POWER DEMOLITION**  
 SCALE: 1/8" = 1'-0"

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**FIRST FLOOR ELECTRICAL PLAN -  
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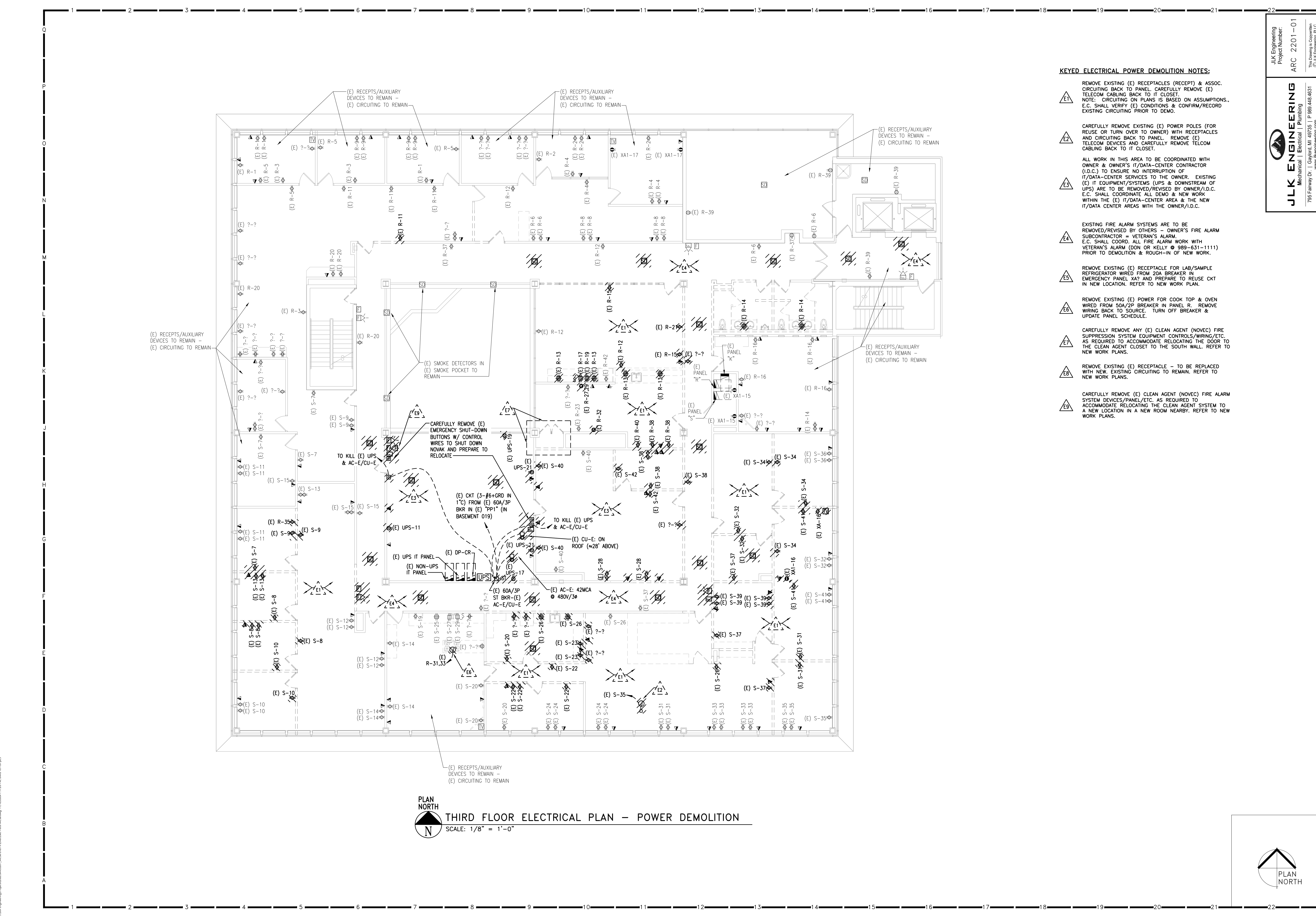
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PLAN NORTH  
**THIRD FLOOR ELECTRICAL PLAN - POWER DEMOLITION**  
SCALE: 1/8" = 1'-0"

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**THIRD FLOOR ELECTRICAL PLAN -  
POWER DEMOLITION**

ISSUE  
PERMITS & BIDS  
11-11-2024  
Revised

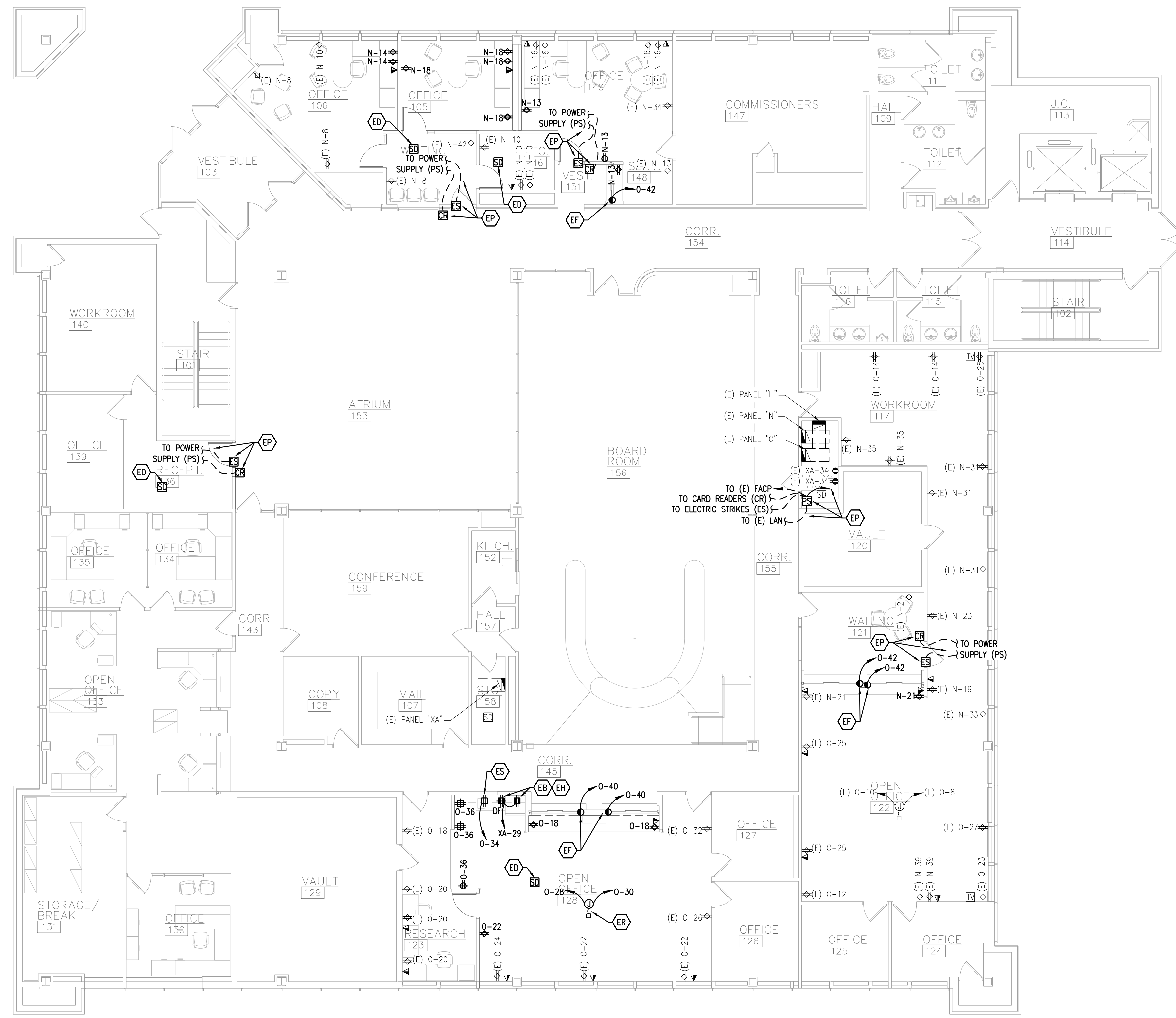


SCALE:  
AS NOTED  
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**E1.3**









PLAN NORTH  
**FIRST FLOOR ELECTRICAL PLAN - POWER NEW WORK**  
 SCALE: 1/8" = 1'-0"

**KEYED ELECTRICAL CONSTRUCTION NOTES:**

- (EA) COORD. LOCATION & MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES AND AUXILIARY (AUX.) ELECTRICAL DEVICES (TELECOM, AUDIO/VIDEO, FIRE ALARM, SECURITY, ETC.) WITH OWNER'S REP & OTHER TRADES PRIOR TO ROUGH-IN.
- (EB) FOR GFI RECEPTS SERVING APPLIANCES THAT ARE INSTALLED IN A NON-ACCESSIBLE LOCATION, WIRE FROM A GFI RECEPT IN ACCESSIBLE LOCATION PER NEC.
- (EC) PROVIDE RECEPT. AND ROUGH-IN CABLE DROP FOR TV UP HIGH. COORD. EXACT LOCATION WITH OWNER'S REP. PRIOR TO ROUGH-IN.
- (ED) NEW FIRE ALARM WIRING/DEVICES WILL BE BY OTHERS - OWNER'S FIRE ALARM SUBCONTRACTOR (F.A.) = VETERAN'S ALARM (MIDLAND). E.C. SHALL PROVIDE BOX/CONDUIT ROUGH-INS FOR NEW FIRE ALARM DEVICES TO BE DESIGNED/BUILT BY OWNER'S F.A. - COORD. ALL FIRE ALARM WORK WITH F.A. VETERAN'S ALARM (DON OR KELLY @ 989-631-1111) PRIOR TO DEMOLITION & ROUGH-IN OF NEW WORK.
- (EE) PROVIDE RECEPTACLE, BELOW SINK (UP HIGH & BEHIND LAV GUARD), FOR EACH SINK'S SENSOR OPERATED FAUCET PLUG-IN (110V/1P). CKT THROUGH A DEAD FRONT GFI (LABELED AS SUCH) OR THROUGH NEARBY GFI RECEPT THAT IS IN AN ACCESSIBLE LOCATION. COORD. LOCATION WITH P.C. PRIOR TO ROUGH-IN.
- (EF) 24 VOLT DC MAGNETIC RELEASE FOR COUNTER FIRE SHUTTER DOOR. COORD. POWER (ASSUMED 600W @ 115V), SWITCHING, & FIRE ALARM REQUIREMENTS WITH SHUTTER DOOR MFR, AND WITH OWNER'S FIRE ALARM SUBCONTRACTOR (F.A. = VETERAN'S ALARM - DON OR KELLY @ 989.631.1111) PRIOR TO ROUGH-IN.
- (EG) PROVIDE POWER AND DATA DROP FOR LED DISPLAY, PROVIDED BY OWNER (ASSUMED 600W? - CONFIRM). COORD. REQUIREMENTS & LOCATION WITH OWNER PRI.
- (EH) PROVIDE POWER FOR REFRIGERATOR/FREEZER, PROVIDED BY OWNER. CIRCUIT FROM 20A BREAKER IN (E) EMERGENCY PANEL XA/XA1. COORD. REQUIREMENTS & LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- (EI) PROVIDE POWER FOR COPY MACHINE/PRINTER - BY OWNER (ASSUMED 1400W @ 120V). COORD. REQUIREMENTS & LOCATION WITH OWNER PRI.
- (EJ) RELOCATE ANY (E) CLEAN AGENT FIRE SUPPRESSION SYSTEM EQUIPMENT CONTROLS/WIRING/ETC. AS REQUIRED TO RELOCATE THE DOOR FOR THE CLEAN AGENT FIRE SUPPRESSION CLOSET TO ACCESS FROM NEW IT 358.
- (EK) PROVIDE NEW RECEPTACLE ON DEDICATED 20A @ 120V CKT FOR (E)/(R) VENDING MACHINE (ASSUMED 1,200W, CONFIRM) VERIFY/CONFIRM REQUIREMENTS PRI.
- (EL) ADDRESSABLE INTERFACE TO FIRE ALARM SYSTEM TO MONITOR CLEAN AGENT (NOVEC) FIRE PROTECTION SYSTEM. COORDINATE WITH OWNER'S FIRE ALARM SUB (F.A.) AND FIRE PROTECTION SUB (F.P.)
- (EM) RELOCATE (R) EXISTING (E) EM SHUT-DOWN BUTTON(S) & ASSOCIATED CONTROL WIRES TO DISABLE NOVEC FIRE PROTECTION (F.P.), UPS(S), & NEW IT-A/C UNITS AC-N1/CU-N1 & AC-N2/CU-N2. COORD. REQUIREMENTS WITH OWNER/I.D.C./F.P. PRI.
- (EN) PROVIDE RECEPTACLE, BELOW COUNTER MTD SINK, FOR EACH SINK'S SENSOR OPERATED FAUCET PLUG-IN (115V). CIRCUIT THROUGH A DEAD FRONT GFI (LABELED AS SUCH) OR THROUGH NEARBY GFI RECEPT THAT IS IN AN ACCESSIBLE LOCATION. COORD. LOCATION WITH P.C. PRI.
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- (ER) RELOCATE (R) EXISTING (E) POWER POLE AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. COORD. LOCATION WITH OWNER/FURNITURE LAYOUT PRI.
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- (EU) PROVIDE NEW RECEPT. & NEW TELECOM DROP ABOVE ACCESSIBLE CEILING FOR OWNER'S PROJECTOR. VERIFY FINAL LOCATION & REQUIREMENTS W/ OWNER PRI.
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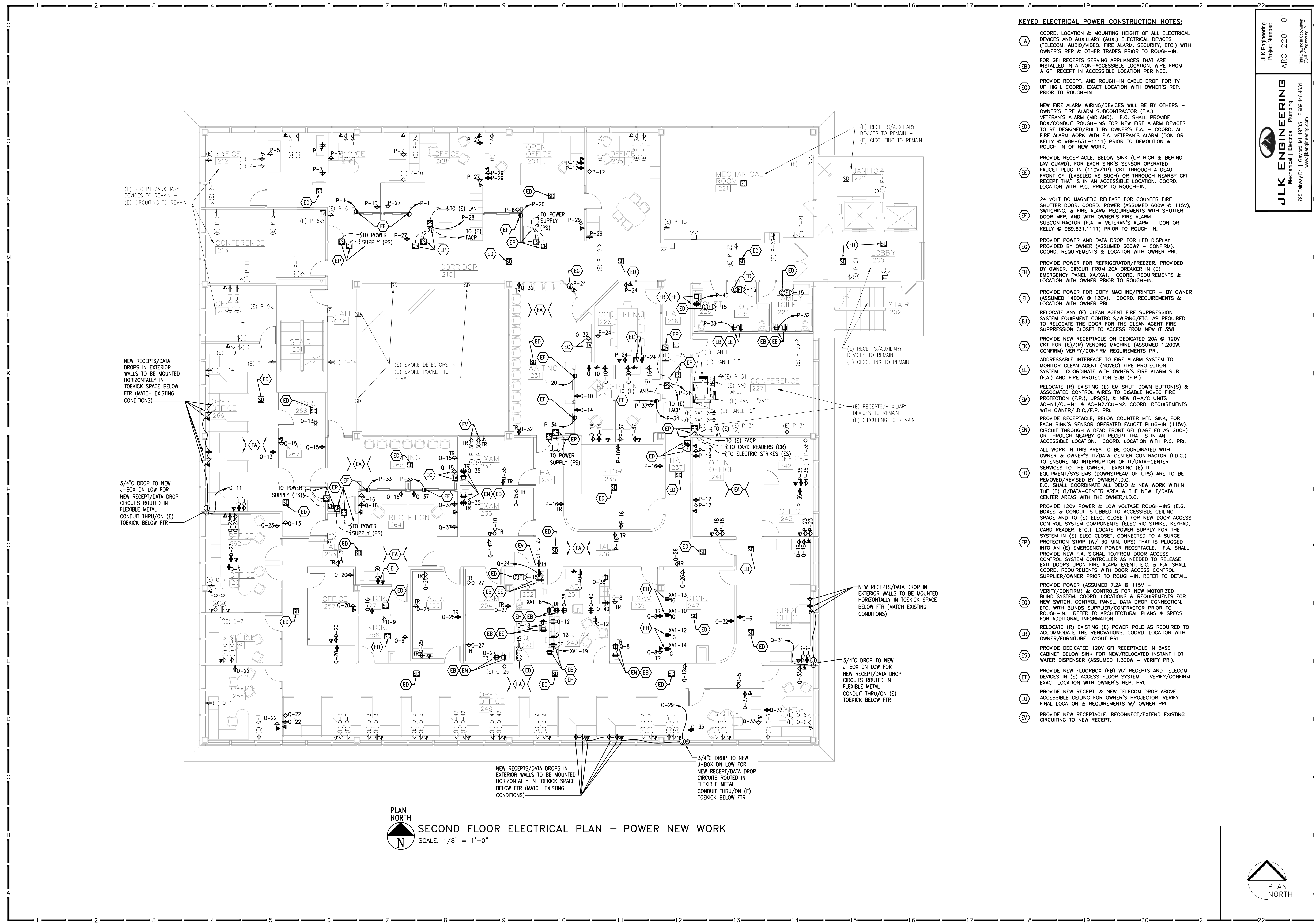


SCALE:  
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PROJECT NO.  
 20220400

DRAWING NO.  
**E3.1**





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3/4\"/>

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**PLAN NORTH**  
**SECOND FLOOR ELECTRICAL PLAN - POWER NEW WORK**  
 SCALE: 1/8" = 1'-0"

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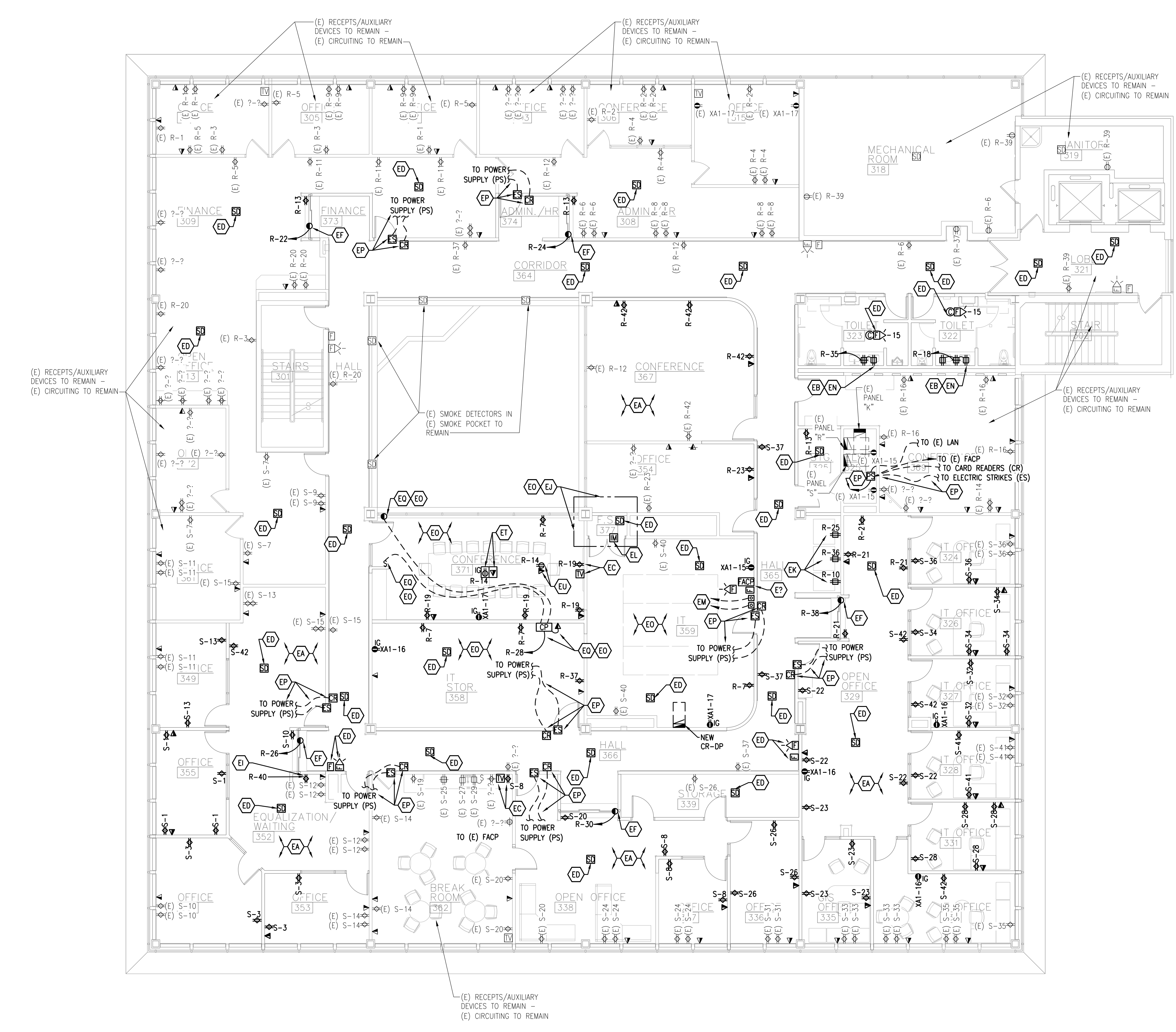
SCALE:  
 AS NOTED

PROJECT NO.  
 20220400

DRAWING NO.  
**E3.2**

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

**KEYED ELECTRICAL POWER CONSTRUCTION NOTES:**

- (EA) COORD. LOCATION & MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES AND AUXILIARY (AUX.) ELECTRICAL DEVICES (TELECOM, AUDIO/VIDEO, FIRE ALARM, SECURITY, ETC.) WITH OWNER'S REP & OTHER TRADES PRIOR TO ROUGH-IN.
- (EB) FOR GFI RECEPTS SERVING APPLIANCES THAT ARE INSTALLED IN A NON-ACCESSIBLE LOCATION, WIRE FROM A GFI RECEPT IN ACCESSIBLE LOCATION PER NEC.
- (EC) PROVIDE RECEPT. AND ROUGH-IN CABLE DROP FOR TV UP HIGH. COORD. EXACT LOCATION WITH OWNER'S REP. PRIOR TO ROUGH-IN.
- (ED) NEW FIRE ALARM WIRING/DEVICES WILL BE BY OTHERS - OWNER'S FIRE ALARM SUBCONTRACTOR (F.A.) = VETERAN'S ALARM (MIDLAND). E.C. SHALL PROVIDE BOX/CONDUIT ROUGH-INS FOR NEW FIRE ALARM DEVICES TO BE DESIGNED/BUILT BY OWNER'S F.A. COORD. ALL FIRE ALARM WORK WITH F.A. VETERAN'S ALARM (DON OR KELLY @ 989-631-1111) PRIOR TO DEMOLITION & ROUGH-IN OF NEW WORK.
- (EE) PROVIDE RECEPTACLE, BELOW SINK (UP HIGH & BEHIND LAV GUARD), FOR EACH SINK'S SENSOR OPERATED FAUCET PLUG-IN (110V/1P). CKT THROUGH A DEAD FRONT GFI (LABELED AS SUCH) OR THROUGH NEARBY GFI RECEPT THAT IS IN AN ACCESSIBLE LOCATION. COORD. LOCATION WITH P.C. PRIOR TO ROUGH-IN.
- (EF) 24 VOLT DC MAGNETIC RELEASE FOR COUNTER FIRE SHUTTER DOOR. COORD. POWER (ASSUMED 600W @ 115V). SWITCHING, & FIRE ALARM REQUIREMENTS WITH SHUTTER DOOR MFR, AND WITH OWNER'S FIRE ALARM SUBCONTRACTOR (F.A. = VETERAN'S ALARM - DON OR KELLY @ 989.631.1111) PRIOR TO ROUGH-IN.
- (EG) PROVIDE POWER AND DATA DROP FOR LED DISPLAY. PROVIDED BY OWNER (ASSUMED 600W? - CONFIRM). COORD. REQUIREMENTS & LOCATION WITH OWNER PRI.
- (EH) PROVIDE POWER FOR REFRIGERATOR/FREEZER. PROVIDED BY OWNER. CIRCUIT FROM 20A BREAKER IN (E) EMERGENCY PANEL XA/XA1. COORD. REQUIREMENTS & LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- (EI) PROVIDE POWER FOR COPY MACHINE/PRINTER - BY OWNER (ASSUMED 1400W @ 120V). COORD. REQUIREMENTS & LOCATION WITH OWNER PRI.
- (EJ) RELOCATE ANY (E) CLEAN AGENT FIRE SUPPRESSION SYSTEM EQUIPMENT CONTROLS/WIRING/ETC. AS REQUIRED TO RELOCATE THE DOOR FOR THE CLEAN AGENT FIRE SUPPRESSION CLOSET TO ACCESS FROM NEW IT 358.
- (EK) PROVIDE NEW RECEPTACLE ON DEDICATED 20A @ 120V CKT FOR (E)/(R) VENDING MACHINE (ASSUMED 1,200W, CONFIRM) VERIFY/CONFIRM REQUIREMENTS PRI.
- (EL) ADDRESSABLE INTERFACE TO FIRE ALARM SYSTEM TO MONITOR CLEAN AGENT (NOVEC) FIRE PROTECTION SYSTEM. COORDINATE WITH OWNER'S FIRE ALARM SUB (F.A.) AND FIRE PROTECTION SUB (F.P.).
- (EM) RELOCATE (R) EXISTING (E) EM SHUT-DOWN BUTTON(S) & ASSOCIATED CONTROL WIRES TO DISABLE NOVEC FIRE PROTECTION (F.P.), UPS(S), & NEW IT-A/C UNITS AC-N1/CU-N1 & AC-N2/CU-N2. COORD. REQUIREMENTS WITH OWNER/I.D.C./F.P. PRI.
- (EN) PROVIDE RECEPTACLE, BELOW COUNTER MTD SINK, FOR EACH SINK'S SENSOR OPERATED FAUCET PLUG-IN (115V). CIRCUIT THROUGH A DEAD FRONT GFI (LABELED AS SUCH) OR THROUGH NEARBY GFI RECEPT THAT IS IN AN ACCESSIBLE LOCATION. COORD. LOCATION WITH P.C. PRI.
- (EO) ALL WORK IN THIS AREA TO BE COORDINATED WITH OWNER & OWNER'S IT/DATA-CENTER CONTRACTOR (I.D.C.) TO ENSURE NO INTERRUPTION OF IT/DATA-CENTER SERVICES TO THE OWNER. EXISTING (E) IT EQUIPMENT/SYSTEMS (DOWNSTREAM OF UPS) ARE TO BE REMOVED/REVISED BY OWNER/I.D.C. E.C. SHALL COORDINATE ALL DEMO & NEW WORK WITHIN THE (E) IT/DATA-CENTER AREA & THE NEW IT/DATA CENTER AREAS WITH THE OWNER/I.D.C.
- (EP) PROVIDE 120V POWER & LOW VOLTAGE ROUGH-INS (E.G. BOXES & CONDUIT STUBBED TO ACCESSIBLE CEILING SPACE AND TO (E) ELEC. CLOSET) FOR NEW DOOR ACCESS CONTROL SYSTEM COMPONENTS (ELECTRIC STRIKE, KEYPAD, CARD READER, ETC.). LOCATE POWER SUPPLY FOR THE SYSTEM IN (E) ELEC CLOSET, CONNECTED TO A SURGE PROTECTION STRIP (W/ 30 MIN. UPS) THAT IS PLUGGED INTO AN (E) EMERGENCY POWER RECEPTACLE. F.A. SHALL PROVIDE NEW F.A. SIGNAL TO/FROM DOOR ACCESS CONTROL SYSTEM CONTROLLER AS NEEDED TO RELEASE EXIT DOORS UPON FIRE ALARM EVENT. E.C. & F.A. SHALL COORD. REQUIREMENTS WITH DOOR ACCESS CONTROL SUPPLIER/OWNER PRIOR TO ROUGH-IN. REFER TO DETAIL FOR ADDITIONAL INFORMATION.
- (EQ) PROVIDE POWER (ASSUMED 7.2A @ 115V VERIFY/CONFIRM) & CONTROLS FOR NEW MOTORIZED BLIND SYSTEM. COORD. LOCATIONS & REQUIREMENTS FOR NEW SWITCH, CONTROL PANEL, DATA DROP CONNECTION, ETC. WITH BLINDS SUPPLIER/CONTRACTOR PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL PLANS & SPECS FOR ADDITIONAL INFORMATION.
- (ER) RELOCATE (R) EXISTING (E) POWER POLE AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. COORD. LOCATION WITH OWNER/FURNITURE LAYOUT PRI.
- (ES) PROVIDE DEDICATED 120V GFI RECEPTACLE IN BASE CABINET BELOW SINK FOR NEW/RELOCATED INSTANT HOT WATER DISPENSER (ASSUMED 1,300W - VERIFY PRI).
- (ET) PROVIDE NEW FLOORBOX (FB) W/ RECEPTS AND TELECOM DEVICES IN (E) ACCESS FLOOR SYSTEM - VERIFY/CONFIRM EXACT LOCATION WITH OWNER'S REP. PRI.
- (EU) PROVIDE NEW RECEPT. & NEW TELECOM DROP ABOVE ACCESSIBLE CEILING FOR OWNER'S PROJECTOR. VERIFY FINAL LOCATION & REQUIREMENTS W/ OWNER PRI.
- (EV) PROVIDE NEW RECEPTACLE, RECONNECT/EXTEND EXISTING CIRCUITING TO NEW RECEPT.

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MIDLAND

THIRD FLOOR ELECTRICAL PLAN -  
POWER NEW WORK

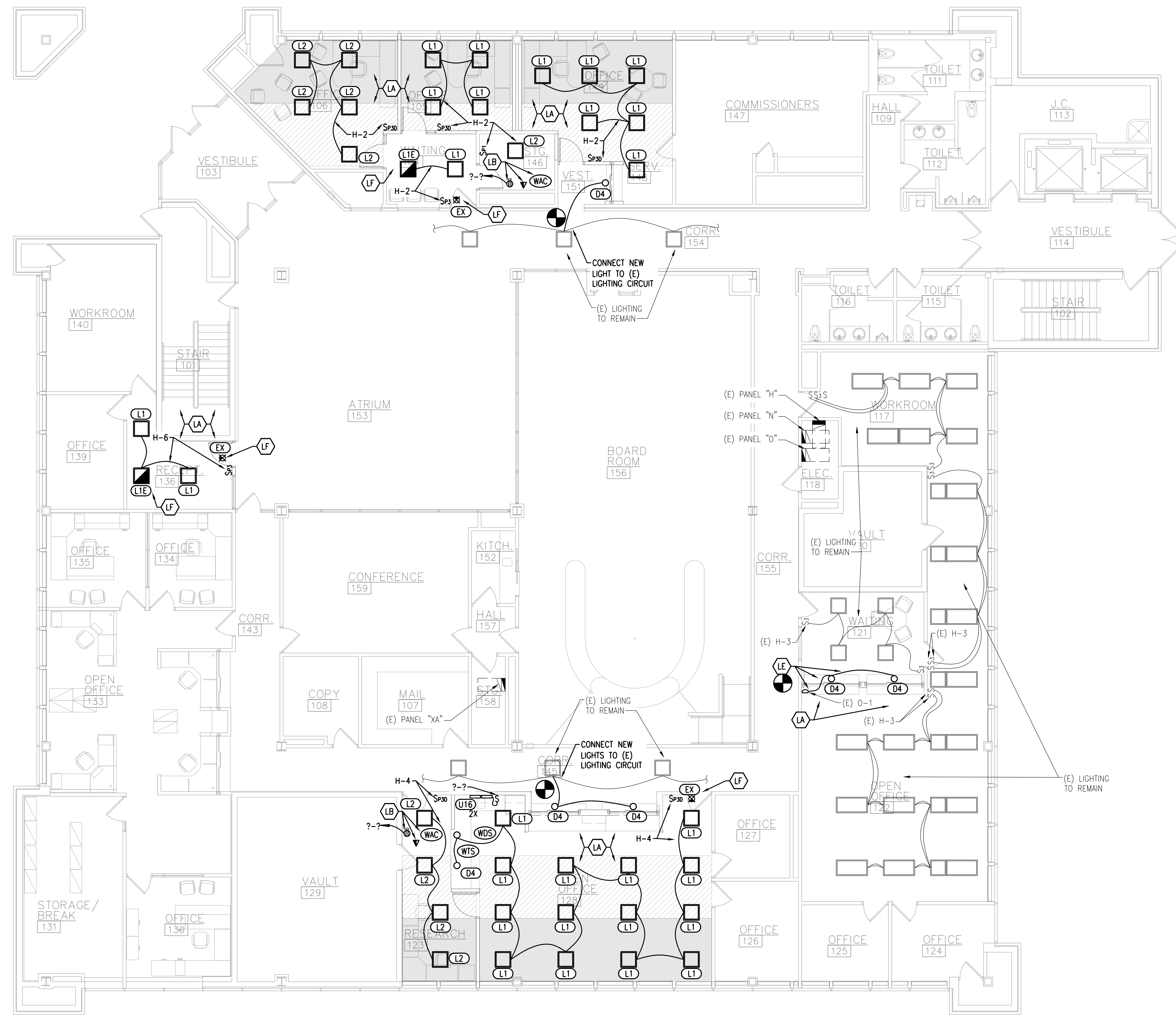
ISSUE PERMITS & BIDS  
11-11-2024  
Revised

SCALE:  
AS NOTED

PROJECT NO.  
20220400

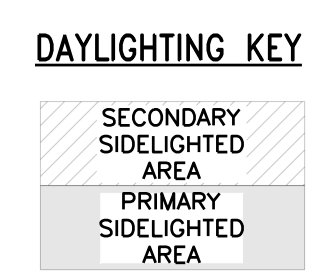
DRAWING NO.  
**E3.3**

PLAN NORTH



PLAN NORTH  
**FIRST FLOOR ELECTRICAL PLAN - LIGHTING NEW WORK**  
 SCALE: 1/8" = 1'-0"

- KEYED ELECTRICAL LIGHTING CONSTRUCTION NOTES:**
- COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL LIGHTING AND CONTROL/SWITCHING WITH OWNER'S REP & ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ROUGH-IN.
  - RELOCATE (R) EXISTING 120V LED EXIT SIGNS AND/OR PROVIDE NEW EXIT SIGNS AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.
  - COORD. LOCATION OF NEW WAVELINK WIRELESS AREA CONTROLLER (WAC), TO BE LOCATED IN AN ACCESSIBLE LOCATION (E.G. ABOVE ACCESSIBLE CEILING, IN ELEC. CLOSET, STORAGE ROOM, ETC.) AND WITHIN CABLE LENGTH TO EXTEND TO POE INJECTOR. LOCATE POE INJECTOR IN AN ACCESSIBLE LOCATION & PROVIDE A NEW RECEPT. (ON EM GENERATOR POWER) FOR POWER & PROVIDE A NEW DATA DROP FOR NETWORKING (COORD. NEW DATA DROP W/ OWNER'S IT DEPT.)
  - RECONNECT/EXTEND (E) WIRING TO RELOCATED AND/OR REPLACED SWITCH TO CONTROL (E) EXHAUST FAN SERVING A NEW AREA.
  - ALL WORK IN THIS AREA TO BE COORDINATED WITH OWNER & OWNER'S IT/DATA-CENTER CONTRACTOR (I.D.C.) TO ENSURE NO INTERRUPTION OF IT/DATA-CENTER SERVICES TO THE OWNER. EXISTING (E) IT EQUIPMENT/SYSTEMS (UPS & DOWNSTREAM OF UPS) ARE TO BE REMOVED/REVISED BY OWNER/I.D.C. E.C. SHALL COORDINATE ALL DEMO & NEW WORK WITHIN THE (E) IT/DATA-CENTER AREA & THE NEW IT/DATA CENTER AREAS WITH THE OWNER/I.D.C.
  - RECONNECT/EXTEND (E) CIRCUITING TO RELOCATED/REPLACED SWITCH TO CONTROL NEW LIGHTS SERVING NEW AREA.
  - CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTS TO AN UNSWITCHED/HOT 120V EMERGENCY GENERATOR CIRCUIT. EXIT SIGNS ARE 120V. NEW EMERGENCY LIGHTS WILL HAVE INTEGRAL EMERGENCY TRANSFER RELAY, WITH DIMMING CONTROL (ETRD).
  - FINALIZE LOCATION OF ROOF EXHAUST FAN REF-23 SWITCH FOR NEW IT ROOM 359 WITH OWNER/I.D.C./F.P. PRIOR TO ROUGH-IN. LABEL SWITCH AS "IT 359-NOVEC PURGE FAN".



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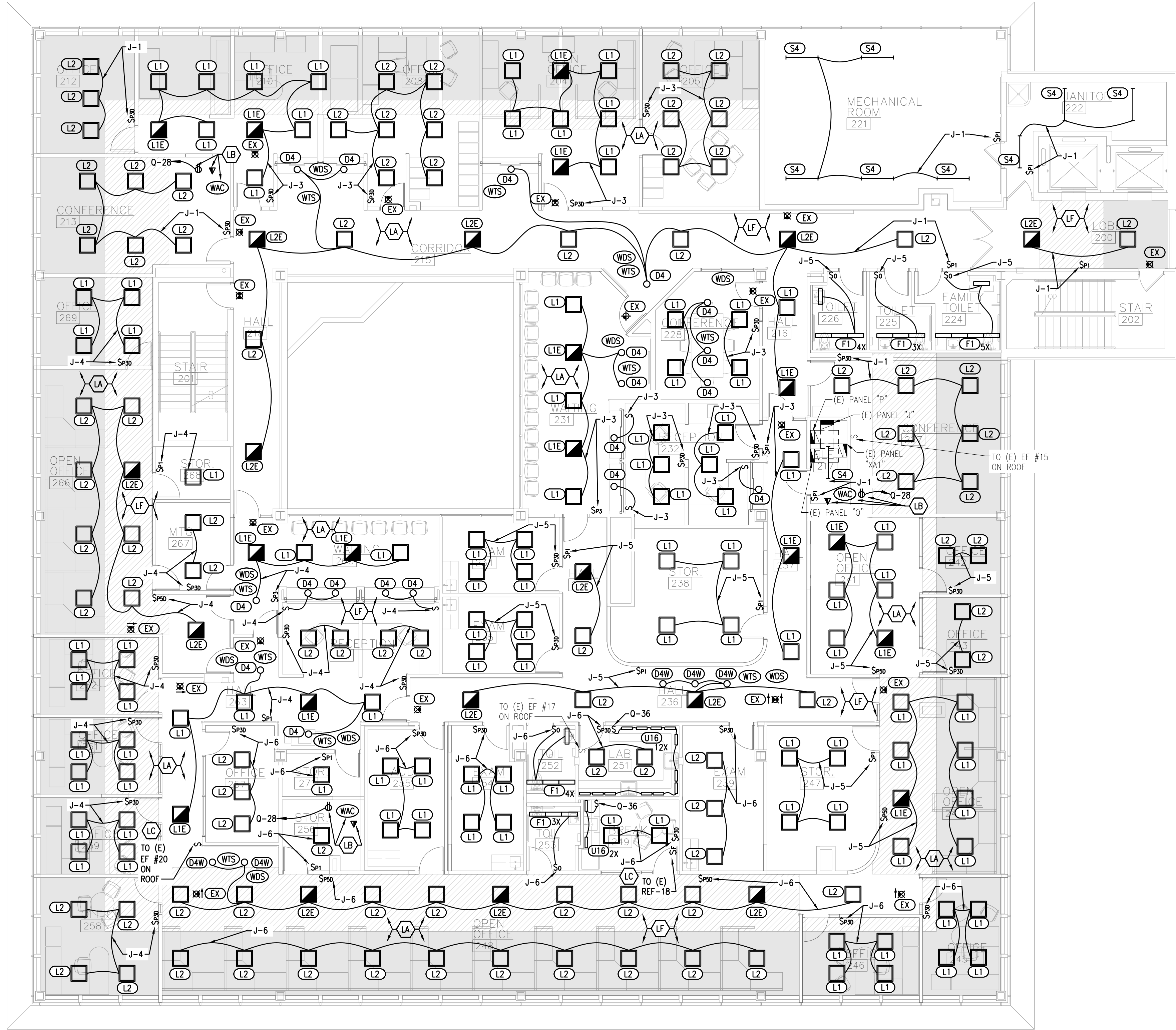
**FIRST FLOOR ELECTRICAL PLAN -  
 LIGHTING NEW WORK**

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised

SCALE:  
 AS NOTED

PROJECT NO.  
 20220400

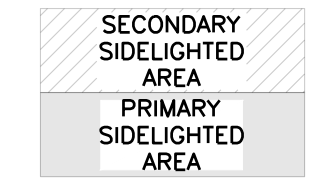
DRAWING NO.  
**E4.1**



**KEYED ELECTRICAL LIGHTING CONSTRUCTION NOTES:**

- (LA) COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL LIGHTING AND CONTROL/SWITCHING WITH OWNER'S REP & ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ROUGH-IN.
- (LB) RELOCATE (R) EXISTING 120V LED EXIT SIGNS AND/OR PROVIDE NEW EXIT SIGNS AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.
- (LC) RECONNECT/EXTEND (E) WIRING TO RELOCATED AND/OR REPLACED SWITCH TO CONTROL (E) EXHAUST FAN SERVING A NEW AREA.
- (LD) ALL WORK IN THIS AREA TO BE COORDINATED WITH OWNER & OWNER'S IT/DATA-CENTER CONTRACTOR (I.D.C.) TO ENSURE NO INTERRUPTION OF IT/DATA-CENTER SERVICES TO THE OWNER. EXISTING (E) IT EQUIPMENT/SYSTEMS (UPS & DOWNSTREAM OF UPS) ARE TO BE REMOVED/REVISED BY OWNER/I.D.C. E.C. SHALL COORDINATE ALL DEMO & NEW WORK WITHIN THE (E) IT/DATA-CENTER AREA & THE NEW IT/DATA CENTER AREAS WITH THE OWNER/I.D.C.
- (LE) RECONNECT/EXTEND (E) CIRCUITING TO RELOCATED/REPLACED SWITCH TO CONTROL NEW LIGHTS SERVING NEW AREA.
- (LF) CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTS TO AN UNSWITCHED/HOT 120V EMERGENCY GENERATOR CIRCUIT. EXIT SIGNS ARE 120V. NEW EMERGENCY LIGHTS WILL HAVE INTEGRAL EMERGENCY TRANSFER RELAY, WITH DIMMING CONTROL (ETRD).
- (LG) FINALIZE LOCATION OF ROOF EXHAUST FAN REF-23 SWITCH FOR NEW IT ROOM 359 WITH OWNER/I.D.C./F.P. PRIOR TO ROUGH-IN. LABEL SWITCH AS "IT 359-NOVEC PURGE FAN".

**DAYLIGHTING KEY**



PLAN NORTH  
**SECOND FLOOR ELECTRICAL PLAN - LIGHTING NEW WORK**  
 SCALE: 1/8" = 1'-0"

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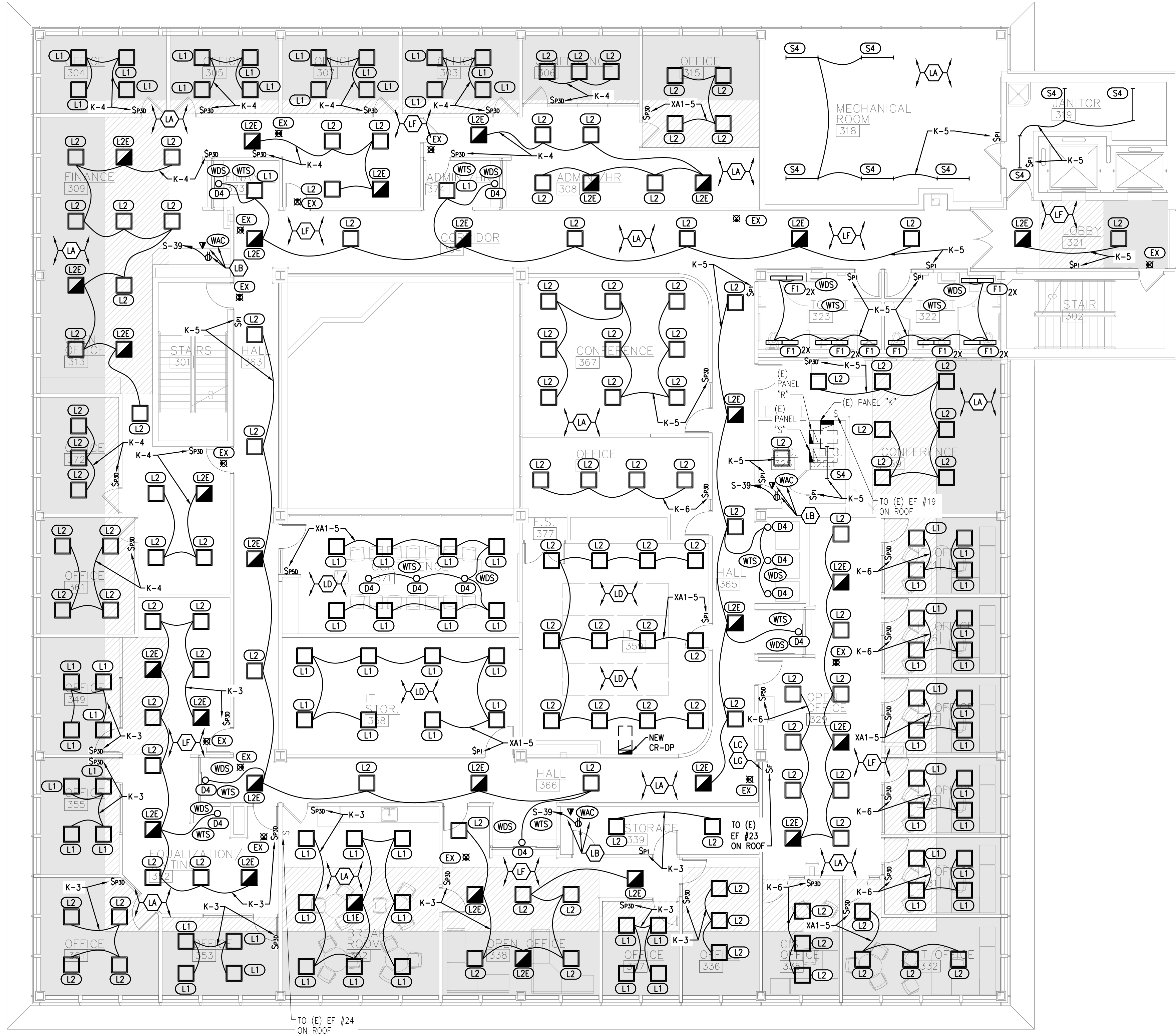
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**SECOND FLOOR ELECTRICAL PLAN - LIGHTING NEW WORK**

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised

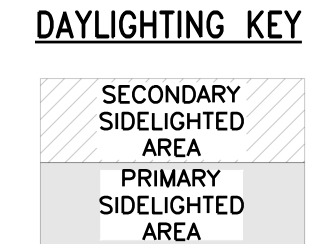
SCALE: AS NOTED  
 PROJECT NO. 20220400  
 DRAWING NO. **E4.2**





PLAN NORTH  
**THIRD FLOOR ELECTRICAL PLAN - LIGHTING NEW WORK**  
 SCALE: 1/8" = 1'-0"

- KEYED ELECTRICAL LIGHTING CONSTRUCTION NOTES:**
- (LA) COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL LIGHTING AND CONTROL/SWITCHING WITH OWNER'S REP & ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ROUGH-IN.
  - (LB) RELOCATE (R) EXISTING 120V LED EXIT SIGNS AND/OR PROVIDE NEW EXIT SIGNS AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.
  - (LC) COORD. LOCATION OF NEW WAVELINK WIRELESS AREA CONTROLLER (WAC), TO BE LOCATED IN AN ACCESSIBLE LOCATION (E.G. ABOVE ACCESSIBLE CEILING, IN ELEC. CLOSET, STORAGE ROOM, ETC.) AND WITHIN CABLE LENGTH TO EXTEND TO POE INJECTOR. LOCATE POE INJECTOR IN AN ACCESSIBLE LOCATION & PROVIDE A NEW RECEPT. (ON EM GENERATOR POWER) FOR POWER & PROVIDE A NEW DATA DROP FOR NETWORKING (COORD. NEW DATA DROP W/ OWNER'S IT DEPT.).
  - (LD) RECONNECT/EXTEND (E) WIRING TO RELOCATED AND/OR REPLACED SWITCH TO CONTROL (E) EXHAUST FAN SERVING A NEW AREA.
  - (LE) ALL WORK IN THIS AREA TO BE COORDINATED WITH OWNER & OWNER'S IT/DATA-CENTER CONTRACTOR (I.D.C.) TO ENSURE NO INTERRUPTION OF IT/DATA-CENTER SERVICES TO THE OWNER. EXISTING (E) IT EQUIPMENT/SYSTEMS (UPS & DOWNSTREAM OF UPS) ARE TO BE REMOVED/REVISED BY OWNER/I.D.C. E.C. SHALL COORDINATE ALL DEMO & NEW WORK WITHIN THE (E) IT/DATA-CENTER AREA & THE NEW IT/DATA CENTER AREAS WITH THE OWNER/I.D.C.
  - (LF) RECONNECT/EXTEND (E) CIRCUITING TO RELOCATED/REPLACED SWITCH TO CONTROL NEW LIGHTS SERVING NEW AREA.
  - (LG) CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTS TO AN UNSWITCHED/HOT 120V EMERGENCY GENERATOR CIRCUIT. EXIT SIGNS ARE 120V. NEW EMERGENCY LIGHTS WILL HAVE INTEGRAL EMERGENCY TRANSFER RELAY, WITH DIMMING CONTROL (ETRD).
  - (LH) FINALIZE LOCATION OF ROOF EXHAUST FAN REF-23 SWITCH FOR NEW IT ROOM 359 WITH OWNER/I.D.C./F.P. PRIOR TO ROUGH-IN. LABEL SWITCH AS "IT 359-NOVEC PURGE FAN".



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RENOVATIONS TO  
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THIRD FLOOR ELECTRICAL PLAN -  
 LIGHTING NEW WORK

ISSUE PERMITS & BIDS  
 11-11-2024  
 Revised

SCALE: AS NOTED  
 PROJECT NO. 20220400  
 DRAWING NO. **E4.3**



PANEL: (E) O		225A	BUSING SIZE:	225A	FED FROM:	(E) SWBD-B	
# OF POLES:	42	VOLTS: 120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	SURFACE	
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 118							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	NEW & (E) LIGHTING - 121,124 & 133	404				
3	(E) 30	(E) COPIER IN ROOM 108		0			
5	-	-			0		
7	(E) 20	(E) RECEPITS - 133 & 135	720				
9	(E) 20	(E) RECEPITS - 134 & 135		720			
11	(E) 20	(E) RECEPITS - 134 & 143			720		
13	(E) 20	(E) RECEPITS - 133	720				
15	(E) 20	(E) POWER POLE - 133		180			
17	(E) 20	(E) POWER POLE - 133			180		
19	(E) 20	(E) ATRIUM SHADING ON ROOF	0				
21	(E) 20	(E) EXTERIOR RECEPITS - EAST SIDE		720			
23	(E) 20	(E) RECEPITS - 117 & 124			360		
25	(E) 20	(E) RECEPITS - 117 & 124	720				
27	(E) 20	(E) RECEPITS - 117, 124, 126		720			
29	(E) 20	(E) RECEPITS - 124 & 125			720		
31	(E) 20	(E) PRINTER IN 133	1000				
33	(E) 20	(E) RECEPITS - 133		540			
35	(E) 20	(E) RECEPITS - 131			360		
37	(E) 20	(E) RECEPITS - 131 & 132	720				
39	(E) 20	TAF-2 & CUH-5		160			
41	(E) 20	TAF-1 & CUH-6 IN 131			160		
2	(E) 20	(E) LIGHTING - 159	1224				
4	(E) 20	(E) RECEPITS - 108		360			
6	(E) 20	(E) RECEPITS - 107			540		
8	(E) 20	(E) POWER POLE 122	180				
10	(E) 20	(E) POWER POLE 122		180			
12	(E) 20	(E) RECEPT - 122			180		
14	(E) 20	(E) RECEPITS - 122 & 127	720				
16	(E) 20	(E) SPARE		0			
18	(E) 20	NEW & (E) RECEPITS - 123, 128 & 155			720		
20	(E) 20	(E) RECEPITS - 123 & 129	720				
22	(E) 20	(E) & NEW RECEPITS - 128		540			
24	(E) 20	(E) PRINTER IN 128			1000		
26	(E) 20	(E) RECEPITS - 126, 127, 128	720				
28	(E) 20	POWER POLE IN ROOM 128		180			
30	(E) 20	POWER POLE IN ROOM 128			180		
32	(E) 20	(E) RECEPITS - 128, 129 & 155	720				
34	(E) 20	HOT WATER DISPENSER IN 128		1300			
36	(E) 20	RECEPITS - COUNTER IN 128			540		
38	(E) 20	(E) SPARE	0				
40	(E) 20	SHUTTER DOOR IN 128		1200			
42	(E) 20	SHUTTER DOOR IN 122 & 148			1800		
<b>KVA:</b>	<b>23</b>	<b>CONNECTED AMPS:</b>	<b>63.4</b>	<b>PHASE WATTS:</b>	<b>8,568</b>	<b>6,800</b>	<b>7,460</b>
<b>DEMAND KVA:</b>	<b>00</b>	<b>DEMAND AMPS:</b>	<b>00.0</b>				

PANEL: (E) XA		200A MCB	BUSING SIZE:	200A	FED FROM:	(E) XMFR X	
# OF POLES:	42	VOLTS: 120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	RECESSED	
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) STORAGE ROOM 158							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) NIGHT LIGHTS - BASEMENT & 1ST FLOOR	750				
3	(E) 20	(E) TEMP CONTROL PANEL - BASEMENT		0			
5	(E) 20	(E) NIGHT LIGHTS & NEW EM LIGHTS 1ST FLOOR			741.8		
7	(E) 20	(E) LIGHTING - 156	910				
9	(E) 20	(E) LIGHTING - 115, 116 & 118		580			
11	(E) 20	(E) NOVAK SYSTEM FOR VAULT 120			0		
13	(E) 20	(E) RECEPITS - 152	360				
15	(E) 20	(E) SPARE		0			
17	(E) 20	(E) RECEPITS - 019			360		
19	(E) 20	(E) FIRE ALARM PANEL	0				
21	(E) 20	(E) ELEVATOR LIGHT		0			
23	(E) 20	(E) ELEVATOR LIGHT			0		
25	(E) 20	(E) RECEPT - 158	180				
27	(E) 20	(E) COMMUNICATION CONTROL		0			
29	(E) 20	REFRIGERATOR RECEPT - 128			1000		
31	(E) 20	(E) RECEPITS - 156	360				
33	(E) 20	(E) RECEPITS - 153		540			
35	(E) 20	(E) RECEPT FOR MICROWAVE IN 152			1100		
37	(E) 20	(E) NOVAK SYSTEM FOR VAULT 131	0				
39	(E) 20	(E) NOVAK SYSTEM FOR VAULT 129			0		
41	(E) 20	(E) RECEPT FOR HOT WATER IN 152			1300		
2	(E) 20	(E) EXIT LIGHTING - BASEMENT & 1ST FLOOR	30				
4	(E) 20	(E) SPARE		0			
6	(E) 20	(E) LIGHTING - 156			1050		
8	(E) 20	(E) LIGHTING - 152, 157, 158 & 159	823				
10	(E) 20	(E) RECEPT - BASEMENT TELE ROOM		180			
12	(E) 20	(E) RECEPT - BASEMENT TELE ROOM			180		
14	(E) 20	(E) HEATER BATT CHARGE EM GEN	0				
16	(E) 20	(E) RECEPT - 156 TABLE		360			
18	(E) 20	(E) SOUND SYSTEM - 156			0		
20	(E) 20	(E) RECEPITS - 156 TABLE & PODIUM	360				
22	(E) 20	(E) RECEPITS - 159		360			
24	(E) 20	(E) RECEPITS - 159 & (E) ROLL UP DOOR 133			360		
26	(E) 20	(E) RECEPITS - 159	360				
28	(E) 20	(E) RECEPITS - 159		360			
30	(E) 20	(E) RECEPITS - 159			360		
32	(E) 100	TO (E) PANEL X4 - 4TH FLOOR	0				
34	-	-		0			
36	-	-			0		
38	(E) 100	TO (E) PANEL XA1 - 2ND FLOOR	0				
40	-	-			0		
42	-	-			0		
<b>KVA:</b>	<b>13</b>	<b>CONNECTED AMPS:</b>	<b>36.0</b>	<b>PHASE WATTS:</b>	<b>4,133</b>	<b>2,380</b>	<b>6,452</b>
<b>DEMAND KVA:</b>	<b>00</b>	<b>DEMAND AMPS:</b>	<b>00.0</b>				

PANEL: (E) N		225A	BUSING SIZE:	225A	FED FROM:	(E) SWBD-B	
# OF POLES:	42	VOLTS: 120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	SURFACE	
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 118							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) LIGHTING - 156	0				
3	(E) 20	(E) LIGHTING - 156		0			
5	(E) 20	(E) LIGHTING - 156			0		
7	(E) 20	(E) RECEPITS - 154 & 147	720				
9	(E) 20	(E) DOOR HARDWARE - 111,112 & 113		500			
11	(E) 20	(E) RECEPITS - 147			720		
13	(E) 20	(E) & NEW RECEPITS - 148 & 149	720				
15	(E) 20	(E) SPARE		0			
17	(E) 20	(E) RECEPITS - 154,155 & 147			540		
19	(E) 20	(E) PRINTER IN 117	1000				
21	(E) 20	(E) RECEPITS - 121, 155 & COUNTER 121		720			
23	(E) 20	(E) COPIER IN 117			1000		
25	(E) 20	(E) LAWN SPRINKLER SYSTEM	1000				
27	(E) 20	(E) EXTERIOR RECEPITS		720			
29	(E) 20	(E) RECEPITS - TREASURY VAULT			720		
31	(E) 20	(E) RECEPITS - 117 & 120	720				
33	(E) 20	(E) RECEPITS - 114 & 117 & CLOCK		460			
35	(E) 20	(E) RECEPITS - 115,116 & 117			720		
37	(E) 20	(E) TAF-3	100				
39	(E) 20	(E) RECEPITS - 117 & 120		720			
41	(E) 20	(E) UH-2, (E) CUH-3 & (E) CUH-4			100		
2	(E) 20	(E) LIGHTING - 156	0				
4	(E) 20	(E) LIGHTING - 156		0			
6	(E) 20	(E) FLOOR RECEPITS - 153			360		
8	(E) 20	(E) RECEPITS - 104 & 106	540				
10	(E) 20	(E) RECEPITS - 106 & 146		720			
12	(E) 20	(E) SPARE			0		
14	(E) 20	NEW & (E) RECEPITS - 106 & 147	720				
16	(E) 20	(E) RECEPITS - 149		720			
18	(E) 20	RECEPITS - 105			720		
20	(E) 20	(E) FLOOR RECEPT - 153	180				
22	(E) 20	(E) RECEPITS - MAIN DOOR		0			
24	(E) 20	(E) DOOR OPENER OUTSIDE			0		
26	(E) 20	(E) DOOR OPENER INSIDE	0				
28	(E) 20	(E) HEAT MATS FRONT ENTRANCE		0			
30	-	-			0		
32	(E) 20	(E) RECEPITS - 140 & (E) UH-1	590				
34	(E) 20	(E) RECEPITS - 140 & 149		720			
36	(E) 20	(E) RECEPITS - 139			720		
38	(E) 20	(E) RECEPITS - 101, 103 & 136	720				
40	(E) 20	(E) CUH-2		100			
42	(E) 20	(E) RECEPITS - 104 & 153 & CLOCK			540		
<b>KVA:</b>	<b>19</b>	<b>CONNECTED AMPS:</b>	<b>51.4</b>	<b>PHASE WATTS:</b>	<b>7,010</b>	<b>5,380</b>	<b>6,140</b>
<b>DEMAND KVA:</b>	<b>00</b>	<b>DEMAND AMPS:</b>	<b>00.0</b>				

PANEL: (E) H		100A	BUSING SIZE:	100A	FED FROM:	(E) SWBD-A	
# OF POLES:	24	VOLTS: 277-480/3P/4W	NEUTRAL BUS:	100A	MOUNTING:	SURFACE	
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 118							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) LIGHTS-103,109,111,112,113,114,120,143,145,153,154,15	2883				
3	(E) 20	(E) LIGHTING - 117, 121 & 122		3383			
5	(E) 20	(E) LIGHTING - 107, 108, 129, 131, 132 & 133			3268		
7	(E) 20	(E) SPARE	0				
9	(E) 20	(E) SPARE		0			
11	(E) 20	(E) SPARE			0		
13	-	-	0				
15	-	-		0			
17	-	-			0		
19	-	-	0				
21	-	-		0			
23	-	-			0		
2	(E) 20	NEW & (E) LIGHTING - 104,105,106,146,148,149 & 147	1373.8				
4	(E) 20	NEW & (E) LIGHTING - 123,124,125,126,127 & 128		1660.6			
6	(E) 20	NEW & (E) LIGHTING - 134,135,136,139 & 140			2036.7		
8	(E) 20	(E) SPARE	0				
10	(E) 20	(E) SPARE		0			
12	(E) 20	(E) SPARE			0		
14	-	-	0				
16	-	-		0			
18	-	-			0		
20	-	-	0				
22	-	-		0			
24	-	-			0		
<b>KVA:</b>	<b>15</b>	<b>CONNECTED AMPS:</b>	<b>17.6</b>	<b>PHASE WATTS:</b>	<b>4,257</b>	<b>5,044</b>	<b>5,305</b>
<b>DEMAND KVA:</b>	<b>15</b>	<b>DEMAND AMPS:</b>	<b>17.6</b>				

**GENERAL ELECTRICAL DEMOLITION NOTES:**  
(APPLICABLE TO ALL ELECTRICAL PLANS)

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE EXTENT OF DEMOLITION WORK SHALL BE AS REQUIRED BY THE NEW WORK.
- THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING SYSTEMS/EQUIPMENT PRIOR TO ISSUING THEIR BID. ALL EXISTING PANEL/WIRE/LIGHT SIZES AND ROUTINGS SHOWN ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED.
- ALL ELECTRICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE WITH ALL RELATED ITEMS INCLUDING, BUT NOT LIMITED TO, WIRES, CONDUITS, SUPPORTS, FIXTURES, ETC. REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF OFF SITE.
- ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED, BY THE OWNER OR OWNER'S REPRESENTATIVE, AT LEAST (7) DAYS IN ADVANCE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING OPERATION.
- WHERE DEMOLITION OF EXISTING SERVICES ARE REQUIRED TO ACCOMMODATE THE PROJECT PHASING/SCHEDULING, AND SERVICES ARE TO BE INTERRUPTED IN AREAS THAT ARE REMAINING OCCUPIED, THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES/CONNECTIONS TO THE OCCUPIED AREAS TO MAINTAIN ITS PRESENT OPERATION. IF SYSTEM SHUT DOWNS ARE REQUIRED, THE CONTRACTOR SHALL SCHEDULE WORK TO BE PERFORMED AT UNOCCUPIED HOURS.
- ALL ITEMS TO BE REMOVED AND/OR RELOCATED SHALL BE REMOVED AND/OR RELOCATED TOGETHER WITH ALL RELATED ITEMS AS REQUIRED BY THE NEW WORK TO BE PERFORMED.
- CONTRACTOR SHALL COORDINATE ALL REMOVAL AND/OR RELOCATION WITH THE EXTENT OF THE NEW WORK AND WITH ALL OTHER TRADES INVOLVED.
- INSTALL STAINLESS STEEL BLANK COVER PLATES AT ALL LOCATIONS WHERE DEVICES (SWITCHES, RECEPTACLES, FIRE ALARM, ETC.) ARE TO BE REMOVED.
- EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, CORING, PATCHING ASSOCIATED WITH THEIR WORK. CUTTING, CORING, PATCHING WORK SHALL BE PERFORMED BY A QUALIFIED CONTRACTOR AND MATCH EXISTING OR NEW FINISHES.
- FIRE ALARM WORK SHOWN IS DIAGRAMMATIC AND INDICATE THE GENERAL SCOPE OF WORK. FIRE ALARM WORK FOR THIS PROJECT WILL BE A PERFORMANCE BASED DESIGN/BUILD BY THE OWNER'S EXISTING/PREFERRED FIRE ALARM SUB (F.A.) = DON OR KELLY AT VETERAN'S ALARM (989-631-1111). E.C. SHALL COORDINATE THE FIRE ALARM WORK THAT IS REQUIRED WITH OWNER'S F.A. PRIOR TO DEMOLITION & ROUGH-IN.

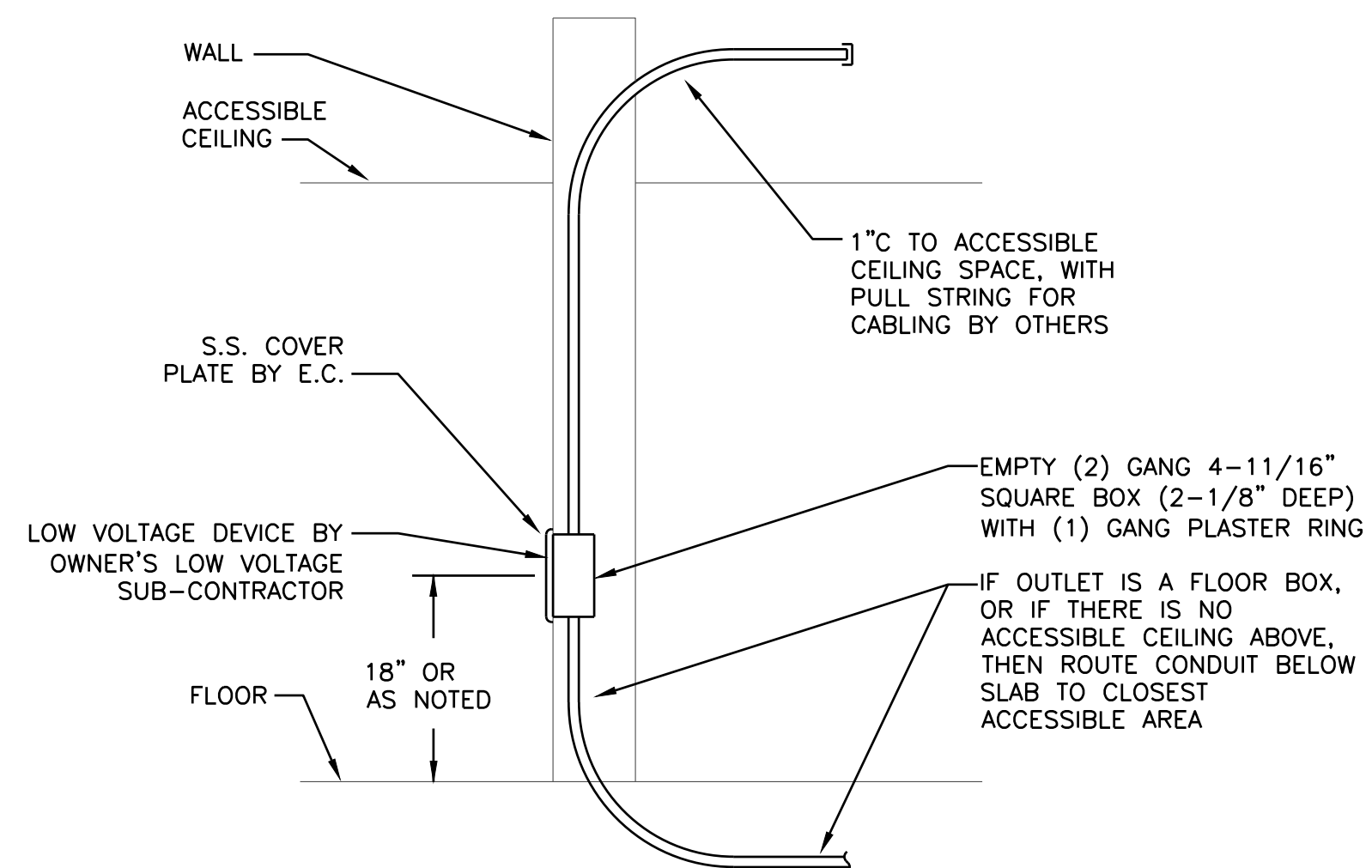
**GENERAL ELECTRICAL POWER, AUXILIARY, & LIGHTING NOTES:**  
(APPLICABLE TO ALL ELECTRICAL PLANS)

- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MATERIALS (I.E. CONDUIT, WIRE, PULL BOXES, FIXTURES, ETC.) REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM.
- ALL ELECTRICAL SYSTEMS SHALL BE PROVIDED/INSTALLED TO MEET APPLICABLE BUILDING CODES; MICHIGAN BUILDING CODE, MICHIGAN ELECTRICAL CODE, N.E.C., LIFE SAFETY CODE NFPA 101, MICHIGAN ENERGY CODE, ETC.
- VERIFY REQUIREMENTS OF ALL MECHANICAL/PLUMBING/ARCHITECTURAL EQUIPMENT WITH SHOP DRAWING SUBMITTALS PRIOR TO INSTALLATION. NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN SHOP DRAWINGS AND PLANS.
- COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ALL OUTLETS WITH LOCATIONS/HEIGHTS OF COUNTERTOPS, SINKS, FURNITURE, CABINETS, ETC. WITH ARCHITECTURAL ELEVATIONS AND OTHER TRADES.
- COORDINATE THE INSTALLATION OF ALL ELECTRICAL WORK WITH ALL OTHER TRADES. CONTRACTOR SHALL VERIFY ALL MECHANICAL AND ELECTRICAL CLEARANCES PRIOR TO FABRICATION OF ANY NEW WORK. ELECTRICAL EQUIPMENT, WIRING, ETC. SHALL NOT INTERFERE WITH MECHANICAL EQUIPMENT CLEARANCE SPACES.
- ALL CIRCUITS FOR POWER, LIGHTING, ETC. SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. ALL CIRCUITS SHALL BE CONCEALED IN WALLS, INCLUDING (E) WALLS. SURFACE MOUNTED RACEWAY SHALL NOT BE USED, UNLESS NOTED OTHERWISE, OR UNLESS ABSOLUTELY NECESSARY. APPROVAL FROM ARCHITECT/ENGINEER MUST BE OBTAINED PRIOR TO USING SURFACE MOUNTED CONDUIT.
- UNLESS OTHERWISE NOTED, EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL NEW PENETRATIONS THROUGH ALL WALLS WITH FIRE CAULK IN ACC

PANEL: (E) J		100A	BUSING SIZE: 100A	FED FROM: (E) SWBD-A		
# OF POLES: 24	VOLTS: 277-480/3P/4W	NEUTRAL BUS: 100A	MOUNTING: SURFACE			
PHASE: 3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ: 60	ISOLATED GROUND: NO					
LOCATION: (E) ELEC ROOM 217						
REMARKS:						
CIRCUIT	BREAKER	DESCRIPTION	A	B	C	
1	(E) 20	LIGHTING - 200,212,213,215,217,221,222,227	1248.8			
3	(E) 20	LIGHTS-204,205,208,210,228,231,232,237		1218		
5	(E) 20	LIGHTS-224,225,226,233,234,235,236,238,241,242,243,244,24			1100	
7	(E) 20	(E) SPARE	0			
9	(E) 20	(E) SPARE	0	0		
11	(E) 20	(E) SPARE			0	
13			0			
15				0		
17					0	
19			0			
21				0		
23					0	
2	(E) 20	(E) SPARE	0			
4	(E) 20	LIGHTING - 258,259,261,262,263,264,265,266,267,268 & 269		1228.2		
6	(E) 20	LIGHTS-239,245,246,248,249,251,252,253,254,255,256,257,2			1441.6	
8	(E) 20	(E) SPARE	0			
10	(E) 20	(E) SPARE		0		
12	(E) 20	(E) SPARE			0	
14			0			
16				0		
18					0	
20			0			
22				0		
24					0	
KVA: 06			CONNECTED AMPS: 07.5	PHASE WATTS: 1,249	2,446	2,542
DEMAND KVA: 06			DEMAND AMPS: 07.5			

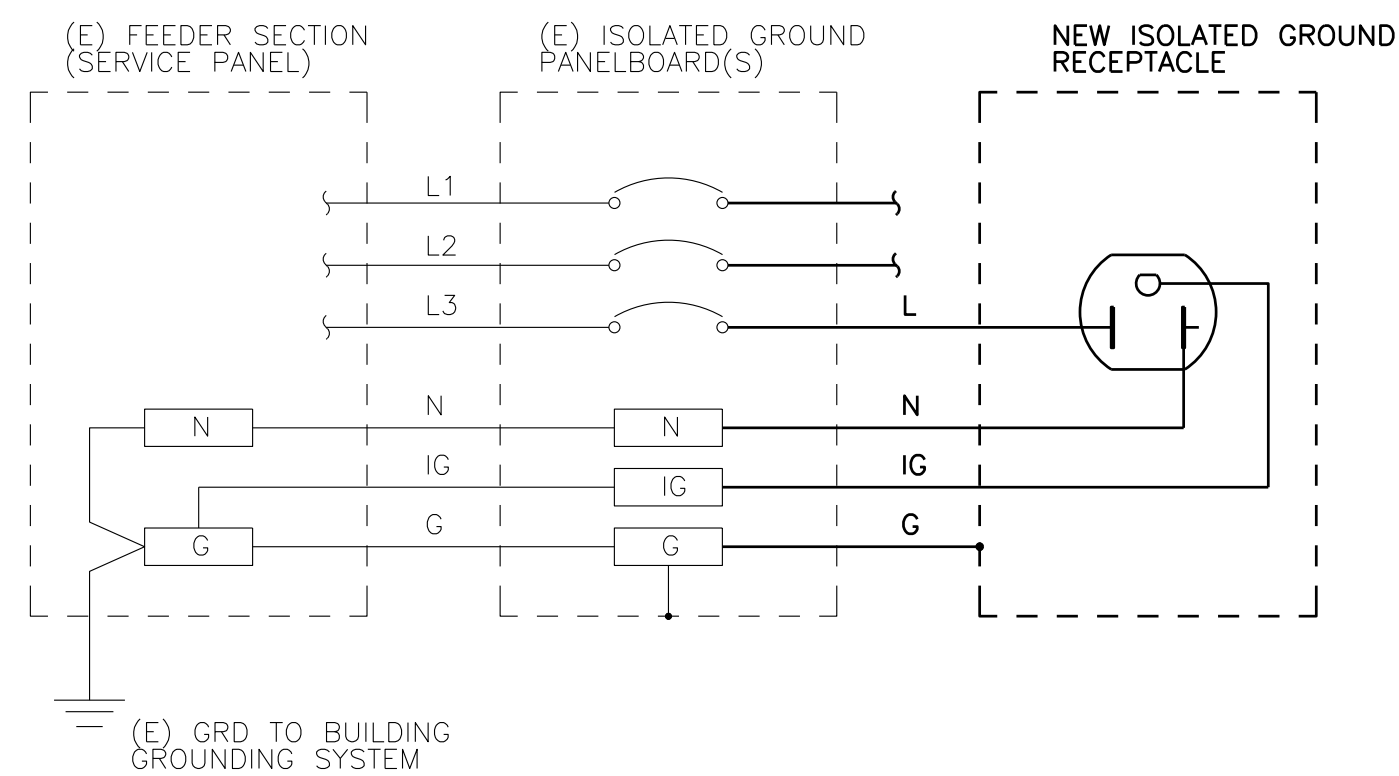
PANEL: (E) P		225A	BUSING SIZE: 225A	FED FROM: (E) SWBD-B		
# OF POLES: 42	VOLTS: 120-208/3P/4W	NEUTRAL BUS: 225A	MOUNTING: SURFACE			
PHASE: 3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ: 60	ISOLATED GROUND: NO					
LOCATION: (E) ELEC ROOM 217						
REMARKS:						
CIRCUIT	BREAKER	DESCRIPTION	A	B	C	
1	(E) 20	SHUTTER DOOR IN 208 & 210	1200			
3	(E) 20	(E) SPARE		0		
5	(E) 20	PLOTTER RECEIPT IN 210			1100	
7	(E) 20	RECEPTS - 210	720			
9	(E) 20	(E) RECEPTS - 269 & 266		720		
11	(E) 20	(E) RECEPTS - 213 & 269			720	
13	(E) 20	(E) RECEPTS - 205 & 221	720			
15	(E) 20	(E) SPARE		0		
17	(E) 20	(E) SPARE			0	
19	(E) 20	(E) RECEPTS - 215	180			
21	(E) 20	(E) RECEPTS - 200, 221 & 222		720		
23	(E) 20	(E) RECEPTS - 215 & 243			720	
25	(E) 20	(E) RECEPT - 216	180			
27	(E) 20	RECEPTS - 208 & 215		720		
29	(E) 20	RECEPTS - 204 & 205			720	
31	(E) 20	(E) RECEPTS - 227	540			
33	(E) 20	SHUTTERS DOOR IN 264		1200		
35	(E) 20	(E) RECEPT - 242 & NEW RECEPTS - 242 & 243			720	
37	(E) 20	RECEPTS - 232	540			
39	(E) 20	(E) AUTOMATIC DOOR OPENER		120		
41	(E) 20	(E) SPARE			0	
2	(E) 20	(E) RECEPTS - 212 & 213	720			
4	(E) 20	(E) RECEPTS - 210		360		
6	(E) 20	(E) RECEPTS - 210, 213 & 204			540	
8	(E) 20	(E) RECEPTS - 208 & 210	540			
10	(E) 20	(E) RECEPTS - 210		360		
12	(E) 20	(E) RECEPTS - 204 & 241			540	
14	(E) 20	(E) RECEPTS - 218 & 266	540			
16	(E) 20	RECEPTS - 232, 233, 236 & 238		1080		
18	(E) 20	RECEPTS - 241			720	
20	(E) 20	SHUTTER DOOR IN 204 & 232	1200			
22	(E) 20	(E) SPARE		0		
24	(E) 20	RECEPTS - 228 & LED SIGNAGE			1320	
26	(E) 20	(E) SPARE	0			
28	(E) 20	(E) SPARE		0		
30	(E) 20	(E) SPARE			0	
32	(E) 20	RECEPTS - 224	360			
34	(E) 20	SHUTTER DOOR IN 232		1200		
36	(E) 20	(E) SPARE			0	
38	(E) 20	RECEPTS - 225	360			
40	(E) 20	RECEPTS - 226		360		
42	(E) 20	(E) UNIT HEATER #3 ROOM 221			400	
KVA: 22			CONNECTED AMPS: 61.5	PHASE WATTS: 7,800	6,840	7,500
DEMAND KVA: 00			DEMAND AMPS: 00.0			

PANEL: (E) Q		225A	BUSING SIZE: 225A	FED FROM: (E) SWBD-B		
# OF POLES: 42	VOLTS: 120-208/3P/4W	NEUTRAL BUS: 225A	MOUNTING: SURFACE			
PHASE: 3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ: 60	ISOLATED GROUND: NO					
LOCATION: (E) ELEC ROOM 217						
REMARKS:						
CIRCUIT	BREAKER	DESCRIPTION	A	B	C	
1	(E) 20	(E) RECEPTS - 258 & 266	720			
3	(E) 20	(E) RECEPTS - 248		720		
5	(E) 20	(E) RECEPTS - 248 & 261			720	
7	(E) 20	(E) RECEPTS - 259 & 261	720			
9	(E) 20	(E) RECEPTS - 256 & 259		720		
11	(E) 20	RECEPTS - 266			720	
13	(E) 20	RECEPTS - 263 & 268	720			
15	(E) 20	RECEPTS - 265 & 267		720		
17	(E) 20	(E) LOAD UNKNOWN			1400	
19	(E) 20	RECEPTS - 244	360			
21	(E) 20	(E) SPARE		0		
23	(E) 20	RECEPTS - 262			720	
25	(E) 20	RECEPTS - 255	720			
27	(E) 20	RECEPTS - 254		900		
29	(E) 20	RECEPTS - 248			720	
31	(E) 20	RECEPTS - 244	720			
33	(E) 20	RECEPTS - 245 & 246		720		
35	(E) 20	RECEPTS - 234 & 235			1080	
37	(E) 20	RECEPTS - 246 & 264	720			
39	(E) 20	COPIER RECEIPT		1400		
41	(E) 20	(E) LOAD UNKNOWN			1400	
2	(E) 20	(E) RECEPTS - 248	720			
4	(E) 20	(E) RECEPTS - 246 & 248		720		
6	(E) 20	(E) RECEPTS 245 & NEW RECEPT 244			720	
8	(E) 20	RECEPTS - 239	900			
10	(E) 20	RECEPTS - 232 & 235		720		
12	(E) 20	RECEPTS - 248 & 249			720	
14	(E) 20	RECEPTS - 232 & 236	720			
16	(E) 20	RECEPTS - 264 & 271		720		
18	(E) 20	RECEPTS - 253			360	
20	(E) 20	RECEPTS - 248 & 257	720			
22	(E) 20	RECEPTS - 248 & 258		720		
24	(E) 20	RECEPTS - 252			360	
26	(E) 20	(E) RECEPTS - 236, 247 & 248	720			
28	(E) 20	RECEPTS FOR WACS		360		
30	(E) 20	OFFICE EQUIPMENT - 232			1000	
32	(E) 20	RECEPTS - 231 & 247	720			
34	(E) 20	(E) SPARE		0		
36	(E) 20	LIGHTING - 249 & 251			67.2	
38	(E) 20	RECEPTS - 251	360			
40	(E) 20	RECEPTS - 251		540		
42	(E) 20	(E) RECEPTS - 248			720	
KVA: 29			CONNECTED AMPS: 81.1	PHASE WATTS: 9,540	8,960	10,707
DEMAND KVA: 00			DEMAND AMPS: 00.0			

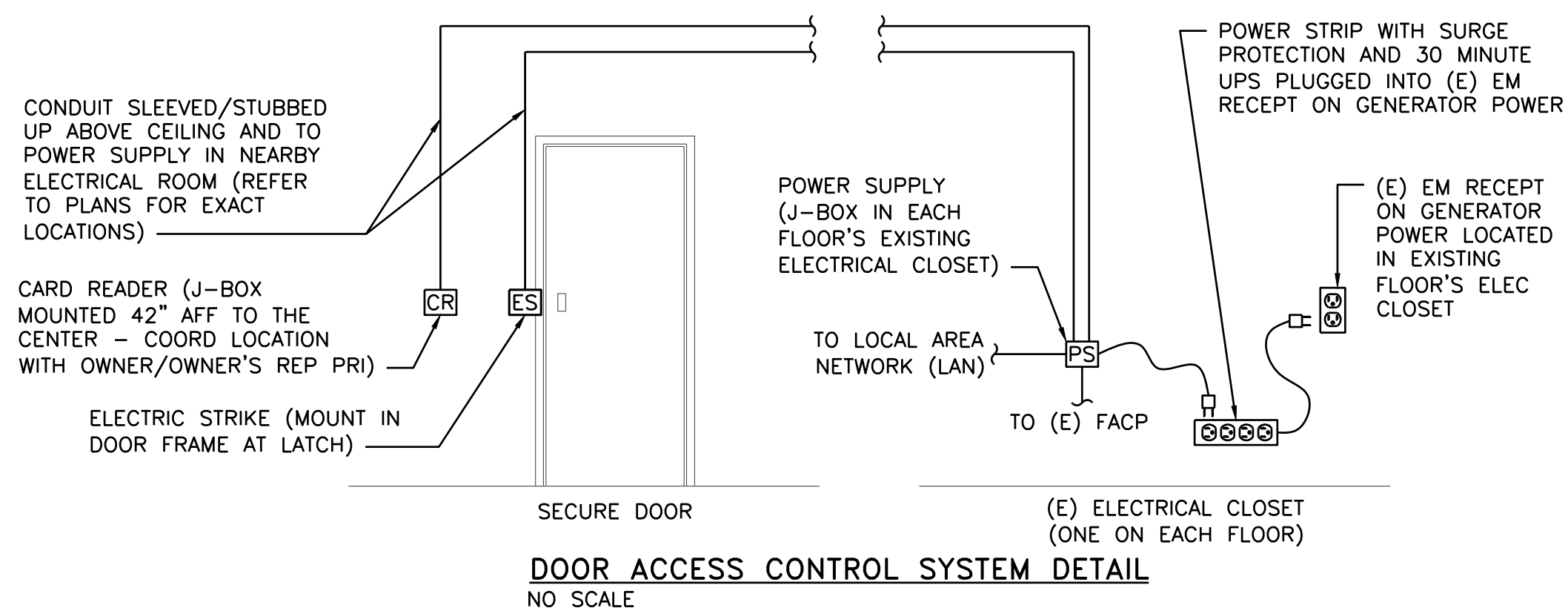


- NOTES:
- 1) PROVIDE LABEL ON CONDUIT STATING OUTLET BOX LOCATION (E.G. ROOM NAME & NUMBER) & PURPOSE (E.G. TELECOM DROP, FA PULL, ETC.).
  - 2) ALL LOW VOLTAGE CABLING SHALL BE PULLED/TERMINATED BY OWNER'S SELECTED SUB-CONTRACTOR UNDER A SEPARATE CONTRACT. E.C. SHALL COORDINATE ALL ROUGH-INS, AND 120V POWER REQUIREMENTS, WITH EACH LOW VOLTAGE SUB-CONTRACTOR PRIOR TO ROUGH-IN.

**TELECOM/VIDEO/SECURITY/FIRE ALARM/ETC. ROUGH-IN DETAIL**  
NO SCALE



**ISOLATED GROUND SYSTEM WIRING DIAGRAM**  
NO SCALE



**DOOR ACCESS CONTROL SYSTEM DETAIL**  
NO SCALE

PANEL: (E) XA1		100A	BUSING SIZE: 100A	FED FROM: (E) PANEL XA		
# OF POLES: 30	VOLTS: 120-208/3P/4W	NEUTRAL BUS: 100A	MOUNTING: SURFACE			
PHASE: 3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ: 60	ISOLATED GROUND: NO					
LOCATION: (E) ELEC ROOM 217						
REMARKS:						
CIRCUIT	BREAKER	DESCRIPTION	A	B	C	
1	(E) 20	EMERGENCY LIGHTING - 2ND FLOOR	613.7			
3	(E) 20	EMERGENCY LIGHTING - 3RD FLOOR		847.4		
5	(E) 20	LIGHTING - 315, 327, 332, 358, 359 & 371			1031.5	
7	(E) 20	(E) SPARE	0			
9	(E) 20	(E) SPARE		0		
11	(E) 20	(E) SPARE			0	
13	(E) 20	REFRIGERATOR RECEIPT - 247	1000			
15	(E) 20	(E) RECEPTS - IT 359 & ELEC ROOM 325.1		720		
17	(E) 20	(E) RECEPTS - 315, 359 & 371			720	
19	(E) 20	REFRIGERATOR RECEIPT - 249	1000			
21	(E) 20	(E) HALON PANEL - COMPUTER ROOM		0		
23	(E) 20	(E) 4TH FLOOR PHONE ROOM & ROOF			0	
25	(E) 20	(E) 4TH FLOOR 24 HOUR ROOM	0			
27	(E) 20	(E) 4TH FLOOR 24 HOUR ROOM		0		
29	(E) 20	(E) 4TH FLOOR DAMPER - NOT USED			0	
2	(E) 20	NEW & (E) EXIT LIGHTS - 2ND, 3RD & 4TH FLOORS	0			
4	(E) 20	(E) NIGHT LIGHTS - 4TH FLOOR		0		
6	(E) 20	FREEZER IN ROOM 251			1000	
8	(E) 20	(E) RECEPTS - 217	360			
10	(E) 20	(R) REFRIGERATOR RECEIPT - 247		1000		
12	(E) 20	(R) REFRIGERATOR RECEIPT - 247			1000	
14	(E) 20	(R) REFRIGERATOR RECEIPT - 247	1000			
16	(E) 20	RECEPTS - 358, 327, 329 & 332		180		
18	(E) 20	(E) TEMP CONTROL PANEL - 2ND FLOOR			0	
20	(E) 20	(E) AIR COMPRESSOR - 310	0			
22	(E) 20	(E) 4TH FLOOR PHONE ROOM & ROOF		0		
24	(E) 20	(E) 4TH FLOOR ELEVATOR AREA			0	
26	(E) 20	(E) 4TH FLOOR COMPUTER ROOM	0			
28	(E) 20	(E) 4TH FLOOR COMPUTER ROOM		0		
30	(E) 20	(E) SPARE - 4TH FLOOR TEMP CONTROL PANEL			0	
KVA: 10			CONNECTED AMPS: 29.1	PHASE WATTS: 3,974	2,747	3,752
DEMAND KVA: 00			DEMAND AMPS: 00.0			

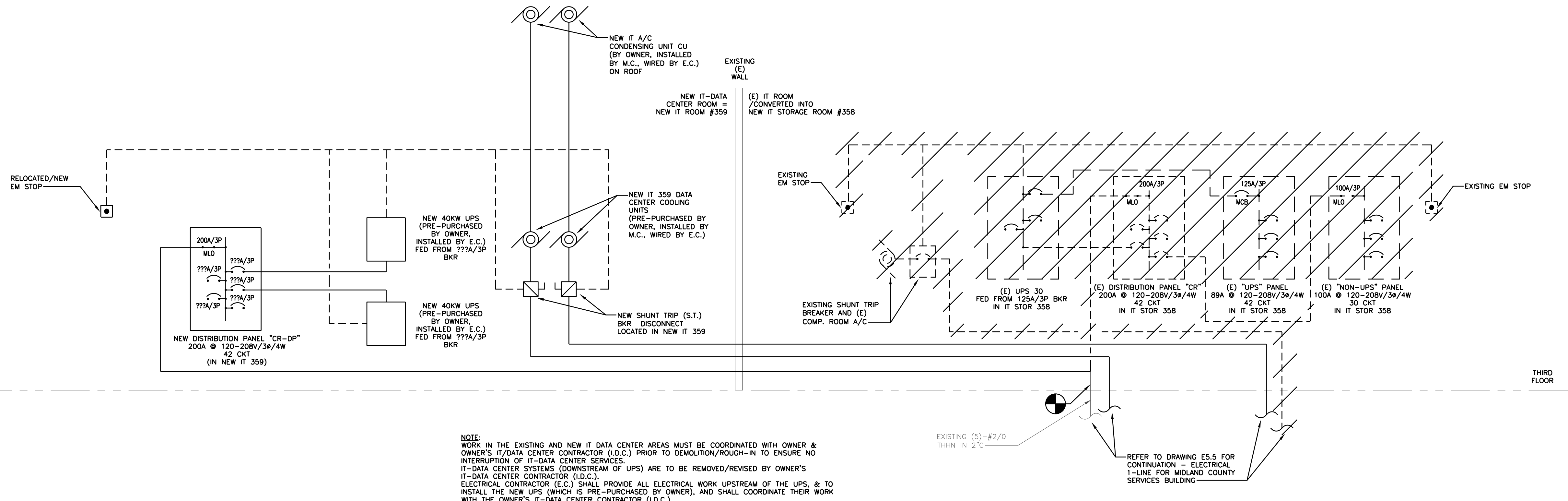




PANEL: (E) R		225A		BUSSING SIZE: 225A		FED FROM: (E) SWBD-B	
# OF POLES:	42	VOLTS:	120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	SURFACE
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 325.1							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) RECEPTS - 304 & 307	720				
3	(E) 20	(E) RECEPTS - 313,304 & 305		540			
5	(E) 20	(E) RECEPTS - 309,304,305 & 307			720		
7	(E) 20	RECEPTS - 358, 359 & 371	720				
9	(E) 20	(E) RECEPTS - 305 & 307		720			
11	(E) 20	(E) RECEPTS - 309			540		
13	(E) 20	RECEPTS - 325,308 & 309	540				
15	(E) 20	(E) SPARE		0			
17	(E) 20	(E) SPARE			0		
19	(E) 20	RECEPTS - 371	720				
21	(E) 20	RECEPTS - 329		720			
23	(E) 20	NEW & (E) RECEPTS - 354			360		
25	(E) 20	DEDICATED RECEIPT FOR VENDING MACHINE	1200				
27	(E) 30	(E) SPARE		0			
29	-	-			0		
31	(E) 50	(E) SPARE	0				
33	-	-		0			
35	(E) 20	RECEIPT - 323			360		
37	(E) 20	(E) RECEPTS - 364 & 358	540				
39	(E) 20	(E) RECEPTS - 321,318 & 319		720			
41	(E) 20	(E) UNIT HEATER IN ROOM 318			400		
2	(E) 20	(E) RECEPTS - 306 & 315	720				
4	(E) 20	(E) RECEPTS - 306,308 & 315		720			
6	(E) 20	(E) RECEPTS - 318,308 & 364			720		
8	(E) 20	(E) RECEPTS - 308	720				
10	(E) 20	DEDICATED RECEIPT FOR VENDING MACHINE		1200			
12	(E) 20	(E) RECEPTS - 367,364 & 308			540		
14	(E) 20	NEW & (E) RECEPTS - 369 & 371	540				
16	(E) 20	(E) RECEPTS - 369		720			
18	(E) 20	RECEIPT - 322			360		
20	(E) 20	(E) RECEPTS - 313,363 & 309	720				
22	(E) 20	SHUTTER DOOR FOR ROOM 373		1100			
24	(E) 20	SHUTTER DOOR FOR ROOM 374			1100		
26	(E) 20	SHUTTER DOOR FOR ROOM 352	1100				
28	(E) 20	MOTORIZED BLINDS FOR ROOM 371 (7.2A MAX)		900			
30	(E) 20	SHUTTER DOOR FOR ROOM 338			1100		
32	(E) 30	(E) SPARE	0				
34	(E) 20	(E) AUTOMATIC DOOR OPENERS		120			
36	(E) 20	DEDICATED RECEIPT FOR VENDING MACHINE			1200		
38	(E) 20	SHUTTER DOOR FOR ROOM 329	1100				
40	(E) 20	RECEIPT FOR COPIER IN ROOM 352		1400			
42	(E) 20	NEW & (E) RECEPTS - 367			720		
<b>KVA:</b>	<b>26</b>	<b>CONNECTED AMPS:</b>	<b>73.1</b>	<b>PHASE WATTS:</b>	<b>9,340</b>	<b>8,860</b>	<b>8,120</b>
<b>DEMAND KVA:</b>	<b>00</b>	<b>DEMAND AMPS:</b>	<b>00.0</b>				

PANEL: (E) S		225A		BUSSING SIZE: 225A		FED FROM: (E) SWBD-B	
# OF POLES:	42	VOLTS:	120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	SURFACE
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 325.1							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	RECEPTS - 355	720				
3	(E) 20	RECEPTS - 351 & 353		720			
5	(E) 20	(E) SPARE			0		
7	(E) 20	(E) RECEPTS - 361 & 313	540				
9	(E) 20	(E) RECEPTS - 313		360			
11	(E) 20	(E) RECEPTS - 349 & 361			720		
13	(E) 20	NEW & (E) RECEPTS - 349	720				
15	(E) 20	(E) RECEPTS - 349,352 & 363		720			
17	(E) 20	(E) SPARE			0		
19	(E) 20	(E) REFRIGERATOR - 362	1200				
21	(E) 20	(E) SPARE		0			
23	(E) 20	RECEPTS - 335 & 329			720		
25	(E) 20	(E) RECEIPT IN ROOM 362	180				
27	(E) 20	(E) HOT WATER IN ROOM 362		1300			
29	(E) 20	(E) DISPOSER IN ROOM 362			700		
31	(E) 20	(E) RECEPTS - 336	360				
33	(E) 20	(E) RECEPTS - 335 & 332		720			
35	(E) 20	(E) RECEPTS - 332			540		
37	(E) 20	(E) RECEPTS - 365 & 366	540				
39	(E) 20	RECEPTS FOR WACs		360			
41	(E) 20	NEW & (E) RECEPTS - 328			720		
2	(E) 20	(E) SPARE	0				
4	(E) 30	(E) FC-1 SERVING ROOM 369		730			
6	-	-			730		
8	(E) 20	RECEPTS - 362, 338 & 337	720				
10	(E) 20	(E) RECEPTS - 351 & 352		540			
12	(E) 20	(E) RECEPTS - 352			720		
14	(E) 20	(E) RECEPTS - 353 & 362	720				
16	(E) 30	(E) FC-2 SERVING ROOM 362		730			
18	-	-			730		
20	(E) 20	(E) RECEPTS - 338 & 362	720				
22	(E) 20	RECEPTS - 329 & 328		720			
24	(E) 20	(E) RECEPTS - 337 & 338			720		
26	(E) 20	NEW & (E) RECEPTS - 339 & 336	720				
28	(E) 20	RECEPTS - 331		720			
30	(E) 20	(E) SPARE			0		
32	(E) 20	NEW & (E) RECEPTS - 327	720				
34	(E) 20	NEW & (E) RECEPTS - 324		720			
36	(E) 20	NEW & (E) RECEPTS - 326			720		
38	(E) 20	(E) SPARE	0				
40	(E) 20	(E) RECEPTS - 359		360			
42	(E) 20	RECEPTS - 352,329,327 & 332			720		
<b>KVA:</b>	<b>24</b>	<b>CONNECTED AMPS:</b>	<b>67.5</b>	<b>PHASE WATTS:</b>	<b>7,860</b>	<b>8,700</b>	<b>7,740</b>
<b>DEMAND KVA:</b>	<b>00</b>	<b>DEMAND AMPS:</b>	<b>00.0</b>				

PANEL: (E) K		100A		BUSSING SIZE: 100A		FED FROM: (E) SWBD-A	
# OF POLES:	24	VOLTS:	277-480/3P/4W	NEUTRAL BUS:	100A	MOUNTING:	SURFACE
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 325.1							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) SPARE	0				
3	(E) 20	LIGHTING - 349,355,351,353,352,362,338,337,336 & 339		1306.5			
5	(E) 20	LIGHTING - 321,318,319,364,363,369,365,367,325/1,322&323			1828.2		
7	(E) 20	(E) SPARE	0				
9	(E) 20	(E) SPARE		0			
11	(E) 20	(E) SPARE			0		
13	(E) 20	(E) SPARE	0				
15	(E) 20	(E) SPACE		0			
17	(E) 20	(E) SPACE			0		
19	(E) 20	(E) VVB #304	1939				
21	(E) 20	(E) SPACE		0			
23	(E) 20	(E) SPACE			0		
2	(E) 20	(E) SPARE	0				
4	(E) 20	LIGHTS - 306,308,303,307,305,304,309,313,372 & 361		1388.9			
6	(E) 20	LIGHTING - 335,331,328,324,329,326 & 354			847.4		
8	(E) 20	(E) SPARE	0				
10	(E) 20	(E) SPARE		0			
12	(E) 20	(E) SPARE			0		
14	(E) 20	(E) SPACE	0				
16	(E) 20	(E) SPACE		0			
18	(E) 20	(E) SPACE			0		
20	(E) 20	(E) VVB #305	1939				
22	(E) 20	(E) SPACE		0			
24	(E) 20	(E) SPACE			0		
<b>KVA:</b>	<b>09</b>	<b>CONNECTED AMPS:</b>	<b>11.1</b>	<b>PHASE WATTS:</b>	<b>3,878</b>	<b>2,695</b>	<b>2,676</b>
<b>DEMAND KVA:</b>	<b>09</b>	<b>DEMAND AMPS:</b>	<b>11.1</b>				



**ELECTRICAL ONE-LINE DIAGRAM FOR MCSB 3RD FLOOR IT AREA**  
NO SCALE



JLK Engineering  
Project Number: ARC 2201-01  
The District's Contractor  
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Mechanical | Electrical | Plumbing

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Midland, MI 48640

RENOVATIONS TO  
MIDLAND COUNTY SERVICES BUILDING  
MIDLAND MICHIGAN

ELECTRICAL DETAILS

ISSUE PERMITS & BIDS  
11-11-2024  
Revised

SCALE: AS NOTED  
PROJECT NO. 20220400  
DRAWING NO. E5.4

