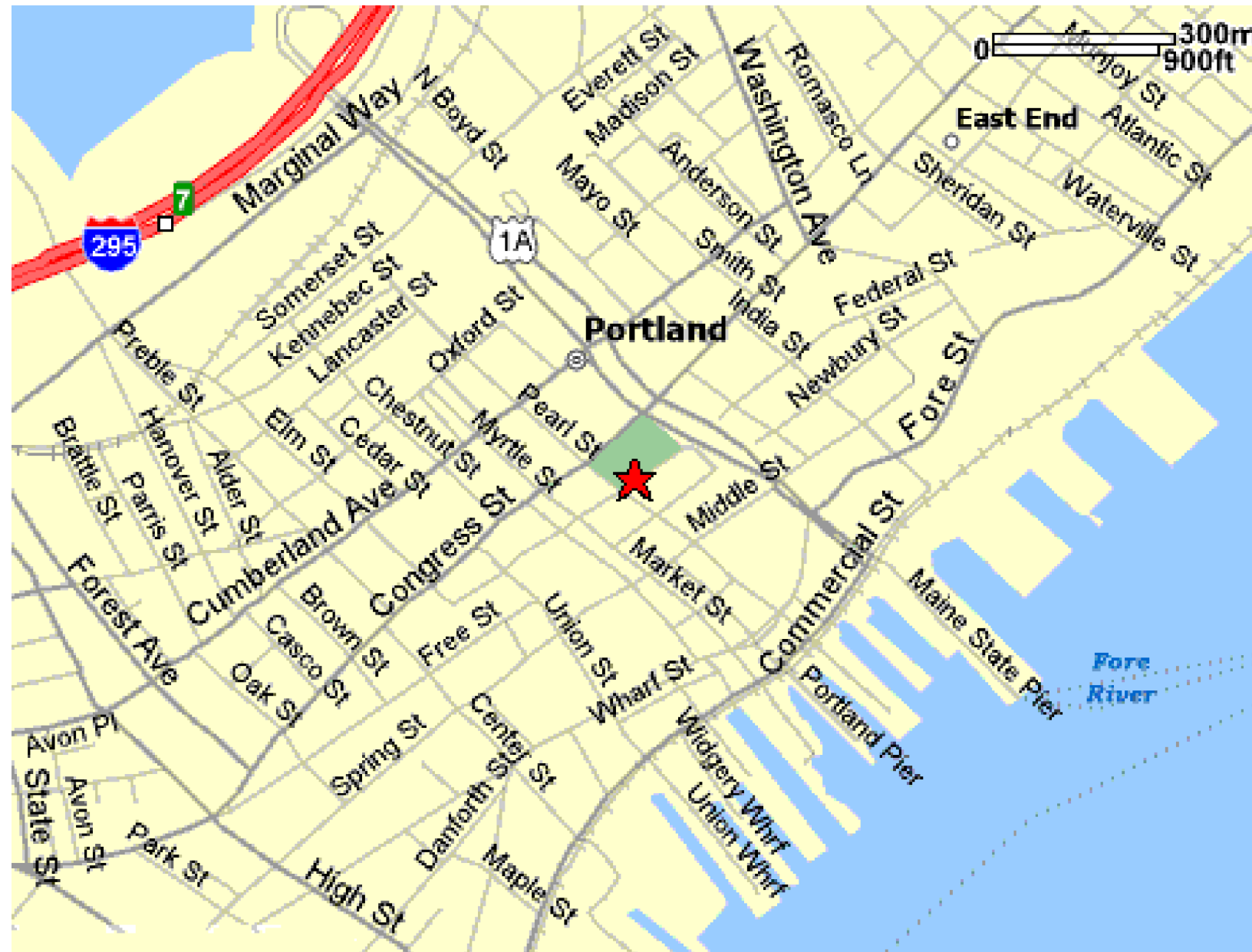


# SJC HVAC UPGRADES AT THE CUMBERLAND COUNTY COURTHOUSE

## PORTLAND, MAINE

ALLIED PROJECT #20018



LOCATION MAP

**ISSUED FOR  
CONSTRUCTION  
16 APRIL, 2020**

### DRAWING STATUS LIST

Sht No.	SHEET TITLE	ISSUE			
		DESCRIPTION	DATE	FINAL REVIEW	ISSUED FOR CONSTRUCTION
C-000	COVER SHEET		04-03-2020		
A-101	ARCHITECTURAL SECOND & THIRD FLOOR PLANS				
A-201	ARCHITECTURAL BUILDING SECTION				
MH-000	MECHANICAL ABBREVIATIONS, LEGENDS AND NOTES				
MH-100	MECHANICAL SECOND FLOOR DUCTWORK & PIPING PLANS				
MH-101	MECHANICAL ATTIC FLOOR DUCTWORK & PIPING PLANS				
MH-500	MECHANICAL DETAILS AND NOTES				
MH-600	MECHANICAL SCHEDULES AND NOTES				
E-000	ELECTRICAL LEGENDS, ABBREVIATIONS, NOTES AND RISER DIAGRAMS				
E-100	ELECTRICAL SECOND AND THIRD FLOOR PLAN				
E-101	ELECTRICAL ATTIC PLAN				

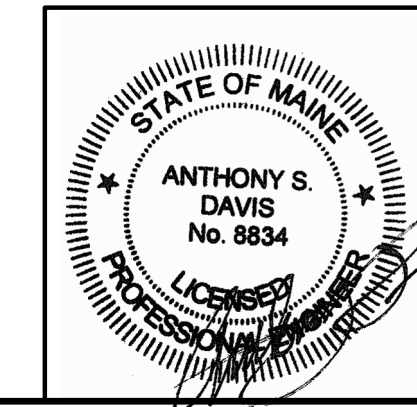


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Architecture / Planning  
Preservation Architecture  
Interior Architecture

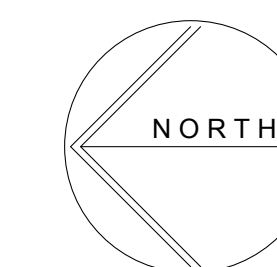
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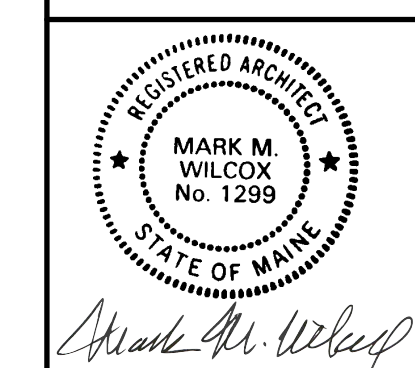


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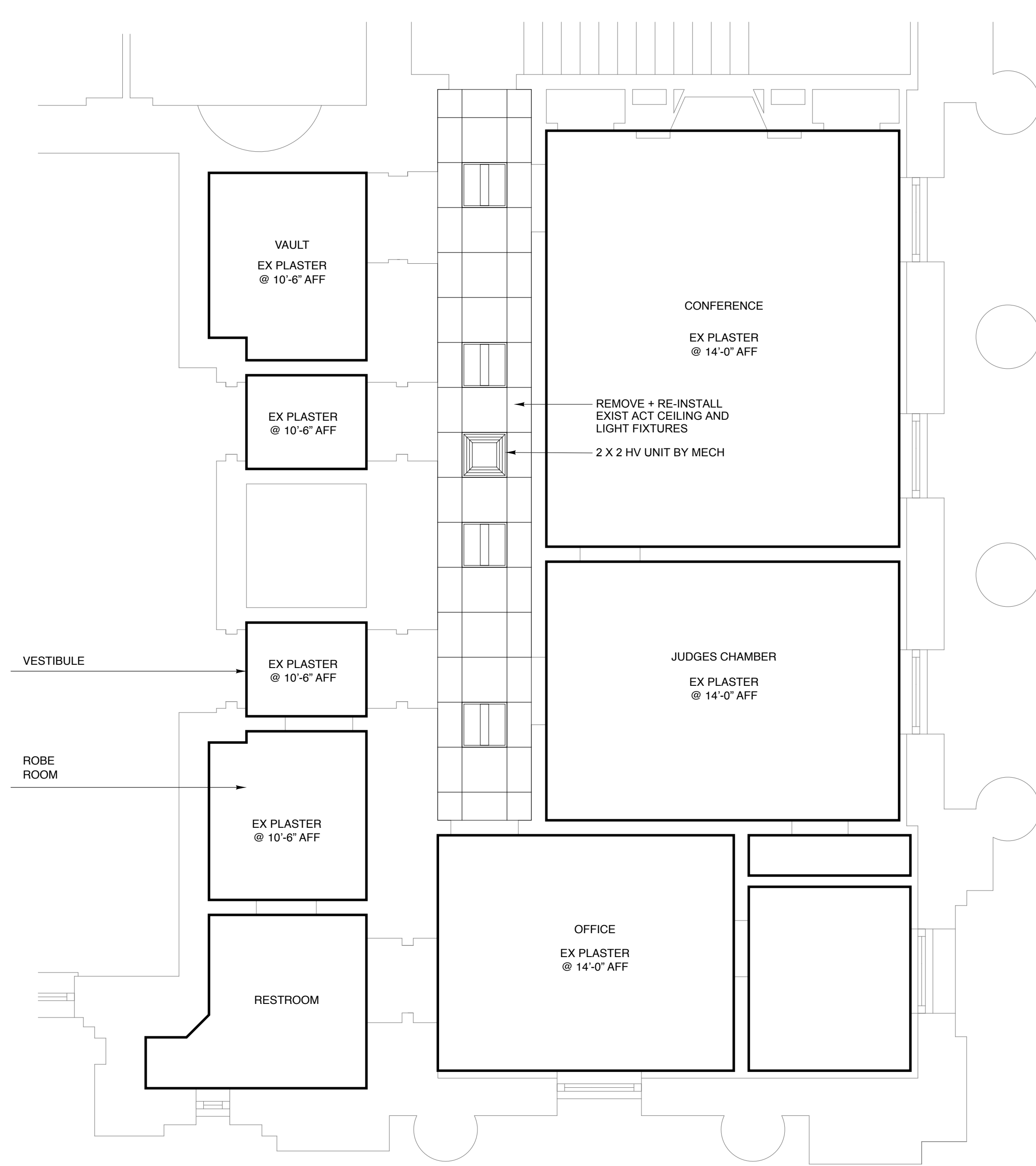


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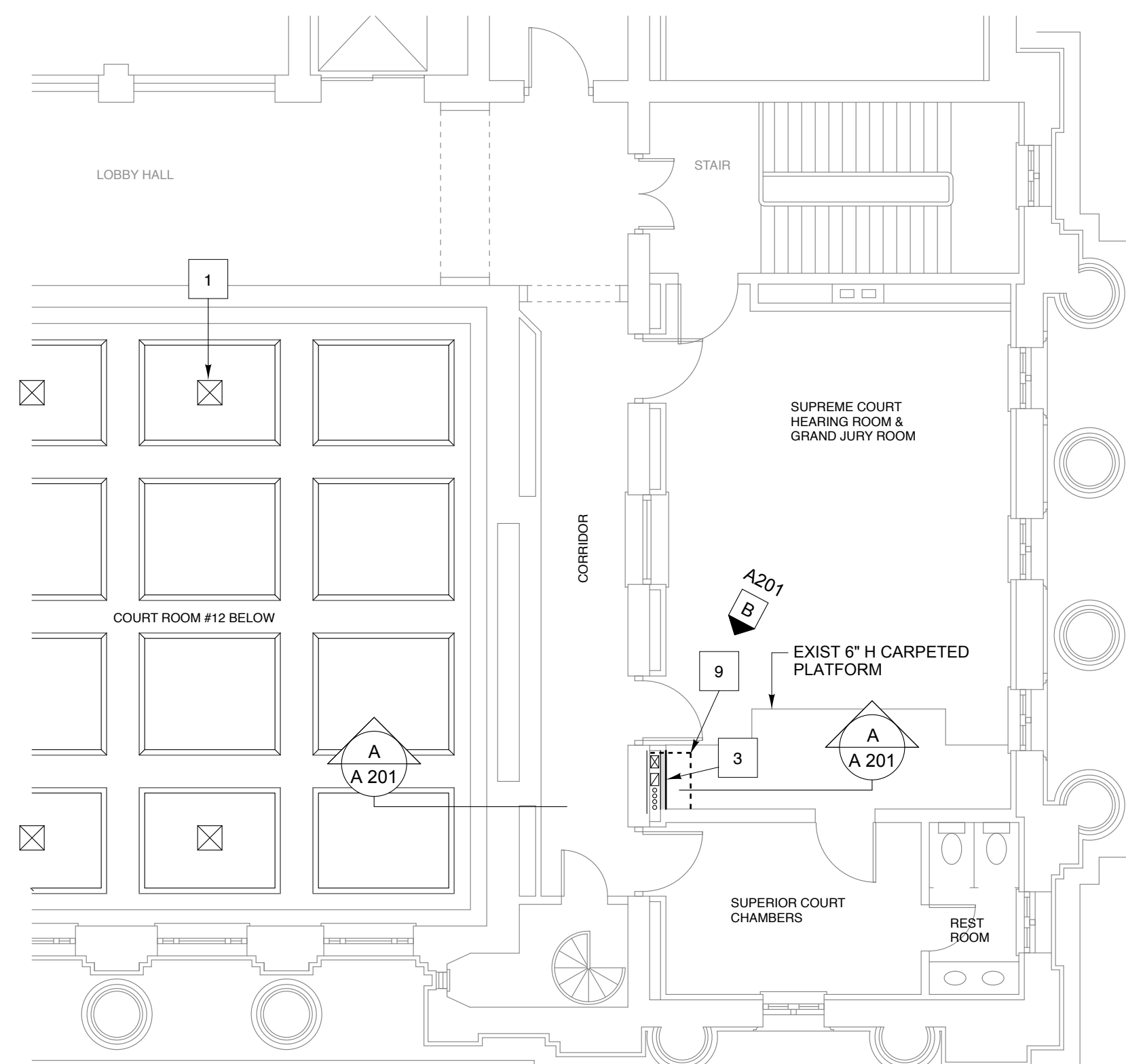
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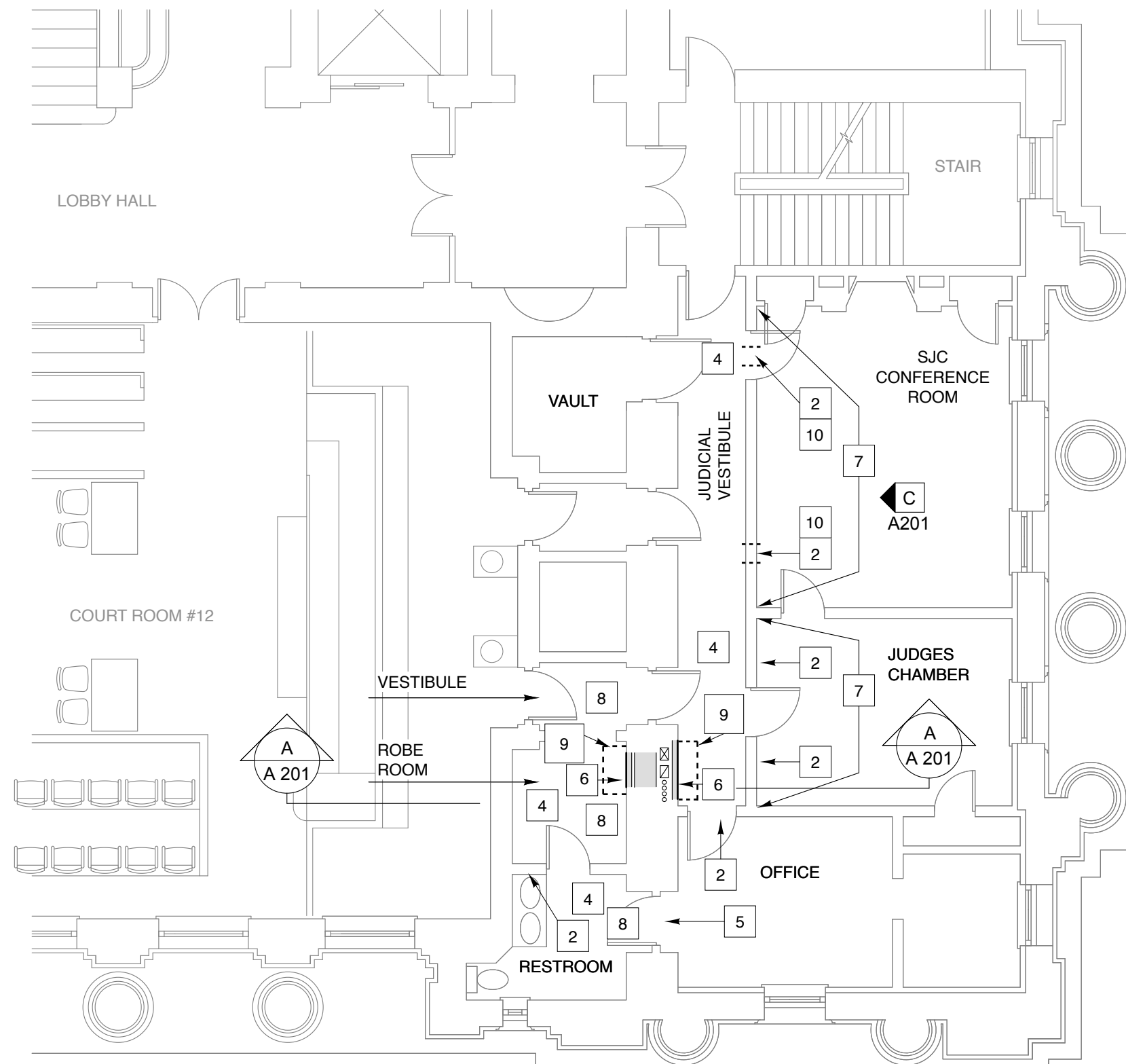
*Mark M. Wilcox*



**C SECOND FLOOR REFLECTED CEILING PLAN**  
1/4" = 1' - 0"  
0 4'



**A THIRD FLOOR PLAN**  
1/8" = 1' - 0"  
0 8'



**B SECOND FLOOR PLAN**  
1/8" = 1' - 0"  
0 8'

**KEYED NOTES**

- 1 EXISTING SUPPLY AIR DIFFUSER TO REMAIN.
- 2 PROPOSED WALL REGISTER LOCATION: CUT AND PATCH EXISTING TERRACOTTA MASONRY WALL TO EXACTLY MATCH ORIGINAL WALL. FIELD VERIFY HEIGHT OF GRILLE AT +/- 12'-0" AFF.
- 3 CAREFULLY REMOVE OAK FULL HEIGHT WALL PANELLING. REMOVE EXISTING TERRACOTTA MASONRY WALL. FOLLOWING MECHANICAL WORK, PROVIDE INFILL WALL TO MATCH EXISTING EXACTLY AND REINSTALL OAK WAINSCOTING. TOUCH UP + REPAIR OAK WAINSCOTING TO EXACTLY MATCH ADJACENT EXISTING PANELS.
- 4 CAREFULLY REMOVE EXISTING SUSPENDED ACOUSTIC TILE CEILING AND LIGHTS IN THIS ROOM. REINSTALL CEILING FOLLOWING MECHANICAL WORK.
- 5 PROPOSED WALL REGISTER AND/OR DUCT PENETRATION LOCATION: CUT AND PATCH EXISTING 16" BRICK BEARING WALL AND TERRACOTTA MASONRY WALL ON BOTH SIDES TO EXACTLY MATCH ORIGINAL WALL.
- 6 REMOVE EXISTING TERRACOTTA MASONRY PARTITION. FOLLOWING MECHANICAL WORK REINSTALL PARTITION TO MATCH EXISTING.
- 7 PAINT THIS WALL TO MATCH EXISTING ROOM COLOR.
- 8 EXPOSED DUCTWORK IN THIS ROOM SHALL BE PAINTED BY SECTION 099000
- 9 REMOVE AND REPLACE EXIST ACT. REMOVE EXIST CEILING PLASTER 4" ABOVE AS NEEDED FOR INSTALLATION OF DUCTS AND PIPING. PATCH CEILING PLASTER TO MATCH EXISTING. REPLACE ACT.
- 10 CENTER PROPOSED GRILLE ABOVE EXISTING DOOR OR BUILT-IN BOOKCASE AT +/- 12" AFF

**EXISTING WALL TYPES LEGEND**

- ROOM SIDE PLASTER ON FURRING
- 6" TERRACOTTA BLOCK
- 8" VOID SPACE
- 16" BRICK
- CORRIDOR SIDE PLASTER ON FURRING
- 6", 8" OR 10" TERRACOTTA BLOCK PLASTER EACH SIDE

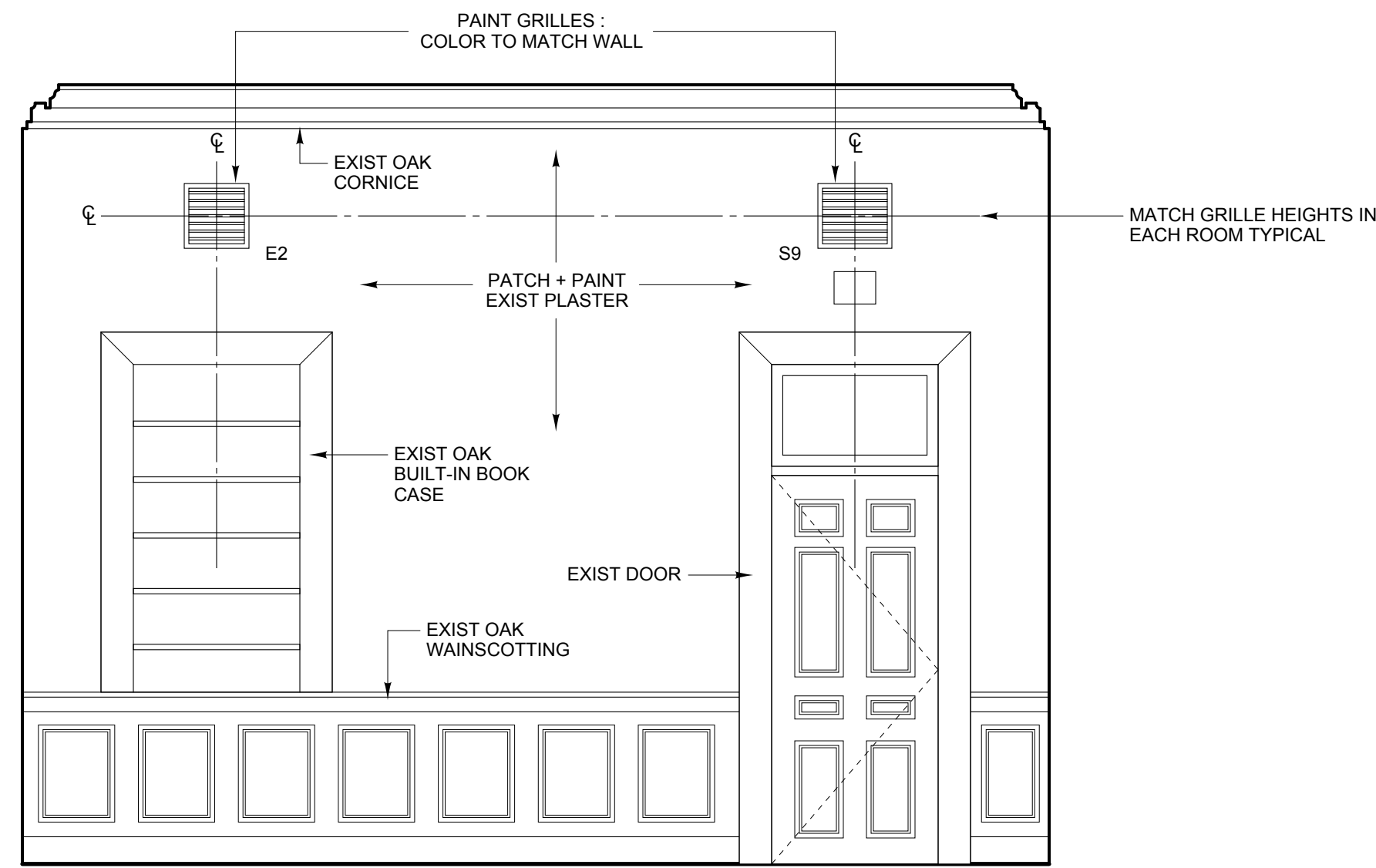
**GENERAL NOTES**

1. PROVIDE TWO-HOUR FIRE STOPPING SYSTEM AT ALL FLOOR PENETRATIONS AND SHAFTWAY WALLS.
2. PROVIDE ONE-HOUR FIRE STOPPING SYSTEM AT EACH SIDE OF ALL WALL PENETRATIONS.
3. PROTECT EXISTING FINISHES FROM DAMAGE. ANY EXISTING ITEMS DAMAGED DURING THE COURSE OF THE WORK SHALL BE REPLACED TO EXACTLY MATCH EXISTING AT NO EXTRA COST.

REVISIONS			
NUMBER	DATE	BY	DESCRIPTION

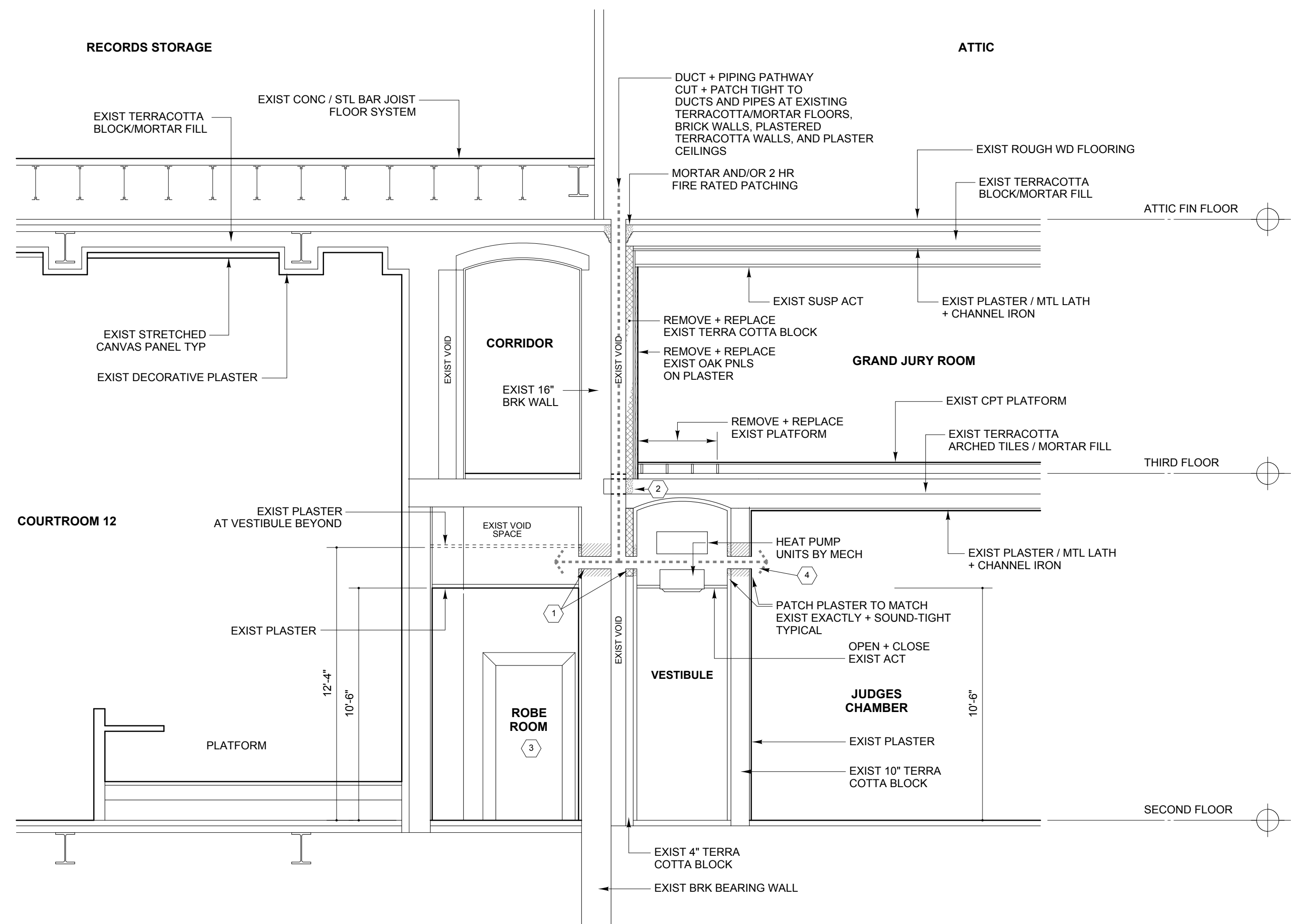
Date: April 16, 2020	Drawn By:	Checked By:	Project Mgr: ASD	Project No.: 20018	Cad File:	Graphic Scale:	0 8'
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**SECOND AND THIRD FLOOR PART PLANS**  
SJC HVAC UPGRADES UPGRADES AT THE CUMBERLAND COUNTY COURTHOUSE  
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SJC CONFERENCE ROOM  
NORTH ELEVATION

3/8" = 1' - 0"

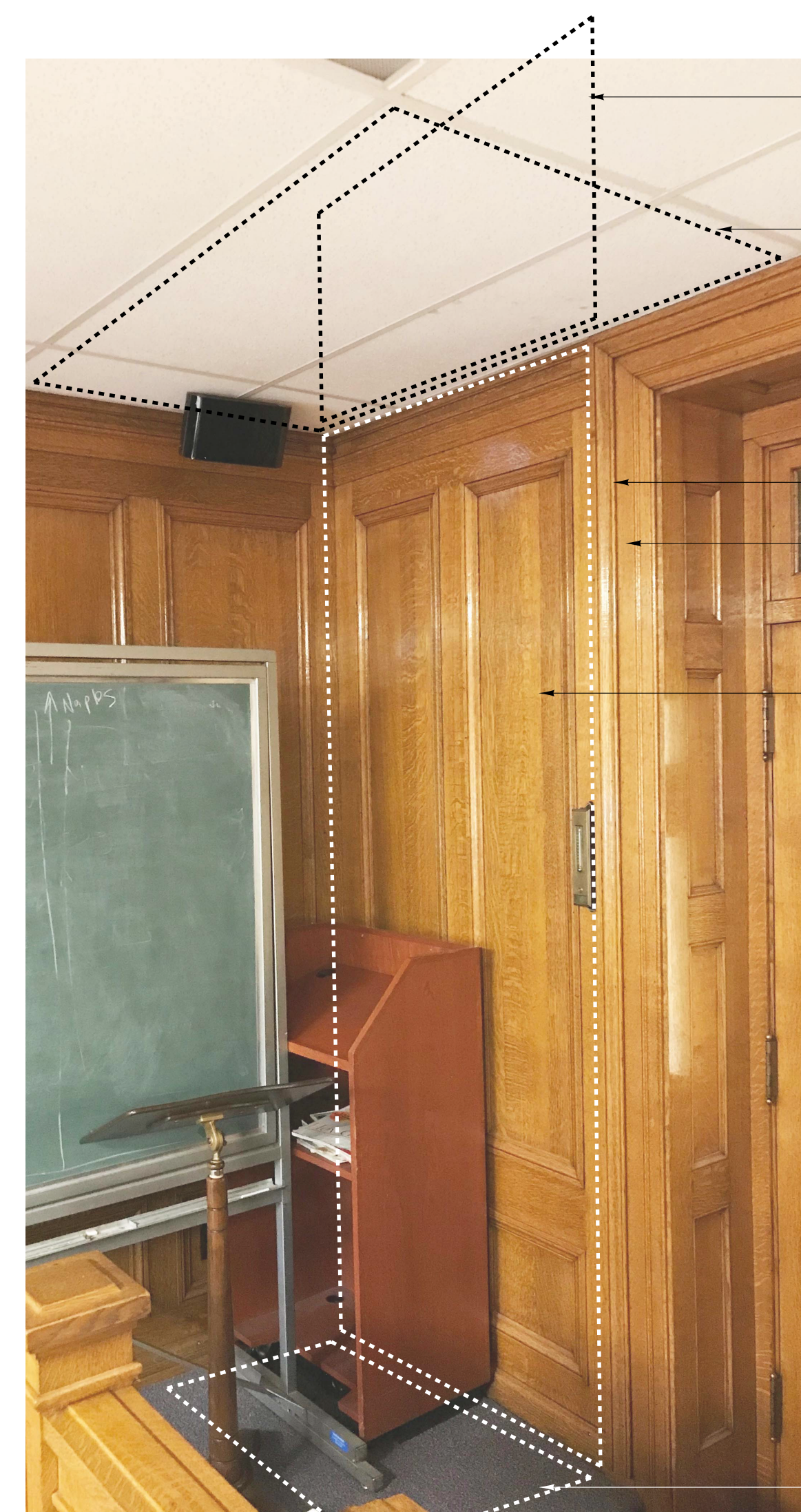


BUILDING SECTION

1/4" = 1' - 0"

KEYED NOTES

- ① MASONRY AND/OR 2 HR FIRE RATED PATCHING
- ② IF UNDERMINED PATCH FLOOR TO MATCH EXIST
- ③ PAINT EXPOSED DUCTS IN THESE ROOMS
- ④ SPRAY PAINT WALL GRILLES TO MATCH WALL



THIRD FLOOR GRAND JURY ROOM  
NORTHWEST CORNER ELEVATION

B

NO SCALE

REMOVE PANELLING AND PLASTER ABOVE TO UNDERSIDE OF ORIGINAL CEILING  
REMOVE EXISTING TERRACOTTA MASONRY WALL  
FOLLOWING MECHANICAL WORK, REPLACE MASONRY AND PATCH TIGHT.

REMOVE + REINSTALL ACT AND GRID  
REMOVE + REINSTALL PLASTER AT ORIGINAL CEILING ABOVE + REINSTALL

REMOVE + REINSTALL BACKBAND  
CASING TO REMAIN IN PLACE

REMOVE PANELLING AND PLASTER ABOVE TO UNDERSIDE OF ORIGINAL CEILING  
REMOVE EXISTING TERRACOTTA MASONRY WALL  
FOLLOWING MECHANICAL WORK, REPLACE MASONRY AND PATCH TIGHT. REPLACE PANELLING AND BACKBAND AND PATCH TO MATCH EXISTING EXACTLY

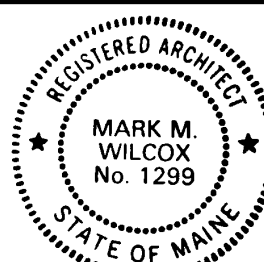
OPEN AND CLOSE EXISTING CARPETED PLATFORM



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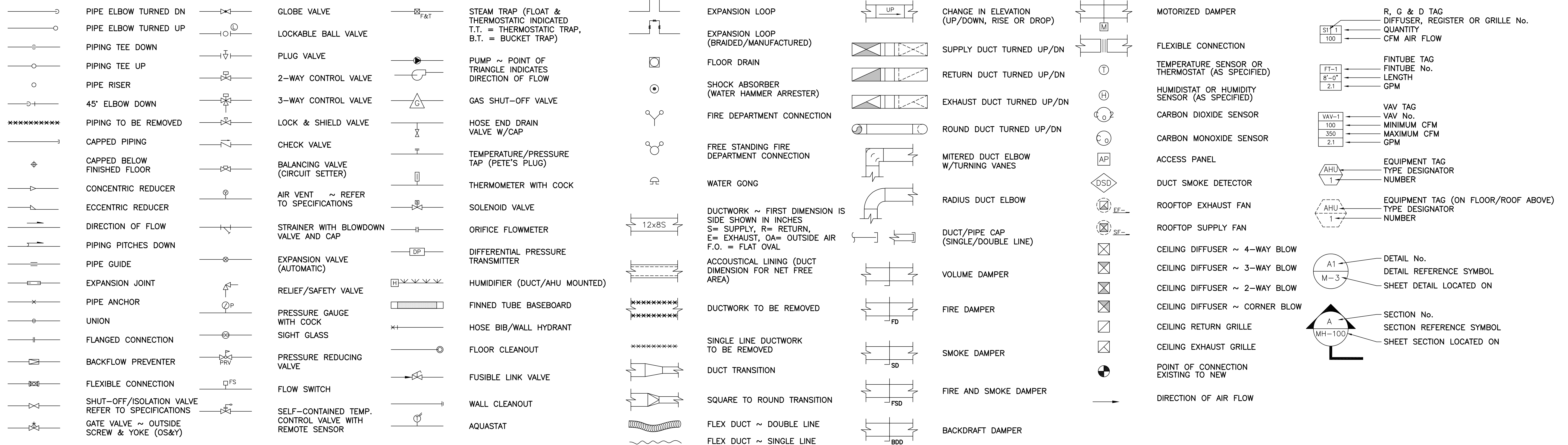


*Mark M. Wilcox*

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Date: April 16, 2020	Drawn By:	Checked By:	Project Mgr: ASD	Project No: 20018	Cal File:	Graphic Scale: 0' 8"
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BUILDING SECTION  
SJC HVAC UPGRADES UPGRADES AT  
THE CUMBERLAND COUNTY COURTHOUSE  
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D1 SYMBOLS LEGEND

NONE

AW	ACID WASTE	LPR	LOW-PRESSURE CONDENSATE
ATV	AIR RELIEF	LPS	LOW-PRESSURE STEAM
BBD	BOILER BLOWDOWN	MA	MEDICAL AIR
BF	BOILER FEED	MPR	MEDIUM-PRESSURE CONDENSATE
C	CONDENSATE (HVAC DRAIN PAN)	MPS	MEDIUM-PRESSURE STEAM
C	CONDENSATE (HVAC DRAIN PAN - BELOW FLOOR)	MU	MAKEUP WATER
CA	COMPRESSED AIR	N2	NITROGEN
CHWR	CHILLED WATER RETURN	NG	NATURAL GAS
CHWS	CHILLED WATER SUPPLY	NO	NITROUS OXIDE
CWS	CONDENSER WATER SUPPLY	NPW	NON-POTABLE WATER
CWR	CONDENSER WATER RETURN	OX	OXYGEN
	DOMESTIC COLD WATER	PC	PUMPED CONDENSATE
	DOMESTIC HOT WATER	PCWR	PROCESSED COLD WATER RETURN
	DOMESTIC WATER RECIRC.	PCWS	PROCESSED COLD WATER SUPPLY
D	DRAIN	RD	REFRIGERANT DISCHARGE
FM	PUMP FORCE MAIN	RL	REFRIGERANT LIQUID
FOF	FUEL OIL FILL	RS	REFRIGERANT SUCTION
FOR	FUEL OIL RETURN	RW	RAIN WATER ABOVE FLOOR
FOS	FUEL OIL SUPPLY	RW	RAIN WATER BELOW GRADE
FOV	FUEL OIL TANK VENT		SANITARY SOIL WASTE (ABOVE FLOOR)
FW	FEEDWATER		SANITARY SOIL WASTE (BELOW FLOOR)
GR	GLYCOL RETURN		SANITARY SOIL VENT (ABOVE FLOOR)
GS	GLYCOL SUPPLY		SANITARY SOIL VENT (BELOW FLOOR)
H	HUMIDIFICATION LINE	SV	SANITARY WASTE & VENT COMBINATION
H2	HYDROGEN GAS	SP	SPRINKLER MAIN PIPING
HPWR	HEAT PUMP WATER RETURN	SWR	SOLAR WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY	SWS	SOLAR WATER SUPPLY
HPC	HIGH-PRESSURE CONDENSATE	TP	TRAP PRIMER PIPING ABOVE GRADE
HPS	HIGH-PRESSURE STEAM	TP	TRAP PRIMER PIPING BELOW GRADE
HTWR	HIGH-TEMP. HOT WATER RETURN	TWR	TEMPERED RETURN WATER
HWR	HOT WATER RETURN	TWS	TEMPERED SUPPLY WATER
HWS	HOT WATER SUPPLY	VAC	VACUUM (AIR)
IND	INDUSTRIAL WASTE	VC	VACUUM CLEANING (HOUSE)
IW	INDIRECT WASTE	VPD	VACUUM PUMP DISCHARGE
LN	LIQUID NITROGEN		
LOX	LIQUID OXYGEN		
LPC	LOW-PRESSURE CONDENSATE		
LP	LIQUID PETROLEUM GAS		

AAV	AUTOMATIC AIR VENT	DN	DOWN	LP	LIQUID PETROLEUM GAS	TP	TRAP PRIMER
AC	ABOVE CEILING	DS	DOWNSPOUT	LPR	LOW PRESSURE STEAM RETURN	TSP	TOTAL STATIC PRESSURE
ACC	AIR COOLED CONDENSER	DT	DROP AND TRANSITION	LPS	LOW PRESSURE STEAM SUPPLY	TTS	TIGHT TO STEEL
ACU	AIR CONDITIONING UNIT	DV	DRAIN VALVE	MAX	MAXIMUM	TV	TURNING VANE
ADA	AMERICANS WITH DISABILITIES ACT	DWG	DRAWING	MBH	1000 BTU/HR.	TW	TEMPERED WATER
AD	ACCESS DOOR	EA	EXHAUST AIR	MFR	MANUFACTURER	TYP	TYPICAL
AE	ACID EXHAUST	EF	EXHAUST FAN	MIN	MINIMUM	UH	UNIT HEATER
AW	ACID WASTE	EG	EXHAUST GRILLE	MOD	MOTOR OPERATED DAMPER	UIC	UP IN CHASE
AFF; A.F.F.	ABOVE FINISHED FLOOR	ELEV	ELEVATION	MPG	MEDIUM PRESSURE GAS	UIW	UP IN WALL
AHU	AIR HANDLING UNIT	ELONG	ELONGATE	MPV	MULTI-PURPOSE VALVE	UV	UNIT VENTILATOR
AP	ACCESS PANEL	ENC	ENCLOSURE	MTD	MOUNTED	V	VENT
APPROX	APPROXIMATE; APPROXIMATELY	ER	EXHAUST REGISTER	MTG	MOUNTING	VAC	VACUUM
APMR	AS PER MFR'S RECOMMENDATIONS	ESP	EXTERNAL STATIC PRESSURE	MUA	MAKE UP AIR	VB	VACUUM BREAKER
ATC	AUTOMATIC TEMPERATURE CONTROL	ET	EXTERNAL STATIC PRESSURE	N.C.	NORMALLY CLOSED	VCF	VALVE & CAP FOR FUTURE
AV	AIR VENT	ET (E)	EXISTING	N.O.	NORMALLY OPEN	VD	VOLUME DAMPER - MANUAL
BC	BALANCING COCK	F & T	FLOAT AND THERMOSTATIC	NIC	NOT IN CONTRACT	VLV	VALVE
BDD	BACKDRAFT DAMPER	FBO	FURNISHED BY OTHERS	NPT	NATIONAL PIPE THREAD	VS	VENT STACK
BG	BLAST GATE	FBP	FACE AND BYPASS	NTS	NOT TO SCALE	VTR	VENT THROUGH ROOF
BF	BARRIER FREE	FC	FLEXIBLE CONNECTION	OA	OUTSIDE AIR	W	WASTE
BFP	BACKFLOW PREVENTER	FCO	FLOOR CLEANOUT	OB	OPPOSED BLADE DAMPER	W/	WITH
BHP	BRAKE HORSEPOWER	FD	FLOOR DRAIN TAG	OD	OUTSIDE DIAMETER	WB	WET BULB TEMPERATURE, °F
BLDG	BUILDING	FD-#	FLOOR DRAIN TAG	OED	OPEN ENDED DUCT	WCO	WALL CLEANOUT
BOD	BOTTOM OF DUCT	FD	FIRE DAMPER	P-#	PLUMBING FIXTURE TAG	WH	WATER HEATER
B.T.U.	BRITISH THERMAL UNIT	FIN	FINISH	PD	PUMPED DISCHARGE	WHYD	WALL HYDRANT
C; CONV.	CONVECTOR	FL	FLOOR	PRS	PRESSURE REDUCING STATION	NTS	NOT TO SCALE
CCW	COUNTER CLOCKWISE	FTG	FOOTING	RA	RETURN AIR	Ø	DIAMETER
CFF	CAPPED FOR FUTURE	FTR	FINNED TUBE RADIATION	RD	ROOF DRAIN	@	AT
CFM	CUBIC FEET PER MINUTE	FS	FLOW SWITCH	REC	RECOMMENDATION	&	AND
CLG	CEILING	FM	FORCE MAIN	REG	REGULAR	%	PERCENT
CO	CLEANOUT	GC	GENERAL CONTRACTOR	RF	RETURN FAN		
CM	CONSTRUCTION MANAGER	GPM	GALLONS PER MINUTE	RG	RETURN GRILLE		
CNTR	COUNTER; COUNTERTOP	GV	GRAVITY VENTILATOR	RHC	REHEAT COIL		
CONN	CONNECT; CONNECTION	H	HUMIDIFIER	RM	ROOM		
CONT	CONTINUE; CONTINUATION	HB	HOSE BIB	RPZ	REDUCED PRESSURE BFP		
COORD	COORDINATE	HC; HDC	HANDICAP ACCESS	RR	RETURN REGISTER		
CORR	CORRIDOR	HGT, HT.	HEIGHT	RV	RELIEF VALVE		
CR	CHEMICAL RESISTING	HP	HEAT PUMP	RW	RAIN WATER		
CT	COOLING TOWER	HRU	HEAT RECOVERY UNIT	S	SUPPLY AIR		
CTE	CONNECT TO EXISTING	HTR	HEATER	SA-" "	SHOCK ABSORBER OF PDI SIZE (" ") AS INDICATED		
CTR	CENTER	H & V	HEATING AND VENTILATION	SCV	SELF CONTAINED VALVE		
CTRNLN	CENTERLINE	HVAC	HEATING, VENTILATING, & AIR COND.	SD	SMOKE DAMPER		
CJ	COPPER	HW	HOT WATER	SF	SUPPLY FAN		
CUH	CABINET UNIT HEATER	HWR	HOT WATER RETURN	SG	SUPPLY GRILLE		
C.V.	CONTROL VALVE	HWS	HOT WATER SUPPLY	SGL	SINGLE		
CW	COLD WATER/CLOCKWISE	HX	HEAT EXCHANGER	SHT	SHEET		
DB	DRY BULB TEMPERATURE, °F	ID	INSIDE DIAMETER	SPLR	SPRINKLER		
DC	DOUBLE CONTAINED	IN WG	INCHES WATER GAUGE	SQ FT; S. F.	SQUARE FEET		
DDC	DIRECT DIGITAL CONTROL	INCL	INCLUDING	SR	SUPPLY REGISTER		
DET	DETAIL	INV EL	INVERT ELEVATION	S/O	SHUT OFF		
DIA	DIAMETER	IPS	IRON PIPE SIZE	S.S.	STAINLESS STEEL		
DIC	DOWN IN CHASE	KE-#	KITCHEN EQUIPMENT NUMBER	TG	TRANSFER GRILLE		
DIW	DOWN IN WALL	LD	LINEAR DIFFUSER	TOD	TOP OF DUCT		

A1 PIPING LINETYPE LEGEND

NONE

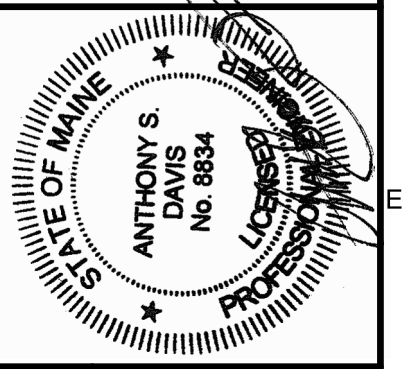
A4 ABBREVIATIONS

NONE

**NOTE**  
ALL GENERAL NOTES, SYMBOL LEGENDS, AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL PLUMBING AND HVAC DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION INTO THE DESIGN.

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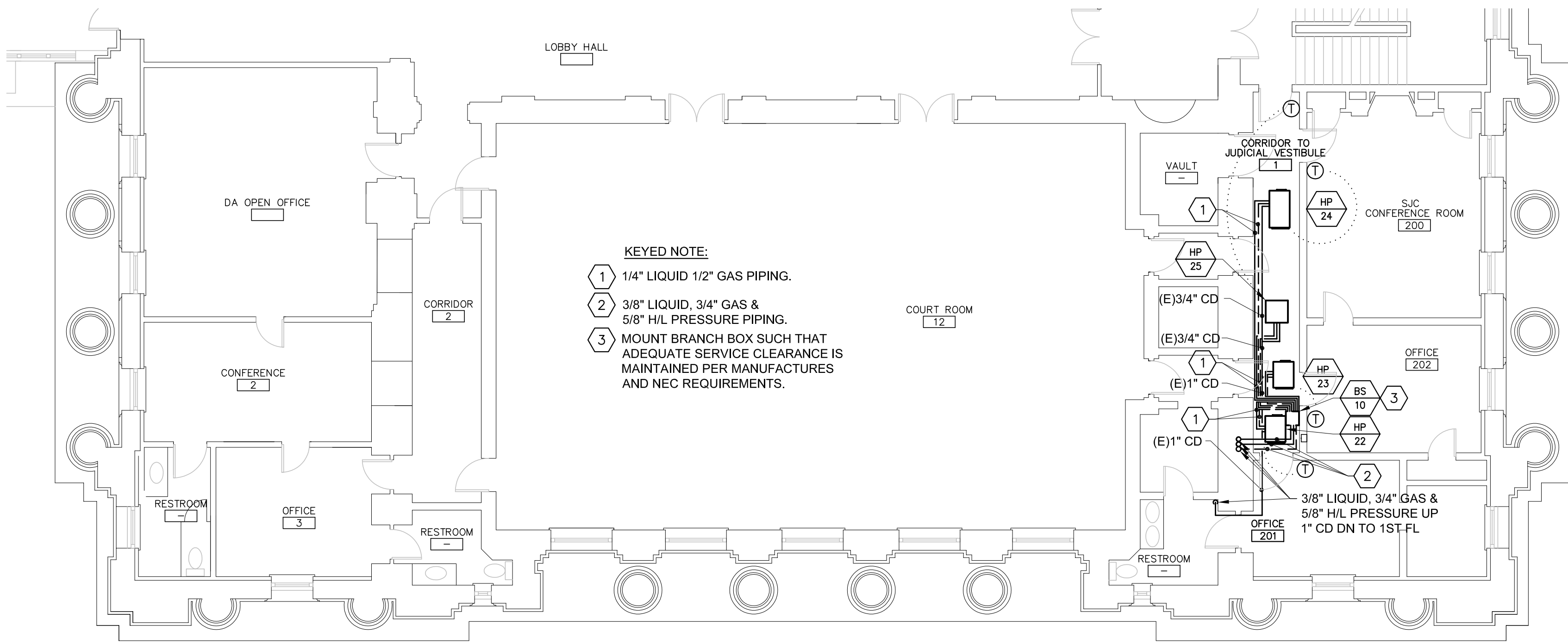


DATE	APRIL 16, 2020
DRAWN BY	SCL
CHECKED BY	ASD
PROJECT MGR.	ASD
PROJECT NO.	20018
CAD FILE	20018M.DWG
GRAPHIC SCALE	1" = 0'

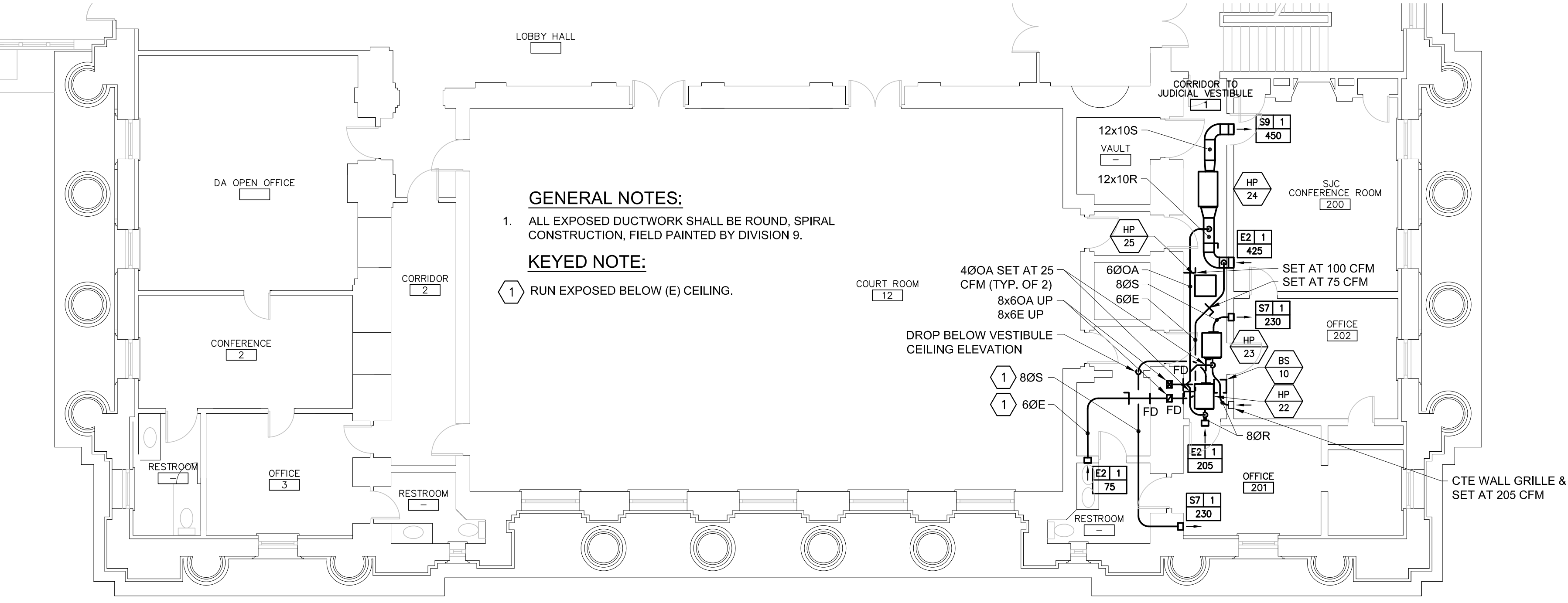
**MECHANICAL ABBREVIATIONS AND LEGEND**  
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**MH-000**

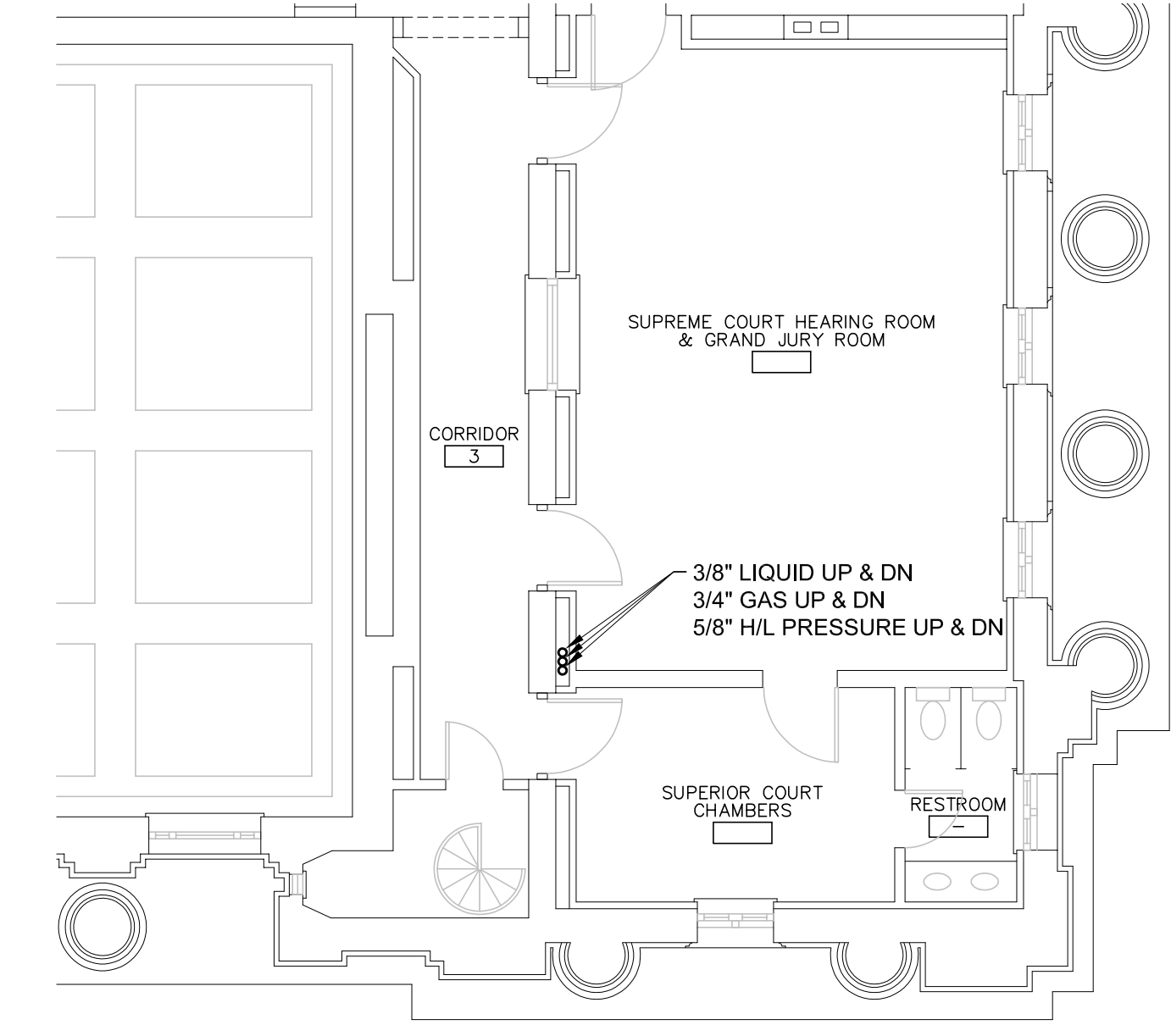
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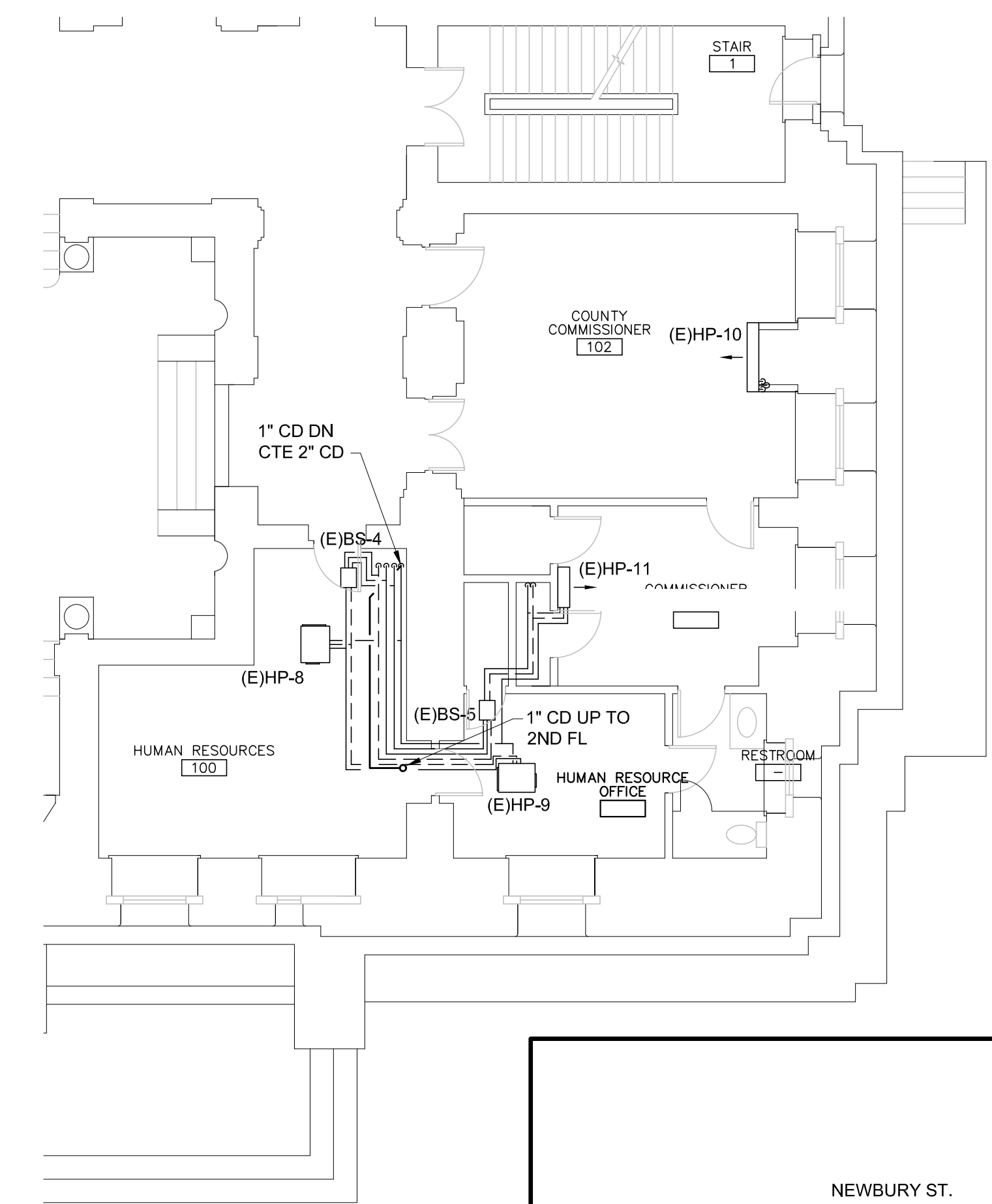
D1 MECHANICAL PIPING SECOND FLOOR PART PLAN  
1/8" = 1'-0"



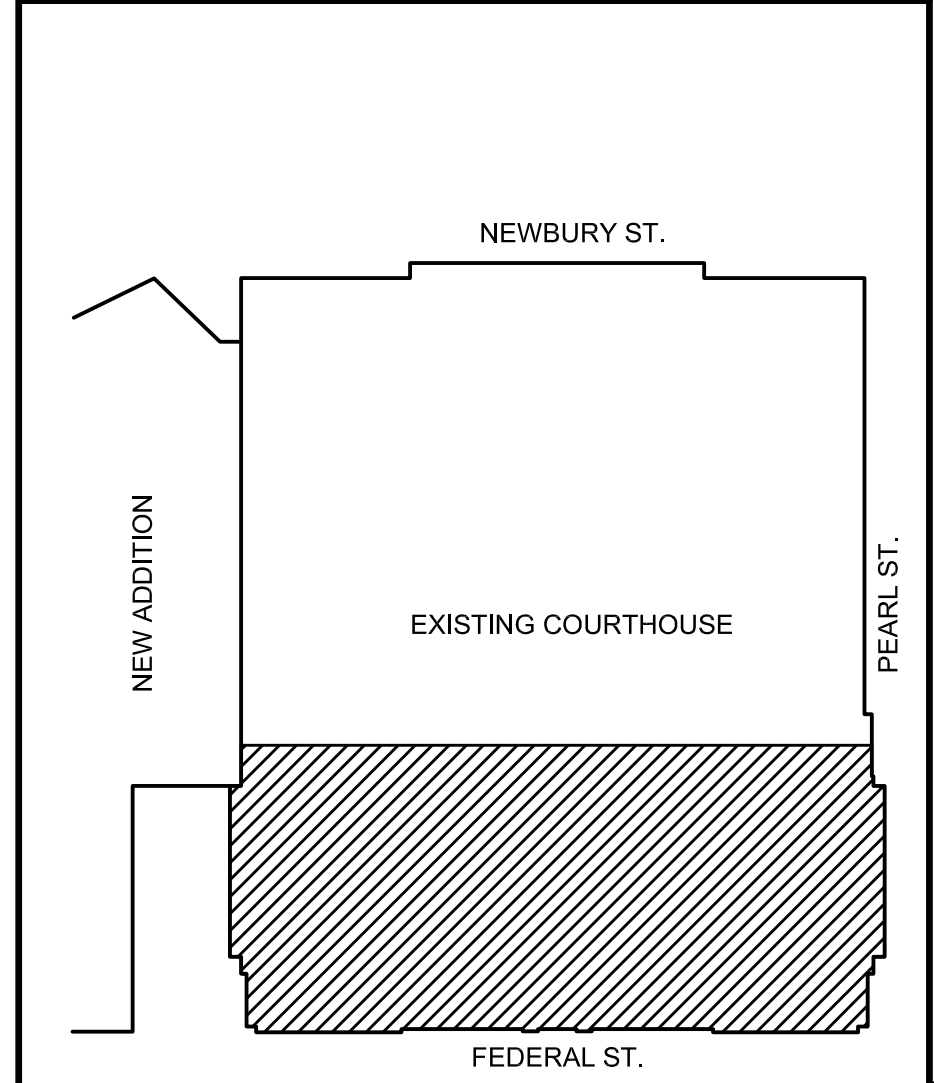
A1 MECHANICAL DUCTWORK SECOND FLOOR PART PLAN  
1/8" = 1'-0"



E8 MECHANICAL PIPING THIRD FLOOR PART PLAN  
1/8" = 1'-0"



A8 MECHANICAL FIRST PIPING FLOOR PART PLAN  
1/8" = 1'-0"



A9 KEY PLAN

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STATE OF MAINE  
ANTHONY S. DAVIS  
No. 8884  
Professional Engineer License

REVISIONS	
NUMBER	DESCRIPTION

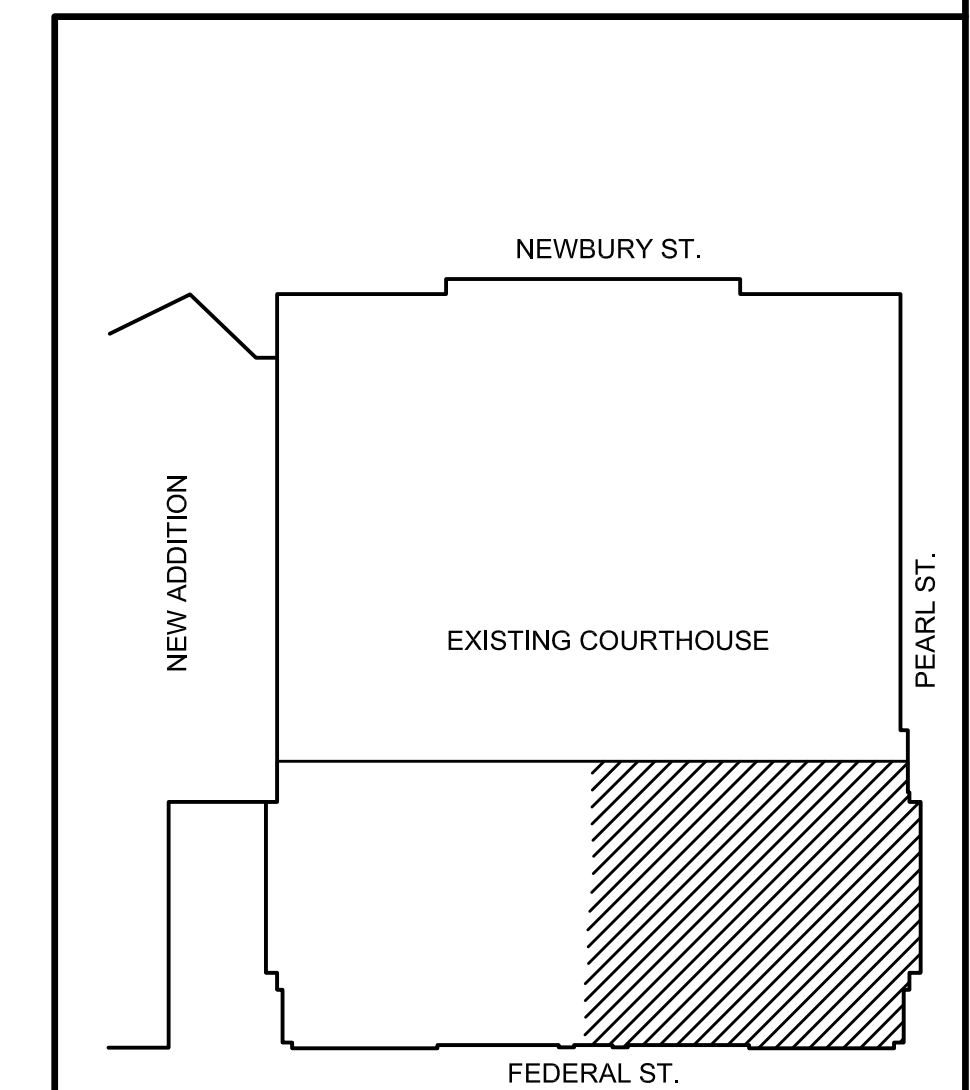
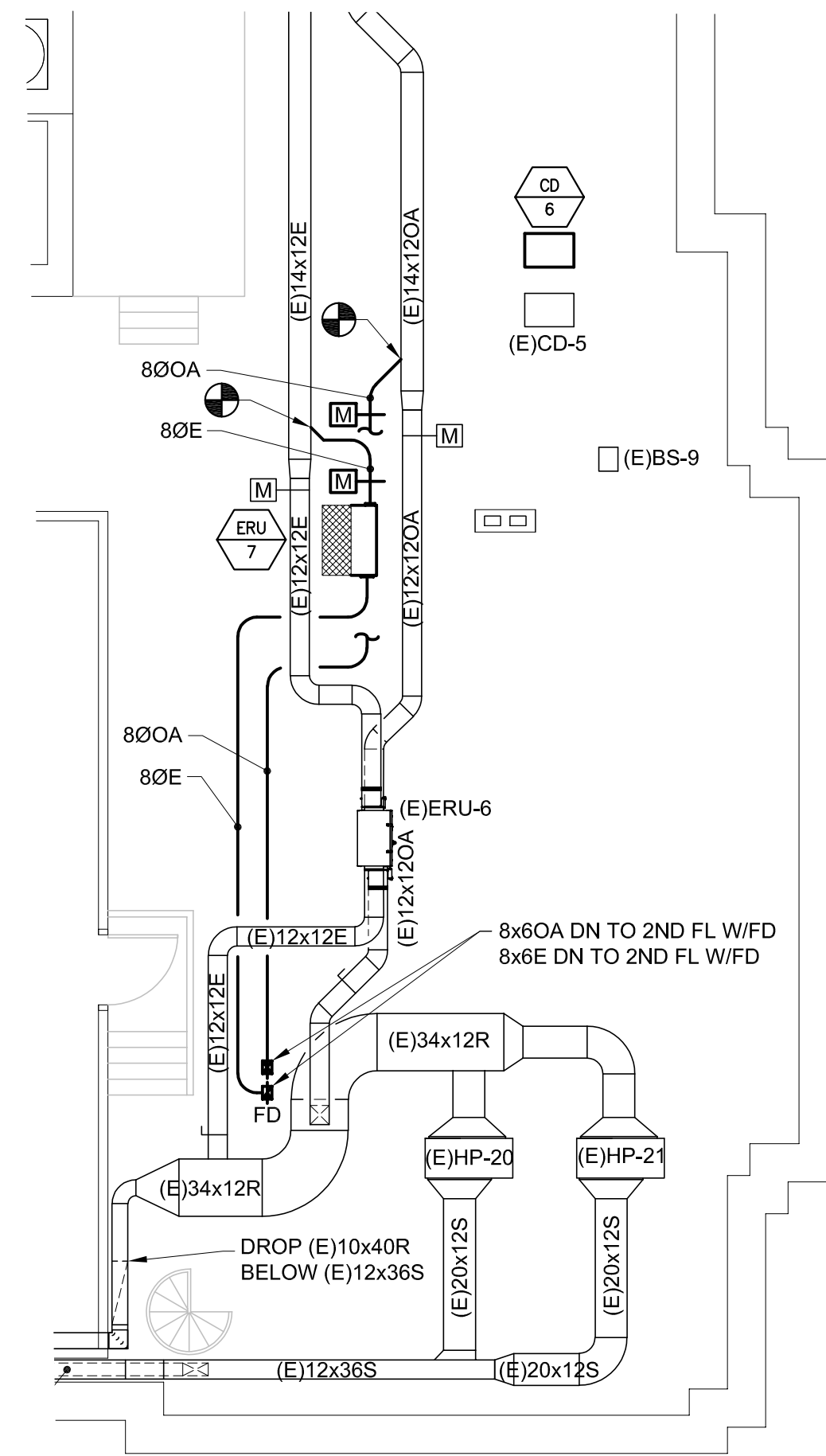
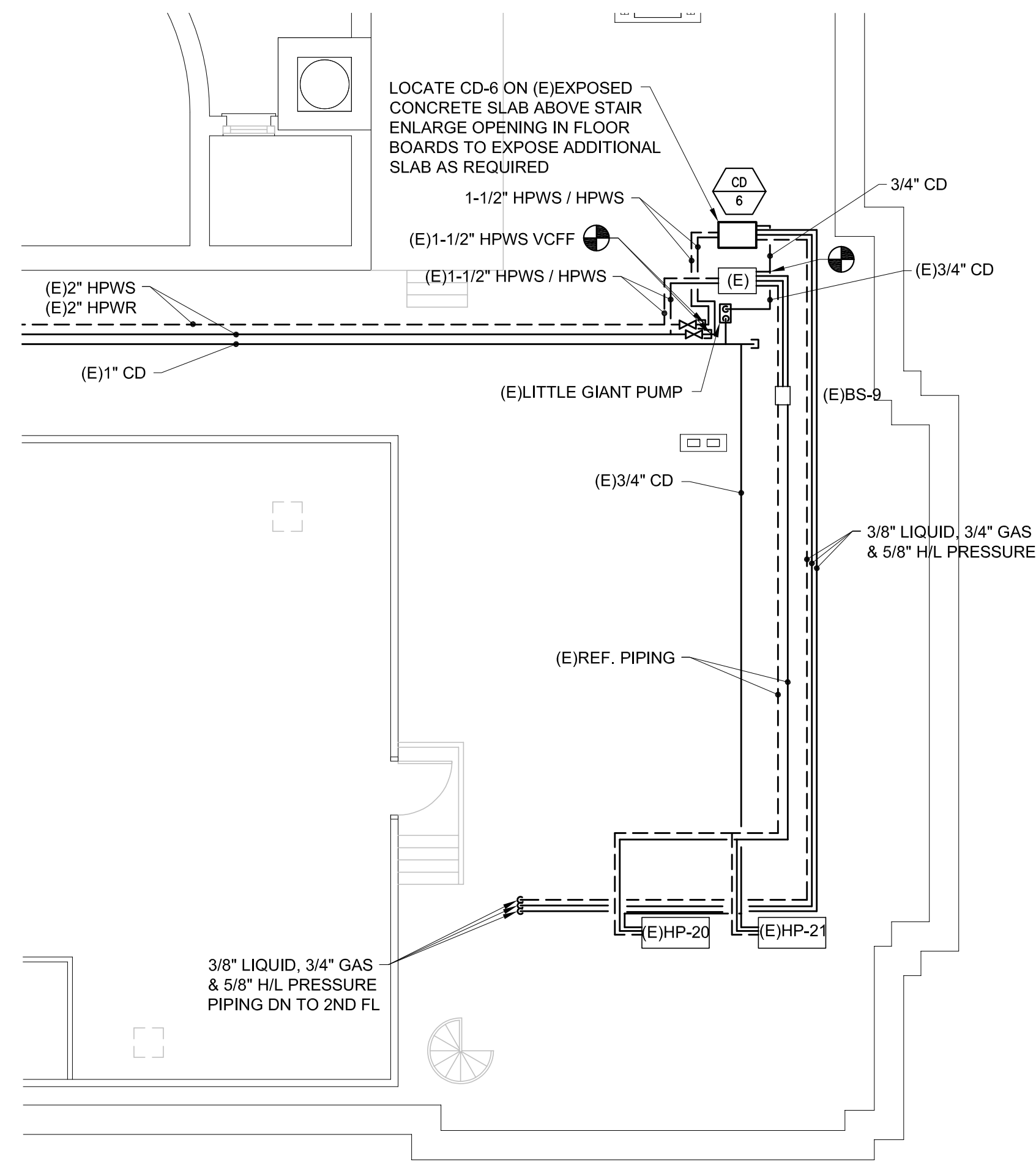
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Drawn By: SCL  
Checked By: ASD  
Project Mgr: ASD  
Project No: 20018  
Cadd File: 20018M.DWG  
Graphic Scale: 0 1'

MECHANICAL SECOND AND THIRD FLOOR PART PLANS

SJC HVAC UPGRADES AT THE CUMBERLAND COUNTY COURTHOUSE  
142 FEDERAL STREET, PORTLAND, MAINE

**MH-100**

N:\Projects\2020\20018 ~ CCH-SJC Suite HVAC Upgrades-Second Floor\1 Design Phase2 DRAWINGS\20018M.dwg Apr 16, 2020 - 10:17am



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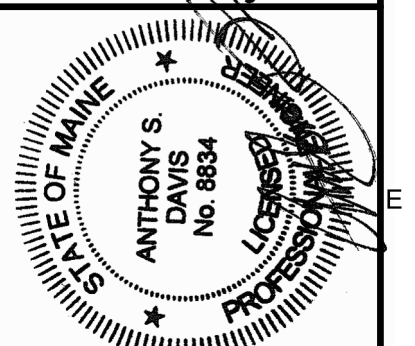
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 Drawn By: SCL  
 Checked By: ASD  
 Project Mgr: ASD  
 Project No: 20018  
 Cad File: 20018M.DWG  
 Graphic Scale: 0 1" = 1'

**MECHANICAL ATTIC PLANS**

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 142 FEDERAL STREET, PORTLAND, MAINE

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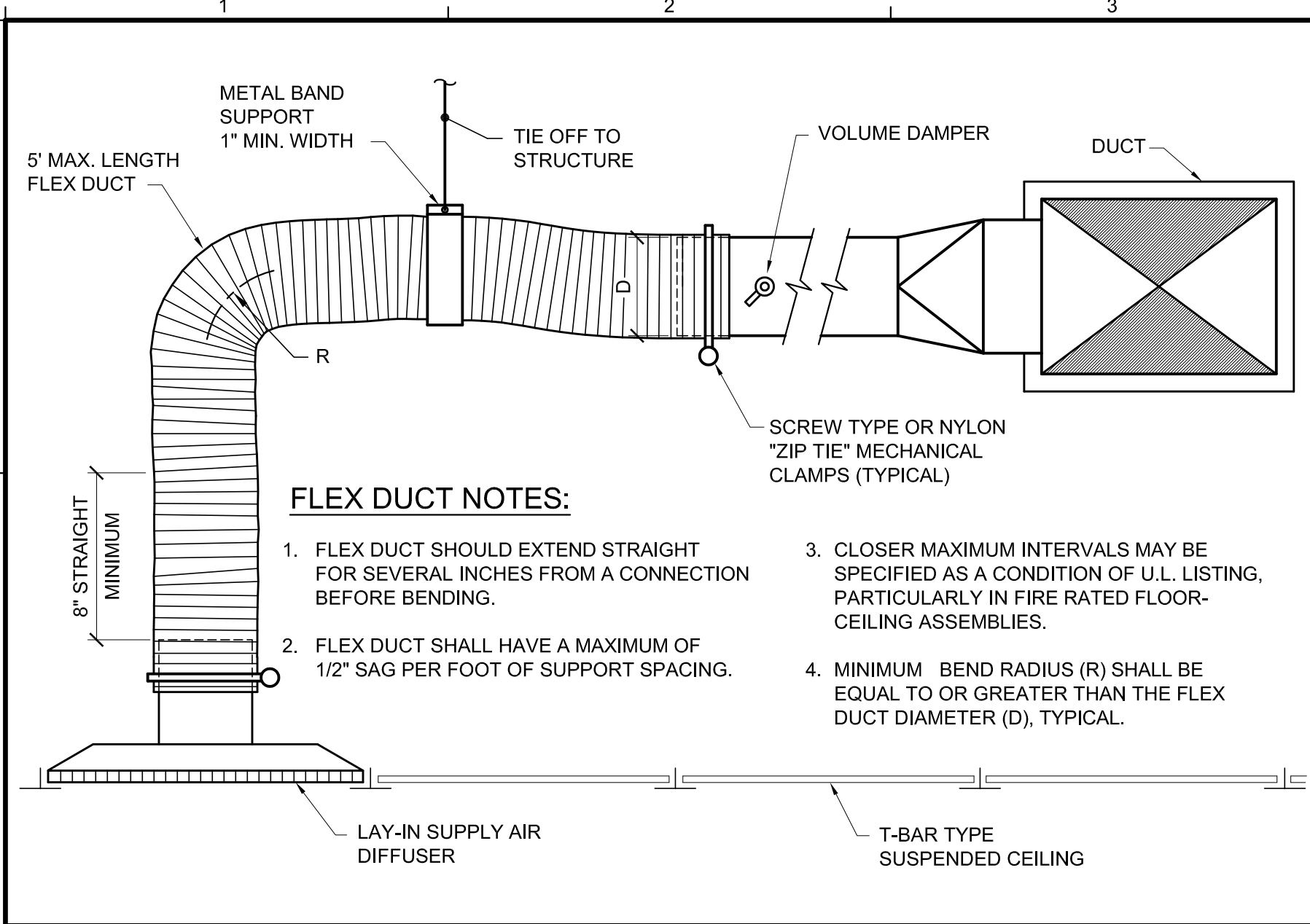
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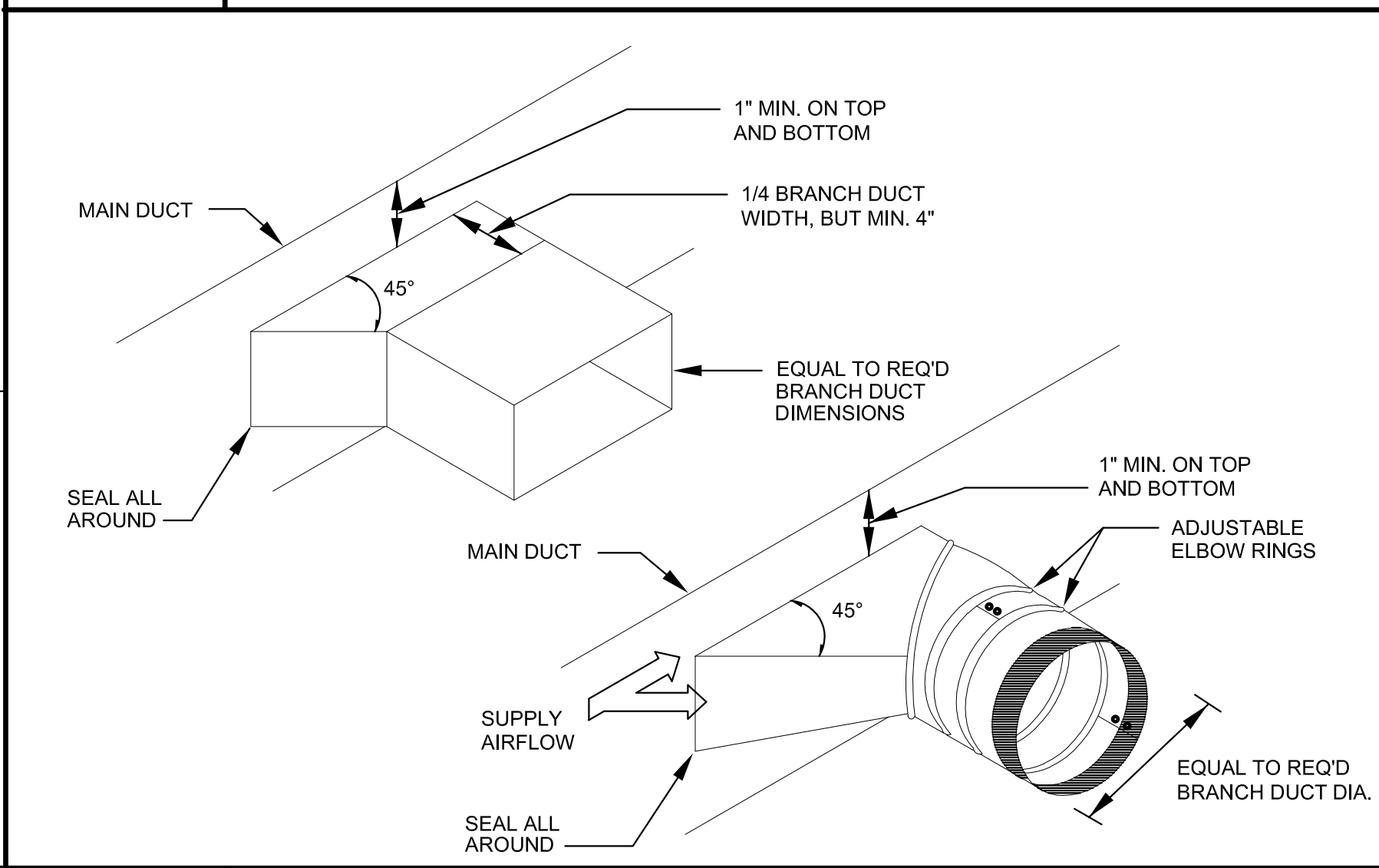
A1	MECHANICAL ATTIC PIPING PLAN	A5	MECHANICAL ATTIC DUCTWORK PLAN	A9	KEY PLAN
1/8" = 1'-0"		1/8" = 1'-0"		NONE	

**MH-102**

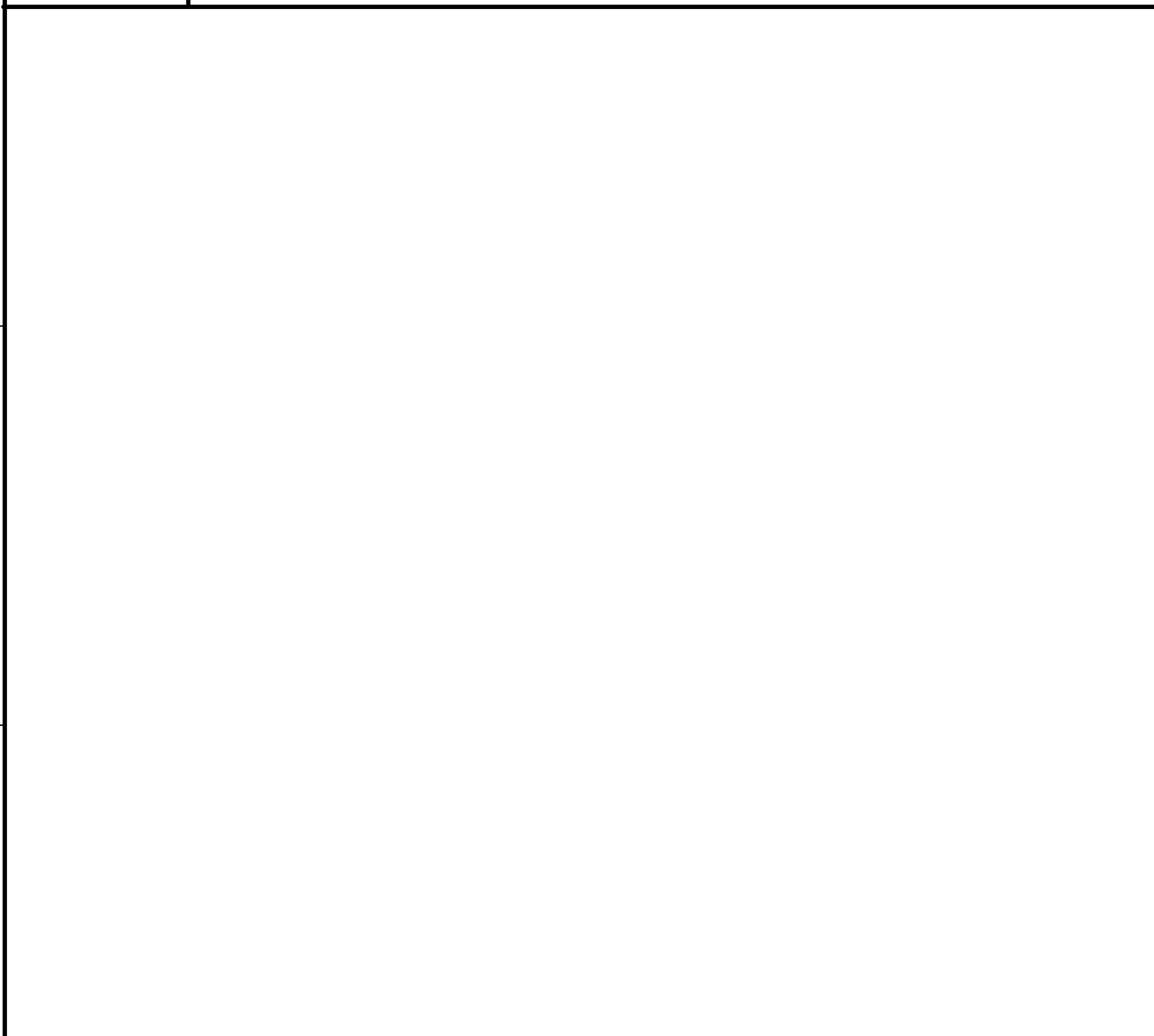
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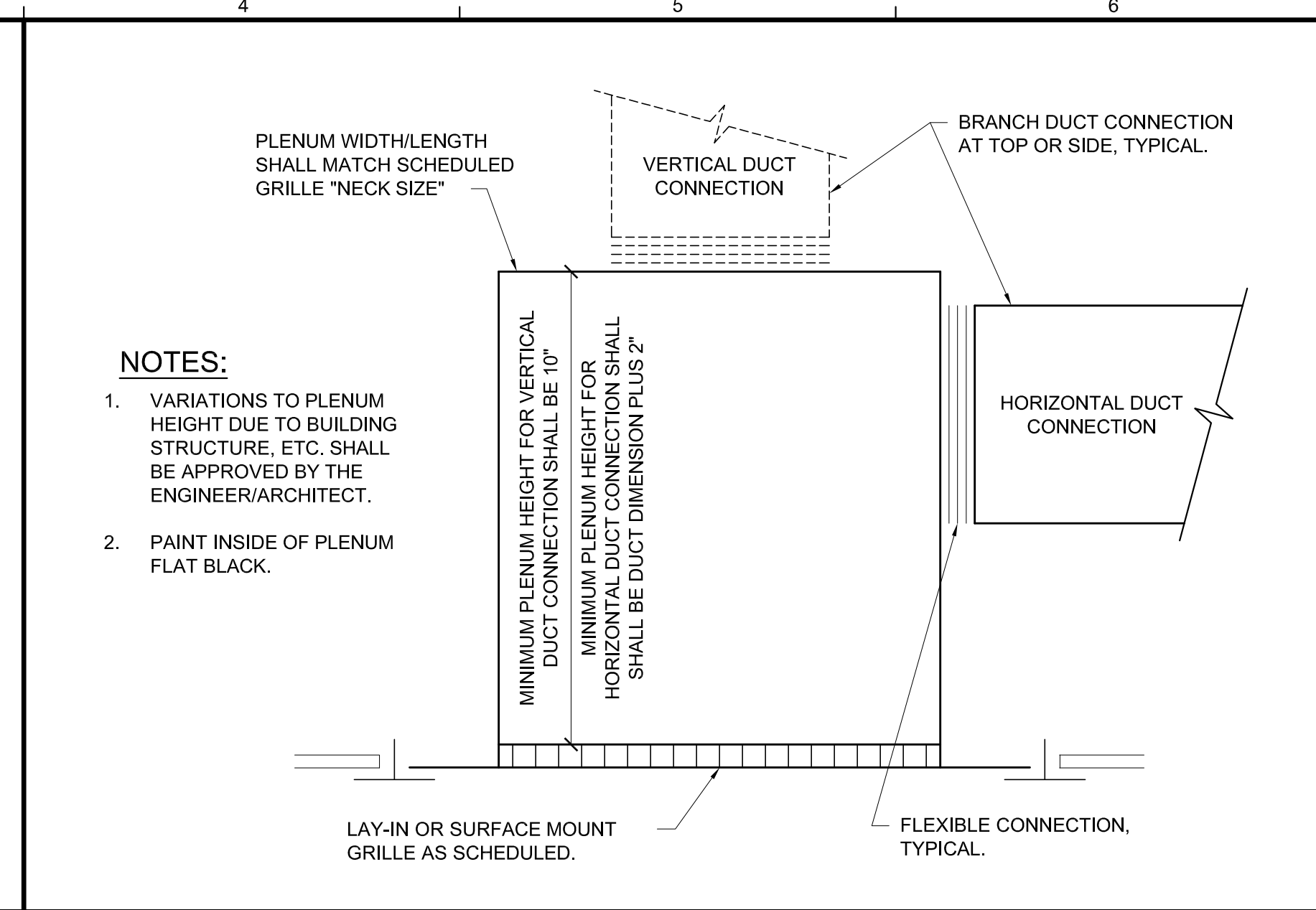
F1 DETAIL ~ SUPPLY AIR BRANCH CONNECTION  
NONE



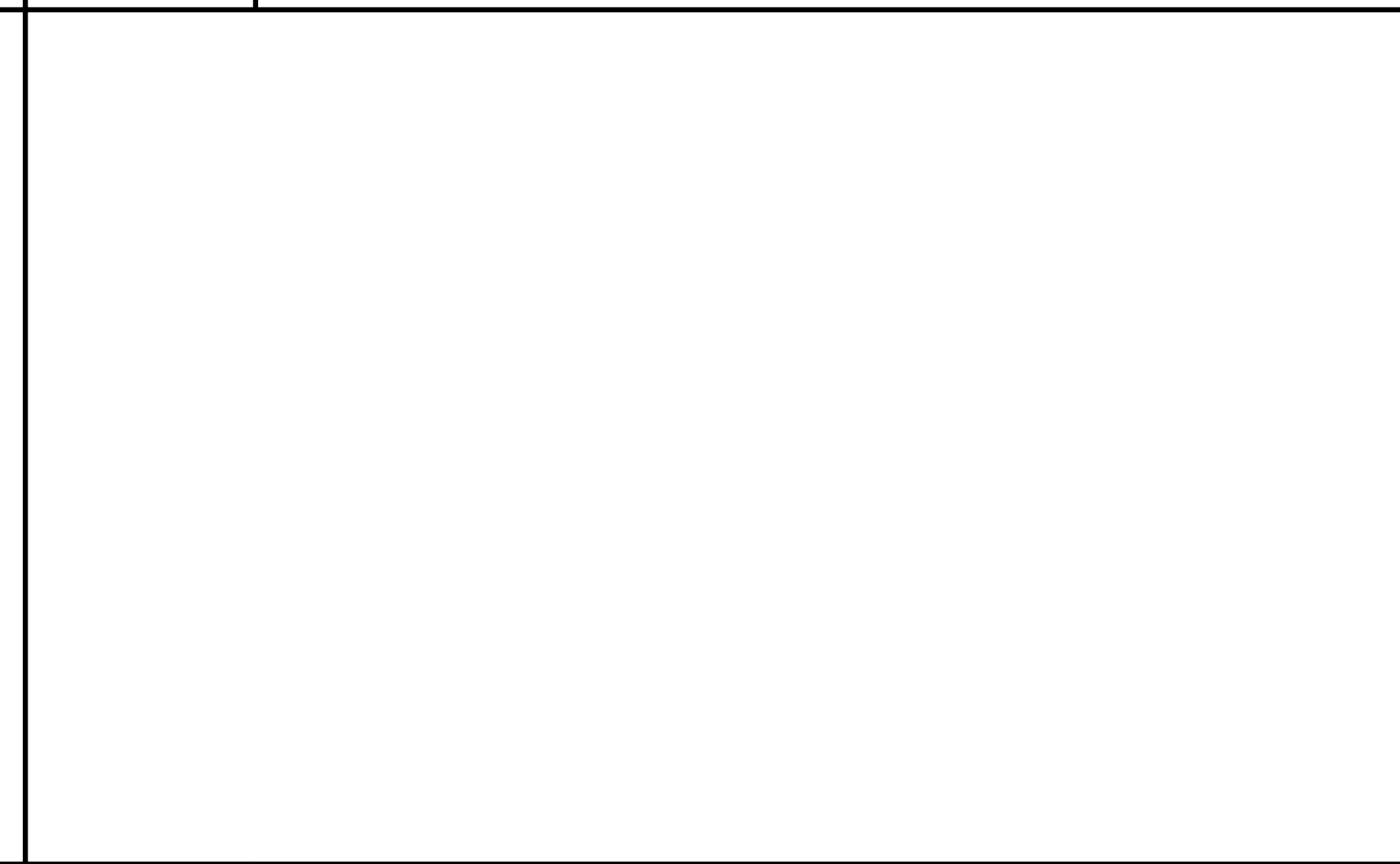
D1 DETAIL ~ ROUND AND SQUARE BRANCH TAKE-OFF FITTING  
NONE



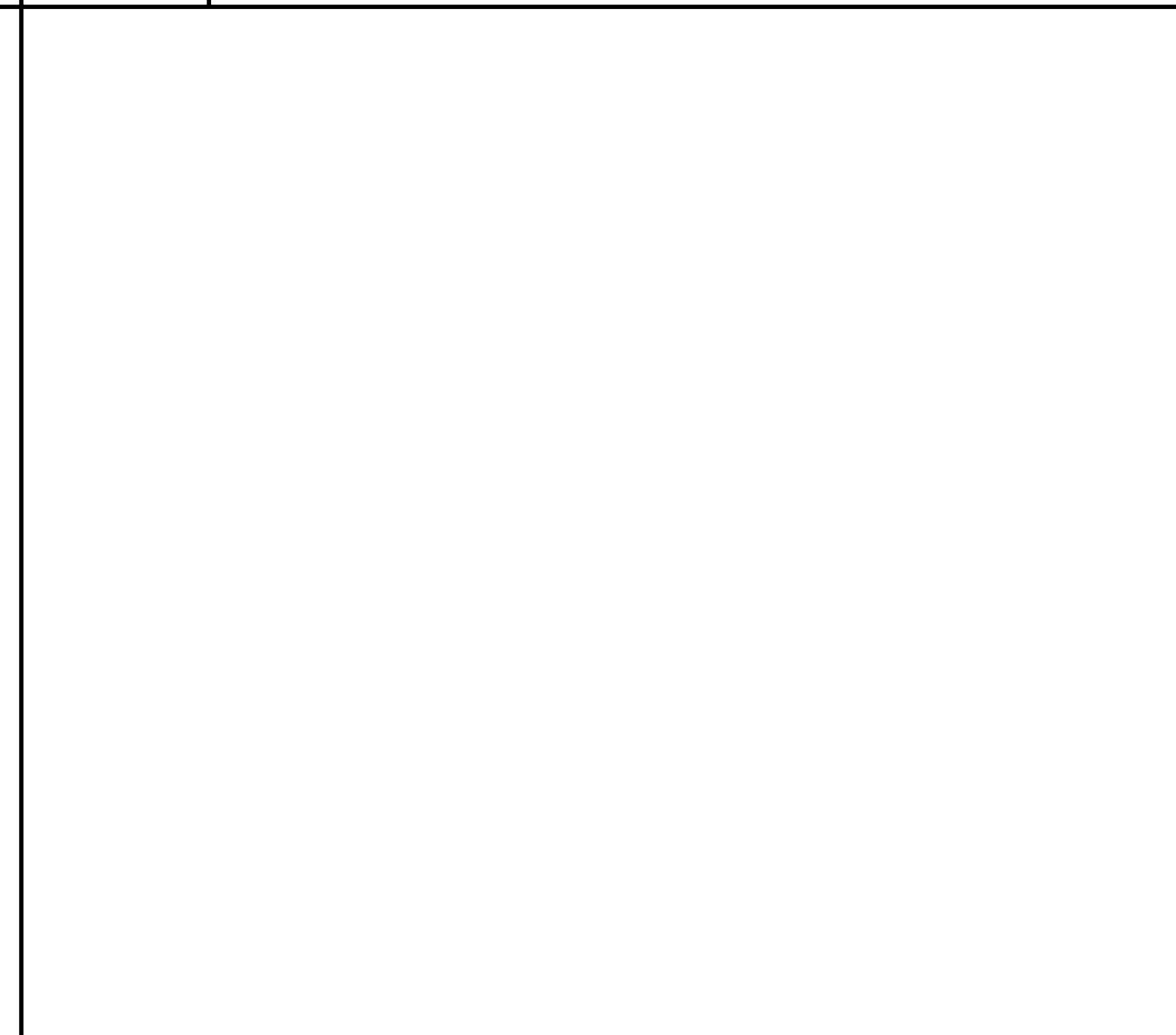
A1 DETAIL ~ WATER COOLED CONDENSING UNIT PIPING  
NONE



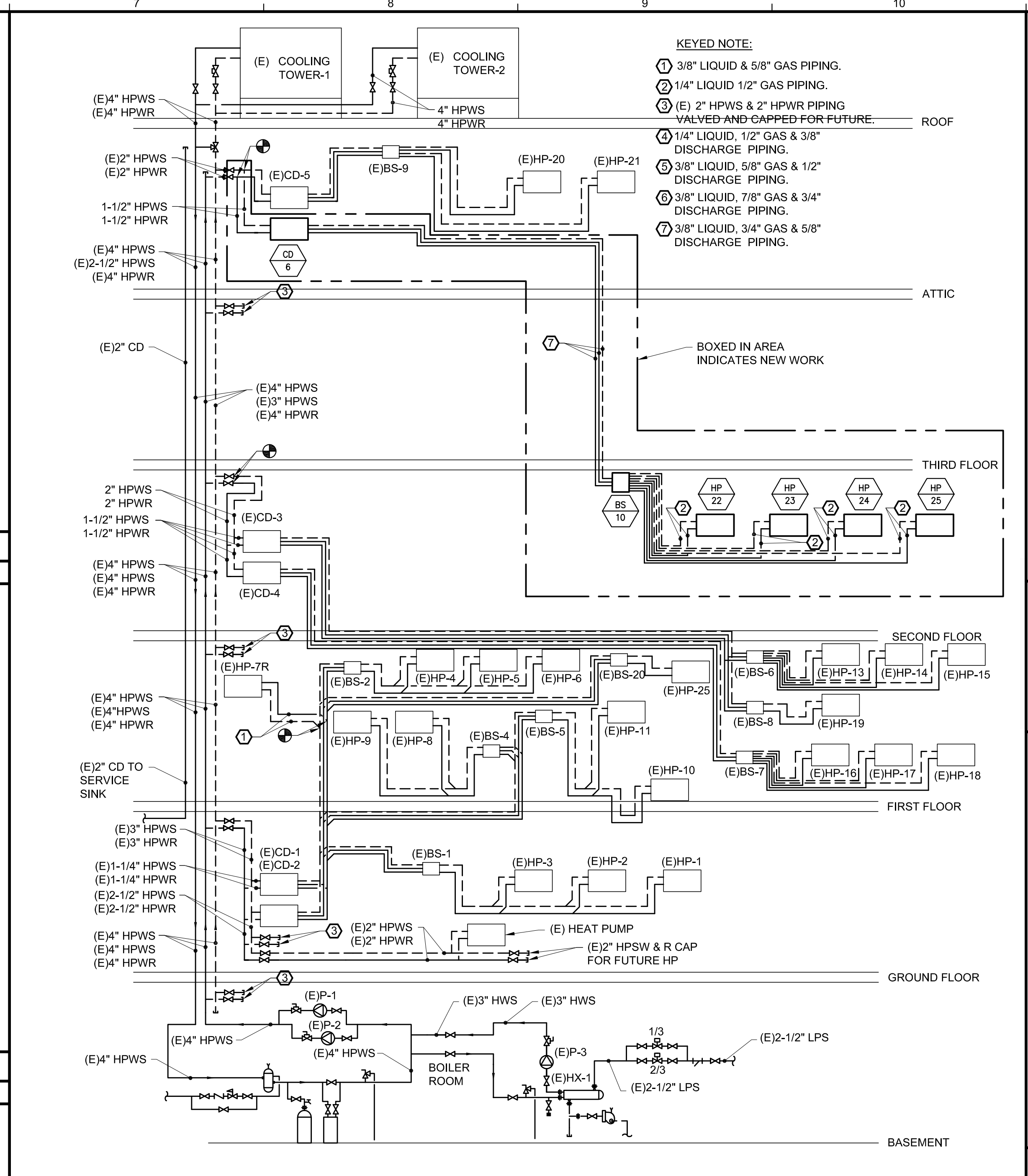
F4 DETAIL ~ RETURN AIR REGISTER BOOT  
NONE



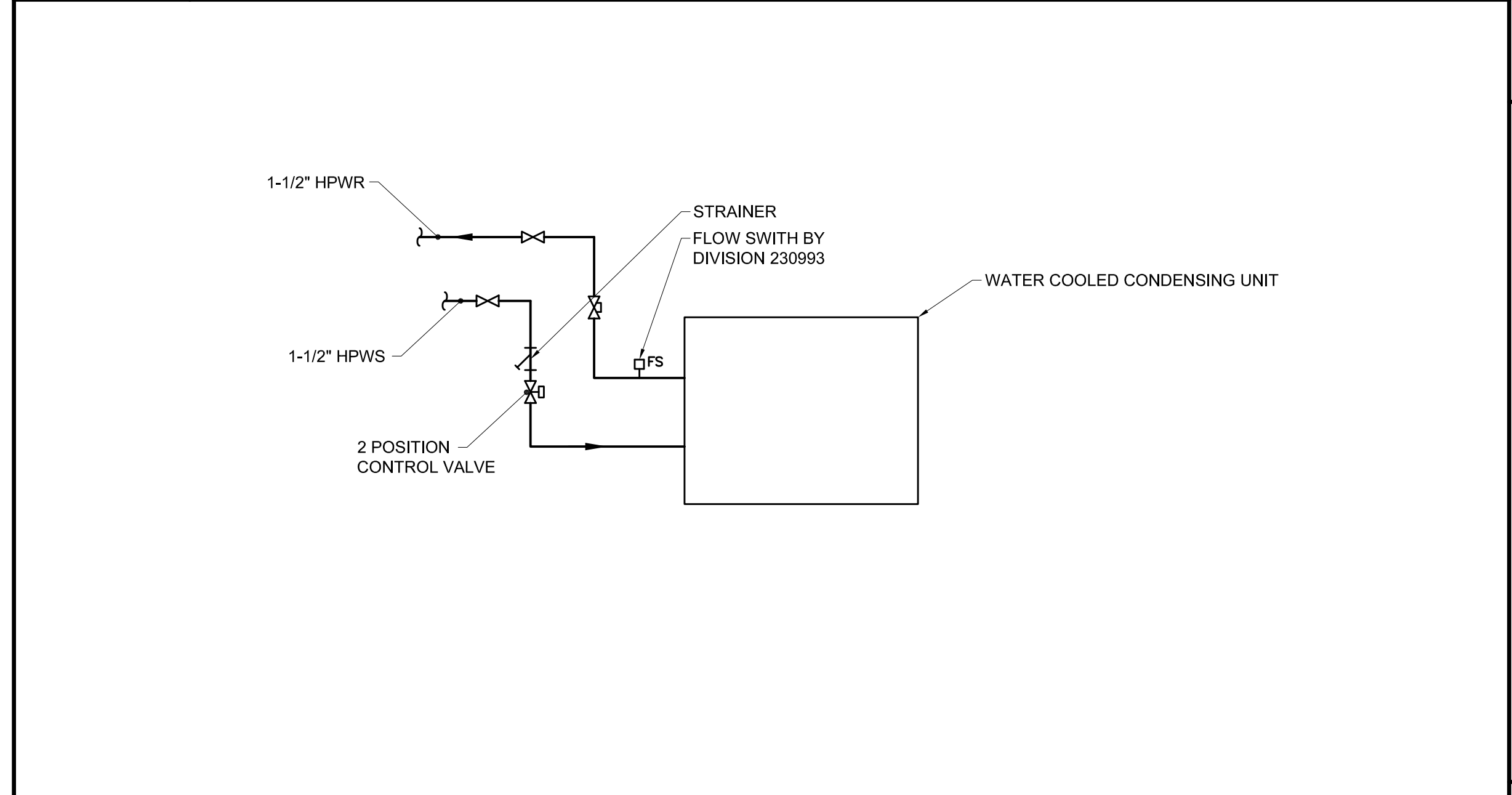
D4 DETAIL ~ ROUND AND SQUARE BRANCH TAKE-OFF FITTING  
NONE



A4 DETAIL ~ WATER COOLED CONDENSING UNIT PIPING  
NONE



C7 PIPING DIAGRAM  
NONE



A7 DETAIL ~ WATER COOLED CONDENSING UNIT PIPING  
NONE

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STATE OF MAINE  
ANTHONY S. DAVIS  
No. 8834  
LICENSED PROFESSIONAL ENGINEER

REVISIONS	NUMBER	DATE	BY	DESCRIPTION

Date: APRIL 16, 2020  
Drawn By: SCL  
Checked By: ASD  
Project Mgr: ASD  
Project No: 20018  
Cadd File: 20018M.DWG  
Graphic Scale: 1" = 0'

**MECHANICAL DETAILS AND NOTES**

SJC HVAC UPGRADES AT  
THE CUMBERLAND COUNTY COURTHOUSE  
142 FEDERAL STREET, PORTLAND, MAINE

**MH-500**

INDOOR UNITS - HEAT PUMP SCHEDULE																	
TAG	DAIKIN HEAT PUMP MODEL NUMBER	TYPE	SERVES	NOMINAL COOLING BTUH	SENSIBLE COOLING BTUH	NOMINAL HEAT	CFM HIGH / LOW	BUCKLEY FILTER BOX	REFRIGERANT			ELECTRICAL			SIZE H X W X D	WEIGHT	
									TYPE	LIQUID PIPE SIZE	GAS PIPE SIZE	COND DRAIN PIPE SIZE	V-PH-Hz	MCA			MOP
HP-22	FXMQ07PBVJU	DUCT MOUNTED	OFFICE 201	7,110	6,042	8,803	3177/230	DFKx-12x20	410A	1/4" ID	1/2" ID	1-1/4" ID	208-1-60	0.60	15	11-13/16" X 21-21/32" X 27-9/16"	55
HP-23	FXMQ07PBVJU	DUCT MOUNTED	OFFICE 202	7,110	6,042	8,803	3177/230	DFKx-12x20	410A	1/4" ID	1/2" ID	1-1/4" ID	208-1-60	0.60	15	11-13/16" X 21-21/32" X 27-9/16"	55
HP-24	FXMQ15PBVJU	DUCT MOUNTED	SJC CONFERENCE ROOM	14,202	11,280	17,095	660/450	DFKx-12x36	410A	1/4" ID	1/2" ID	1-1/4" ID	208-1-60	1.50	15	11-13/16" X 39-3/8" X 27-9/16"	79
HP-25	FXZQ07TAVJU	CEILING CASSETTE	CORRIDOR 1	7,161	5,444	8,872	3077/225	NA	410A	1/4" ID	1/2" ID	25/32" ID	208-1-60	0.30	15	10-3/16" X 22-9/16" X 22-9/16"	35

Cooling based on 80/67 EAT  
Heating based on 70 EAT

NOTES

- POWER TO UNITS BY DIV 26, INTERCONNECTING CONTROL WIRING BY DIV 23. DISCONNECT SWITCH BY DIV 26.
- PROVIDE CONDENSATE PUMPS FOR UNITS UNABLE TO DRAIN BY GRAVITY.
- SEE VRF SYSTEM SCHEMATIC ON SHEET MH-500.

BRANCH SELECTOR UNIT SCHEDULE														
TAG	DAIKIN BS MODEL NUMBER	SERVES	TOTAL CAPACITY BTU	NUMBER OF CONNECTED INDOOR UNITS	REFRIGERANT					ELECTRICAL			SIZE H X W X D	WEIGHT
					INDOOR UNIT		CONDENSER SIDE			V-PH-Hz	MCA	MOP		
					LIQUID PIPE SIZE	GAS PIPE SIZE	LIQUID PIPE SIZE	SUCTION GAS PIPE SIZE	H/L PRESSURE PIPE SIZE					
BS-10	BS4Q54TVJ	HP-22, 23, 24, & 25		4	1/4" ID	1/2" ID	3/8" ID	3/4" ID	5/8" ID	208-1-60	0.4	15.0	8-1/8" X 15-1/4" X 12-13/16"	27

NOTES

- POWER TO UNITS BY DIV 26, INTERCONNECTING CONTROL WIRING BY DIV 23. DISCONNECT SWITCH BY DIV 26.

REGISTERS - GRILLES - DIFFUSERS (RGD) SCHEDULE										
TAG	PRICE MODEL	TYPE	NECK SIZE	FACE SIZE	CFM RANGE	MAX TOTAL P.D. (IN W.C.)	MAX NG LEVEL	BORDER TYPE	BLOW	NOTES
S-1		NOT USED								
S-2		NOT USED								
S-3		NOT USED								
S-4		NOT USED								
S-5		NOT USED								
S-6		NOT USED								
S-7	520D	STEEL DOUBLE DEFL. SUPPLY, W/ DAMPER	10" X 6"	11.75" X 7.75"	181-240	0.10"	23	SURFACE MT.	ADJUSTABLE	
S-8		NOT USED								
S-9	520D	STEEL DOUBLE DEFL. SUPPLY, W/ DAMPER	12" X 10"	13.75" X 11.75"	401-500	0.10"	26	SURFACE MT.	ADJUSTABLE	
E-1		NOT USED								
E-2	530	STEEL RETURN GRILLE, 3/4" SPACING, 45 DEG VANES	12" X 12"	12" X 12"	171-440	0.05"	27	SURFACE MT.		

NOTE 1. PROVIDE W/ FACTORY PRIME COAT FINISH TO FOR FIELD PAINTING - REFER TO ARCHITECTURAL DRAWING.

WATER COOLED CONDENSING UNIT SCHEDULE	
TAG	CD-6
LOCATION	ATTIC
SERVICE	BS-10
MFR-MODEL	DAIKIN
MODEL	RWEYQ72PCTJ-HR
NOMINAL TONS	6
COOLING CAPACITY BTU	68,140
HEATING CAPACITY BTU	82,246
V-PH-HZ	208-230/3/60
COOLING INPUT POWER KW	3.9
HEATING INPUT POWER KW	4.4
MCA	22.4
MOP	30
REFRIGERANT	R-410A
COOLING MODE EWT	86
COOLING MODE LWT	92.5
HEATING MODE EWT	68
HEATING MODE LWT	62.6
GPM	25.4
WATER INLET PIPE	2"
WATER OUTLET PIPE	2"
LIQUID PIPE	3/8"
GAS PIPE	3/4"
H/L PRESSURE PIPE	5/8"
OPERATING WEIGHT, lbs.	331
LENGTH	30-3/4"
WIDTH	39-3/8"
HEIGHT	21-11/16"

NOTES:

- DISCONNECT SWITCH FOR EACH UNIT FURNISHED AND INSTALLED BY DIVISION 26.

ENERGY RECOVERY UNIT SCHEDULE	
GENERAL	TAG ERU-7
	SERVES HP-22, 23, 24, & 25
	TYPE FIXED-PLATE
	MFR RenewAire
	MODEL EV450IN
FILTER SECTION	FILTERS 2" MERV-8
OUTSIDE AIR FAN	TYPE FC
	AIRFLOW, cfm 150
	ESP, in. wc. 0.75"
	HP 0.6
EXHAUST AIR FAN	TYPE FC
	AIRFLOW, cfm 150
	ESP, in. wc. 0.75"
	HP SHARED MOTOR
OVERALL DIMENSIONS	LENGTH 44"
	WIDTH 37"
	HEIGHT 16"
	OPERATING WEIGHT, lbs. 160
HEAT RECOVERY CORE	SUMMER OA DB/WB 87 / 72
	WINTER OA DB 0
	SUMMER SA DB/WB 78.5 / 72.9
	WINTER SA DB 52.8
	TEMP EFF. 81.0%
	SUMMER EFF. 66.0%
	WINTER EFF. 76.0%
	FROST CONTROL NONE REQUIRED
ELECTRICAL DATA	V-PH-HZ 208/1/60
	DISC SWITCH DIV 26
	STARTER DIV 26
	UNIT FLA 4.9
	S & R SMOKE DETECTORS NO
NOTES	1

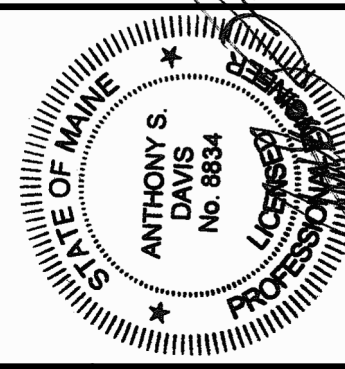
Notes:

- Provide ECM motor as specified.

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REVISIONS	
NUMBER	DESCRIPTION

Date:	APRIL 16, 2020
Drawn By:	SCL
Checked By:	ASD
Project Mgr.:	ASD
Project No.:	20018
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Graphic Scale:	1" = 0'

**MECHANICAL SCHEDULES AND NOTES**

SJC HVAC UPGRADES UPGRADES AT  
THE CUMBERLAND COUNTY COURTHOUSE  
142 FEDERAL STREET, PORTLAND, MAINE

**MH-600**

A1 DETAIL ~ LOUVER

NONE



A	AMPERE	MLO	MAIN LUG ONLY
AC	ALTERNATING CURRENT	MT	MOUNT
AFF	ABOVE FINISHED FLOOR	MTS	MANUAL TRANSFER SWITCH
AFG	ABOVE FINISHED GRADE	MCP	MOTOR CONTROL PANEL
AHU	AIR HANDLING UNIT	MH	METAL HALIDE
AIC	AMPERES INTERRUPTING CAPACITY	MDP	MAIN DISTRIBUTION PANEL
ATS	AUTOMATIC TRANSFER SWITCH	MIN	MINIMUM
AWG	AMERICAN WIRE GAUGE	N	NEUTRAL
BAS	BUILDING AUTOMATION SYSTEM	NC	NORMALLY CLOSED
BKBD	BACKBOARD	NEC	NATIONAL ELECTRICAL CODE
C	CONDUIT	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CAT	CATALOG, CATEGORY	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CATV	CABLE TV	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	NF	NON-FUSED
CCTV	CLOSED CIRCUIT TELEVISION	NO	NORMALLY OPEN
CM	CIRCULAR MILS	NO, #	NUMBER
COMM	COMMUNICATIONS	NTS	NOT TO SCALE
CU	MECH CONDENSING UNIT	OC	ON CENTER
CU	COPPER	OCC	OCCUPANCY
CUH	CABINET UNIT HEATER	OH	OVERHEAD
DC	DIRECT CURRENT	P	POLE
DDC	DIGITAL DIRECT CONTROL	PA	PUBLIC ADDRESS
DN	DOWN	PB	PULLBOX
DW	DISHWASHER	PH	PHASE
DWG	DRAWING	PIR	PASSIVE INFRARED
EF	EXHAUST FAN	PNL	PANELBOARD
ELEV	ELEVATOR	P/O	PART OF
EMT	ELECTRICAL METALLIC TUBING	PV	PHOTOVOLTAIC
EP	EXPLOSION PROOF	PVC	POLY-VINYL CHLORIDE
ERU	ENERGY RECOVERY UNIT	REC	RECEPTACLE
EWC	ELECTRIC WATER COOLER	REF	REFRIGERATOR
FACP	FIRE ALARM CONTROL PANEL	RF	RETURN FAN
FB	FLOOR BOX	RGS	RIGID GALVANIZED STEEL
FLA	FULL LOAD AMPS	RM	ROOM
FWE	FURNISHED WITH EQUIPMENT	RMC	RIGID METAL CONDUIT
G, GND	GROUND	RTU	ROOFTOP UNIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	REF	REFRIGERATOR
GFP	GROUND FAULT PROTECTION	SF	SUPPLY FAN
HID	HIGH INTENSITY DISCHARGE	ST	SHUNT TRIP
HOA	HAND-OFF-AUTO SELECTOR SWITCH	SPDT	SINGLE POLE, DOUBLE THROW
HP	HORSEPOWER	SQ	SQUARE
HVAC	HEATING, VENTILATION AND COOLING UNIT	TEL	TELEPHONE
IDS	INTRUSION DETECTION SYSTEM	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
IG	ISOLATED GROUND	TYP	TYPICAL
IMC	INTERMEDIATE METAL CONDUIT	UF	UNDER FLOOR
IR	INFRARED	UG	UNDERGROUND
K	KILO	UH	UNIT HEATER
KCMIL	KILO CIRCULAR MILS	UL	UNDERWRITER'S LABORATORY
KW	KILOWATT	UNO	UNLESS NOTED OTHERWISE
KVA	KILO VOLT-AMPS	UPS	UNINTERRUPTIBLE POWER SUPPLY
LAN	LOCAL AREA NETWORK	V	VOLTS
LC	LIGHTING CONTACTOR	VFD	VARIABLE FREQUENCY DRIVE
LF	LINEAR FEET	W	WATT
LC	LOADCENTER	WP	WEATHERPROOF
LCP	LIGHTING CONTROL PANEL	WG	WIREGUARD
LED	LIGHT EMITTING DIODE	XFMR	TRANSFORMER
LTG	LIGHTING	(E)	EXISTING ITEM TO REMAIN
LTS	LIGHTS	(R)	REMOVE ITEM AND DISPOSE OF PROPERLY
MAX	MAXIMUM	(ER)	RELOCATED ITEM AT NEW LOCATION
MCB	MAIN CIRCUIT BREAKER	(RL)	REMOVE AND RELOCATE
MECH	MECHANICAL		
MH	MOUNTING HEIGHT		
MC	MICROPHONE		
MW	MICROWAVE		

**TECHNOLOGY GENERAL NOTES**

- DIVISION 26 SHALL PROVIDE BOXES AND CONDUITS WITH PULL STRINGS AS INDICATED. CABLING AND TERMINATIONS SHALL BE BY OWNER.
- FOR EACH TECHNOLOGY OUTLET, PROVIDE A 2-GANG BOX WITH 1-GANG ADAPTER. PROVIDE A 1" CONDUIT FROM EACH OUTLET BOX TO 6" ABOVE THE NEAREST ACCESSIBLE CEILING THAT IS CONTIGUOUS TO A J-HOOK OR CABLE TRAY PATHWAY.

F3	TECHNOLOGY
	FIRE ALARM CONTROL PANEL, MOUNT WITH TOP OF PANEL NOT MORE THAN 72" AFF
	FIRE ALARM ANNUNCIATOR, MOUNT WITH TOP OF PANEL NOT MORE THAN 72" AFF, WIRED TO FACP
	SMOKE DETECTOR, WIRED TO FACP
	SMOKE DETECTOR, "E" INDICATES CONNECTION FOR ELEVATOR RECALL, WIRED TO FACP
	SINGLE STATION SMOKE DETECTOR WITH AUDIBLE INDICATING APPLIANCE, WALL MOUNTED
	SINGLE STATION SMOKE DETECTOR WITH AUDIBLE/VISUAL INDICATING APPLIANCE, CEILING MOUNTED
	SINGLE/MULTI-STATION SMOKE/CARBON MONOXIDE DETECTOR WITH AUDIBLE/VISIBLE INDICATING APPLIANCE, CEILING MOUNTED
	SINGLE/MULTI-STATION SMOKE/CARBON MONOXIDE DETECTOR WITH AUDIBLE INDICATING APPLIANCE, WALL MOUNTED
	HEAT DETECTOR, WIRED TO FACP
	HEAT DETECTOR, "E" INDICATES CONNECTION FOR ELEVATOR RECALL, WIRED TO FACP
	DUCT SMOKE DETECTOR, WIRED TO FACP
	GAS DETECTOR, WIRED TO FACP
	GAS VALVE, WIRED TO FACP
	FLAME DETECTOR, WIRED TO FACP
	REMOTE TEST/INDICATOR FOR DUCT SMOKES, MOUNT ON CEILING BENEATH UNIT, OR WALL MOUNT WHERE INDICATED ON PLANS
	MANUAL PULL STATION, MOUNT 48" AFF
	HORN/STROBE, WALL MOUNTED CANDELA AS NOTED ON PLANS, WIRED TO FACP
	HORN/STROBE, CEILING MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
	STROBE ONLY INDICATING APPLIANCE, WALL MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
	STROBE ONLY INDICATING APPLIANCE, CEILING MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
	STROBE ONLY INDICATING APPLIANCE, WALL MOUNTED, CANDELA AS NOTED ON PLANS, 120V, CONNECT TO OPERATE UPON ACTIVATION OF ROOM SMOKE DETECTOR
	STROBE ONLY INDICATING APPLIANCE, WALL MOUNTED, CANDELA AS NOTED ON PLANS, 120V, CONNECT TO OPERATE UPON ACTIVATION OF ROOM SMOKE DETECTOR
	MINI HORN, WALL MOUNTED, WIRED TO FACP
	MINI HORN, CEILING MOUNTED, WIRED TO FACP
	HORN/STROBE WITH PULL STATION DIRECTLY BELOW
	MAGNETIC DOOR HOLD OPEN DEVICE, WIRED TO FACP
	TRANSFORMER
	SPRINKLER SYSTEM WATER FLOW SWITCH, PROVIDED UNDER DIVISION 23, WIRED TO FACP UNDER DIVISION 26
	SPRINKLER SYSTEM TAMPER SWITCH, PROVIDED UNDER DIVISION 23, WIRED TO FACP UNDER DIVISION 26
	SPRINKLER SYSTEM CHECK VALVE PRESSURE SWITCH, FURNISHED AND INSTALLED UNDER DIVISION 23, WIRED TO FACP UNDER DIVISION 26
	SPRINKLER SYSTEM PRE-ACTION VALVE, FURNISHED AND INSTALLED UNDER DIVISION 21, WIRED TO FACP UNDER DIVISION 26
	KNOX BOX, MOUNT 60" AFF
	SMOKE DAMPER, WIRED TO FACP
	FIRE AND SMOKE DAMPER, WIRED TO FACP HORN/STROBE, CANDELA AS NOTED ON PLANS, WIRED TO FACP
	SPEAKER/STROBE, WALL MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
	SPEAKER/STROBE, CEILING MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
	MASTER BOX

- BRANCH CIRCUIT WIRING NOT SHOWN. WIRE AND CONNECT ELECTRICAL ITEMS TO CIRCUITS INDICATED.
- DISCONNECT, REMOVE, RELOCATE, AND RECONNECT ELECTRICAL CONDUIT, WIRING, DEVICES, BOXES, FIXTURES, EQUIPMENT, ETC. AS INDICATED AND AS REQUIRED TO FACILITATE WORK OF DIVISION 26 AND OTHER DIVISIONS. WHERE ELECTRICAL ITEMS ARE REMOVED, REMOVE CONDUIT AND WIRING BACK TO SOURCE.
- DO NOT SCALE THE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- THE LOCATION OF EQUIPMENT, OUTLETS, ETC. AS GIVEN ON THE DRAWINGS, IS APPROXIMATE. IT SHALL BE UNDERSTOOD THAT THESE LOCATIONS ARE SUBJECT TO MODIFICATION AS MAY BE FOUND NECESSARY OR DESIRABLE AT THE TIME OF INSTALLATION IN ORDER TO MEET PROJECT REQUIREMENTS. SUCH CHANGES SHALL BE MADE WITHOUT EXTRA CHARGE.
- ALL ELECTRICAL DEVICES, WHEN INSTALLED, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. COVER PLATES SHALL BE INSTALLED AFTER FINISH MATERIALS HAVE BEEN APPLIED.
- COORDINATE ALL WORK WITH OTHER DIVISIONS. VERIFY EXACT POWER REQUIREMENTS OF MECHANICAL EQUIPMENT WITH DIVISION 23. POWER WIRING FOR EQUIPMENT & CONTROL IS TO BE PERFORMED BY DIVISION 26. CONTROL WIRING BY DIVISION 23.

F5	GENERAL NOTES
	<b>SINGLE RECEPTACLES</b>
	20A, 125V, 2P, 3W, NEMA 5-20R
	20A, 125V, 2P, 3W, NEMA L5-20R (TWISTLOCK)
	30A DRYER RECEPTACLE ~ 125/250V, 3P, 4W, GROUNDING, NEMA 14-30R, (3)#10+(1)#10G TO 30A, 2P CIRCUIT BREAKER
	30A, 250V, 2P, 3W, NEMA 6-30R
	50A RANGE RECEPTACLE ~ 125/250V, 3P, 4W, GROUNDING, NEMA 14-50R, (3)#6+(1)#10 TO 50A, 2P CIRCUIT BREAKER
	20A, 250V, 2P, 3W, NEMA 6-20R
	<b>NOTE:</b> PROVIDE MATCHING CORD AND PLUG FOR SINGLE RECEPTACLES
	<b>FLOOR AND CEILING DEVICES</b>
	DUPEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
	DOUBLE DUPEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
	DUPEX RECEPTACLE, PEDESTAL MOUNTED
	SINGLE RECEPTACLE, PEDESTAL MOUNTED
	DUPEX RECEPTACLE, FLUSH MOUNTED IN CEILING
	DOUBLE DUPEX RECEPTACLE, FLUSH MOUNTED IN CEILING
	DUPEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
	DOUBLE DUPEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
	OVERHEAD RECEPTACLE DROP, DUPEX
	OVERHEAD RECEPTACLE DROP, DOUBLE DUPEX
	OVERHEAD RECEPTACLE DROP, GFCI
	4" POKE-THRU DEVICE, DUAL SERVICE FURNITURE FEED, BASIS OF DESIGN: WIREMOLD AFFATC
	6" POKE-THRU DEVICE, WITH (2) DUPEX RECEPTACLES AND TEL/DATA AS INDICATED ON PLANS. BASIS OF DESIGN: LEGRAND 6AT SERIES.
	MULTI-SERVICE FLUSH FLOOR BOX - WIREMOLD EFB45 SERIES OR APPROVED EQUAL. COVER SHALL BE FLUSH STYLE WITH FLOOR INSERT. COVER FINISH COLOR SHALL BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD FINISHES.
	<b>RECEPTACLES</b>
	DUPEX RECEPTACLE ~ 20A, 125V, 2P, 3W, NEMA 5-20R
	DOUBLE DUPEX RECEPTACLE
	DUPEX RECEPTACLE, HATCH INDICATES AFCI PROTECTION AND TAMPERPROOF
	TAMPERPROOF DUPEX RECEPTACLE
	GFCI DUPEX RECEPTACLE, MOUNT 44" AFF UNO
	GFCI DOUBLE DUPEX RECEPTACLE, MOUNT 44" AFF UNO
	GFCI RECEPTACLE FOR ELECTRIC WATER COOLER - COORDINATE LOCATION WITH DIVISION 22.
	GFCI RECEPTACLE WITH WEATHERPROOF COVER
	GFCI RECEPTACLE IN WP ENCLOSURE ON ROOF
	MULTI-OUTLET STRIP, PROVIDE OUTLETS 24" OC UNO, MOUNT 48" AFF UNO
	SURFACE RACEWAY WITH DIVIDER, MOUNT 44" AFF UNO. PROVIDE NEMA 5-20 RECEPTACLES AND TECHNOLOGY OUTLETS AS SHOWN ON PLAN
	<b>NOTES:</b>
	1. MOUNT RECEPTACLES WITH CENTERLINE 18" AFF UNO
	2. MOUNT EXTERIOR RECEPTACLES WITH CENTERLINE 24" AFG UNO

<b>NOTE</b>	
SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT NECESSARILY INDICATE THEIR INCORPORATION INTO THE DESIGN	
	PANELBOARD - SURFACE MOUNTED PANELBOARD - FLUSH MOUNTED
	FUSED DISCONNECT SWITCH NON-FUSED DISCONNECT SWITCH
	MOTOR STARTER - NUMBER INDICATES NEMA SIZE COMBINATION MOTOR STARTER/FUSED DISCONNECT MOTOR OR FAN
	METER AND CABINET
	JUNCTION BOX - CEILING MOUNTED JUNCTION BOX - WALL MOUNTED JUNCTION BOX - FLUSH FLOOR MOUNTED JUNCTION BOX - PEDESTAL MOUNTED
	TRANSFORMER - NUMBER INDICATES DESIGNATION SEE TRANSFORMER SCHEDULE
	VARIABLE FREQUENCY DRIVE
	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	EMERGENCY SHUTOFF SWITCH - WALL MOUNTED 48" TO CENTERLINE - PROVIDE TAMPER-PROOF COVER
	SHUT-OFF SWITCH
	CONDUIT TURNING UP CONDUIT TURNING DOWN
	WIRING UNDERGROUND OR UNDERSLAB HOMERUN - (2)#12+(1)#12G UNO (EXCEPT LIGHTING CIRCUITS: (1)#12+(1)#10N+(1)#12G UNO) SINGLE-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT 3-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
	FLEXIBLE CONNECTION
	GROUNDING SYSTEM
	POWER POLE
	PUSHBUTTON
	DOORBELL CHIME
	SYSTEMS FURNITURE WHIP, DUAL SERVICE, WALL MOUNTED
	MOTORIZED DOOR OPERATOR AND PUSH PADDLE - FURNISHED BY DIV 08, WIRED BY DIV 26
	ENCLOSED CIRCUIT BREAKER
	AUTOMATIC TRANSFER SWITCH
	HAND DRYER, COORDINATE HEIGHT WITH ARCHITECTURAL PLANS
	SYSTEMS FURNITURE FEED

**NOTE**  
SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT NECESSARILY INDICATE THEIR INCORPORATION INTO THE DESIGN

N:\Projects\2020\20018 - CCH-SJC Suite HVAC Upgrade-Second Floor\1 - Design Phase\2 DRAWINGS\2001BE.dwg Apr 16, 2020 - 6:24am

**REVISIONS**

NO.	DATE	BY	DESCRIPTION

**ELECTRICAL LEGENDS, ABBREVIATIONS, NOTES**

SJC HVAC UPGRADES UPGRADES AT THE CUMBERLAND COUNTY COURTHOUSE  
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**E-000**

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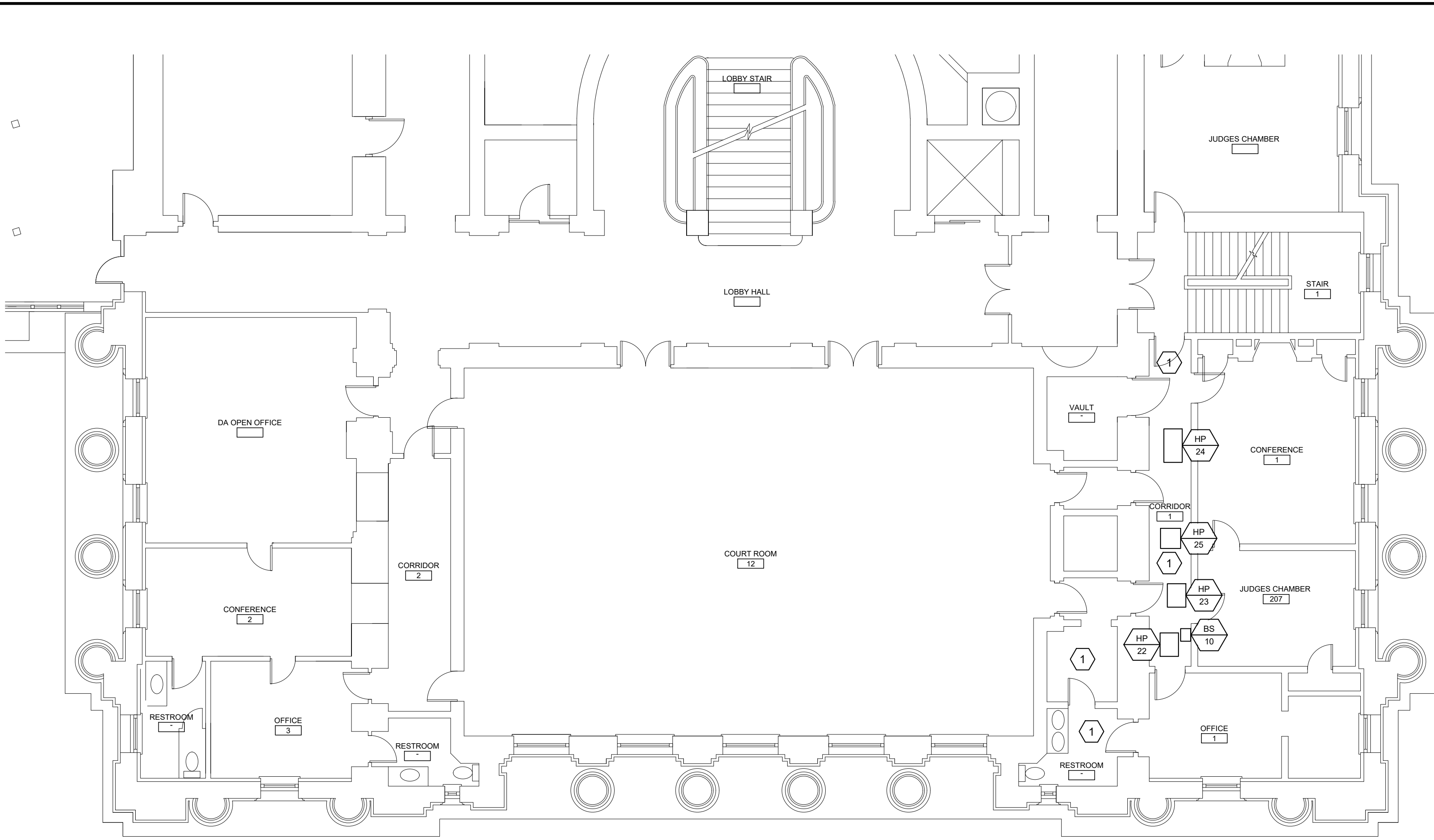
CATHERINE A FAUCHER  
No. 7573  
Professional Engineer  
MAINE

Date: APRIL 16, 2020  
Drawn By: GMC  
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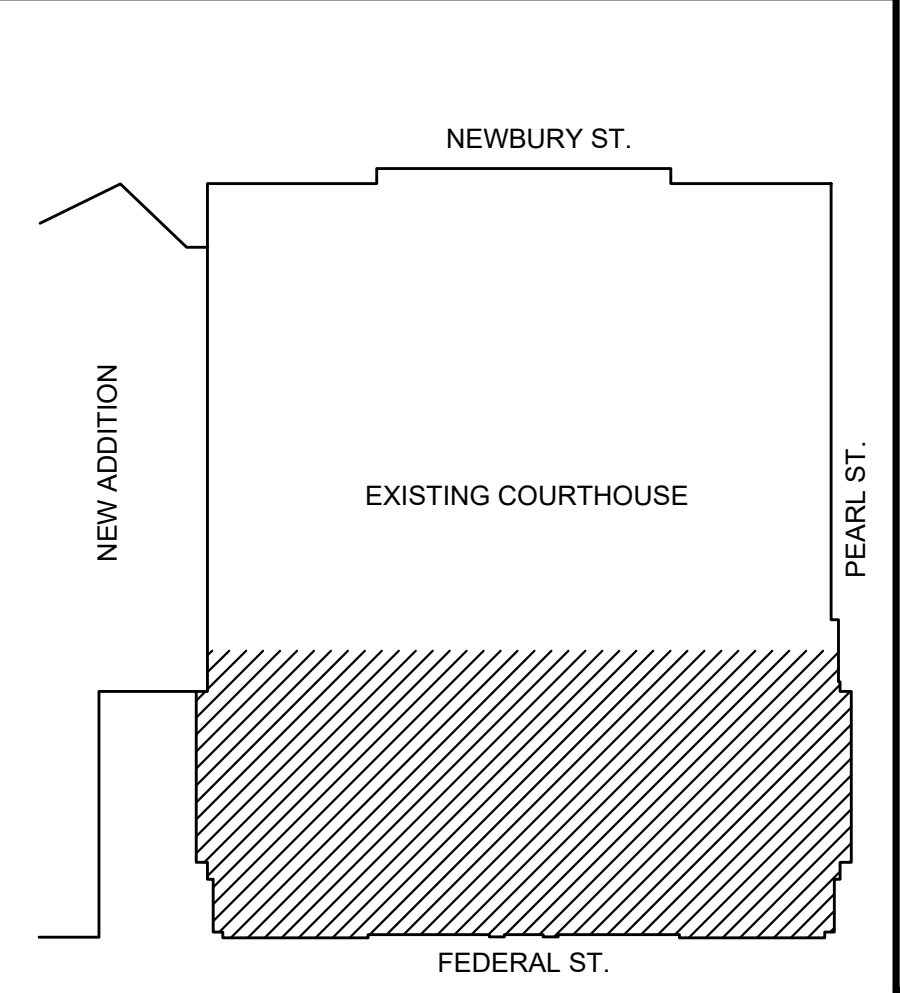
N:\Projects\2020\20018 - CCH-SJC Suite HVAC Upgrade-Second Floor\1 Design Phase\2 Drawings\2001BE.dwg Apr 16, 2020 - 6:24am

EXISTING PANEL SCHEDULE ~ X1									
VOLTAGE: 208/120V				MLO: 225A			AIC: 10KA		
3-PHASE, 4-WIRE									
CIRCUIT BREAKER				CIRCUIT LOAD (KVA) CONNECTED			BRANCH CIRCUIT DESCRIPTION		
CKT NO	BRKR SIZE	NO OF POLES	PH	A	B	C			
1			A	2.69			(E) CD-3		
3	(E) 30	3	B		2.69				
5			C			2.69			
7			A	2.69			(E) CD-4		
9	(E) 30	3	B		2.69				
11			C			2.69			
13	(E) 15	2	A	0.08			(E) BS-20		
15			B		0.08				
17	(E) 15	2	C			0.49	(E) HP-13, (E) HP-14, (E) HP-15, (E) BS-6		
19			A	0.49					
21	(E) 20	2	B		0.59		(E) ERU-4		
23			C			0.59			
25	(E) 20	1	A	0.18			(E) ERU-3		
27	(E) 20	1	B		0.00		SPARE		
29	(E) 20	1	C			0.00	SPARE		
31	(E) 20	1	A	0.00			SPARE		
33	(E) 20	1	B		0.00		SPARE		
35	(E) 20	1	C			0.00	SPARE		
37	(E) 20	1	A	0.00			SPARE		
39	(E) 20	1	B		0.00		SPARE		
41	(E) 20	1	C			0.00	SPARE		
SUBTOTAL				6.13	6.05	6.46			
2	(E) 15	2	A	0.34			(E) HP-7R		
4			B		0.34				
6	(E) 15	2	C		0.29		(E) HP-19, (E) BS-8		
8			A	0.29					
10	(E) 20	2	B		0.59		(E) ERU-5		
12			C			0.59			
14	15	2	A	0.61			HP-22, HP-23, HP-24, HP-25		
16			B		0.61				
18	(E) 15	2	C			1.02	(E) HP-16, (E) HP-17, (E) HP-18, (E) BS-7		
20			A	1.02					
22	30	3	B		2.69		CD-6		
24			C			2.69			
26			A	2.69					
28	15	1	B		0.04		BS-10		
30			C			0.04			
32	(E) 20	1	A	0.00			SPARE		
34	(E) 20	1	B		0.00		SPARE		
36	(E) 20	1	C			0.00	SPARE		
38	(E) 20	1	A	0.00			SPARE		
40	(E) 20	1	B		0.00		SPARE		
42	(E) 20	1	C			0.00	SPARE		
SUBTOTAL				4.95	4.27	4.63			

EXISTING PANEL SCHEDULE ~ XA									
VOLTAGE: 208/120V				MLO: 225A			AIC: 10KA		
3-PHASE, 4-WIRE									
CIRCUIT BREAKER				CIRCUIT LOAD (KVA) CONNECTED			BRANCH CIRCUIT DESCRIPTION		
CKT NO	BRKR SIZE	NO OF POLES	PH	A	B	C			
1			A	3.86			(E) CT-2 FAN		
3	(E) 60	3	B		3.86				
5			C			3.86			
7			A	0.58			(E) CT-2 PUMP		
9	(E) 20	3	B		0.58				
11			C			0.58			
13			A	1.33			(E) CT-2 HEAT		
15	(E) 20	3	B		1.33				
17			C			1.33			
19	(E) 20	2	A	1.66			(E) ERU-6		
21			B		1.66				
23	20	2	C			0.59	ERU-7		
25			A	0.59					
27	(E) 20	1	B		0.00		SPARE		
29	(E) 20	1	C			0.00	SPARE		
31	(E) 20	1	A	0.00			SPARE		
33	(E) 20	1	B		0.00		SPARE		
35	(E) 20	1	C			0.00	SPARE		
37	(E) 20	1	A	0.00			SPARE		
39	(E) 20	1	B		0.00		SPARE		
41	(E) 20	1	C			0.00	SPARE		
SUBTOTAL				8.02	7.43	6.36			
2			A	2.69			(E) CD-5		
4	(E) 30	3	B		2.69				
6			C			2.69			
8			A	2.69			CD-6		
10	30	3	B		2.69				
12			C			2.69			
14	(E) 20	2	A	0.00			SPARE		
16			B		0.00				
18	(E) 20	2	C			0.77	(E) HP-20, (E) HP-21, (E) BS-9		
20			A	0.77					
22	(E) 20	1	B		0.00		SPARE		
24	(E) 20	1	C			0.00	SPARE		
26	(E) 20	1	A	0.00			SPARE		
28	(E) 20	1	B		0.00		SPARE		
30	(E) 20	1	C			0.00	SPARE		
32	(E) 20	1	A	0.00			SPARE		
34	(E) 20	1	B		0.00		SPARE		
36	(E) 20	1	C			0.00	SPARE		
38	(E) 20	1	A	0.00			SPARE		
40	(E) 20	1	B		0.00		SPARE		
42	(E) 20	1	C			0.00	SPARE		
SUBTOTAL				6.15	5.38	6.15			



1 EXISTING ACOUSTICAL CEILING IN THIS AREA WILL BE REMOVED AND RE-INSTALLED UNDER OTHER DIVISIONS. REMOVE, PROTECT, AND RE-INSTALL EXISTING CEILING MOUNTED ELECTRICAL ITEMS. PROVIDE SUPPORTS AS REQUIRED TO SUPPORT ABOVE-CEILING WIRING IN ACCORDANCE WITH CODE REQUIREMENTS.



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**Allied Engineering**  
Structural Mechanical Electrical Commissioning

REVISIONS		DESCRIPTION
NUMBER	DATE	BY

Date: APRIL 16, 2020  
Drawn By: GMC  
Checked By: SRM  
Project Mgr.: ASD  
Caf File: 17051E.DWG  
Graphic Scale: 0 1"

**ELECTRICAL SECOND & THIRD FLOOR PLANS**

SJC HVAC UPGRADES AT  
THE CUMBERLAND COUNTY COURTHOUSE  
142 FEDERAL STREET, PORTLAND, MAINE

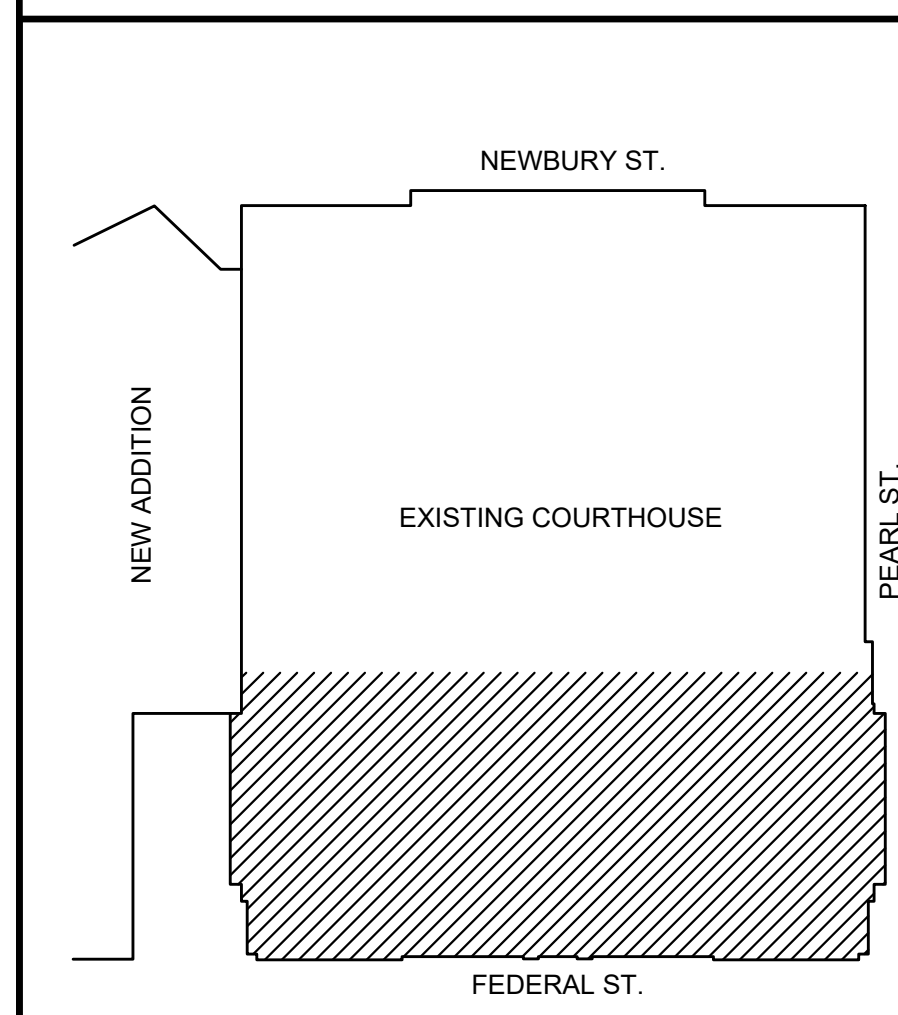
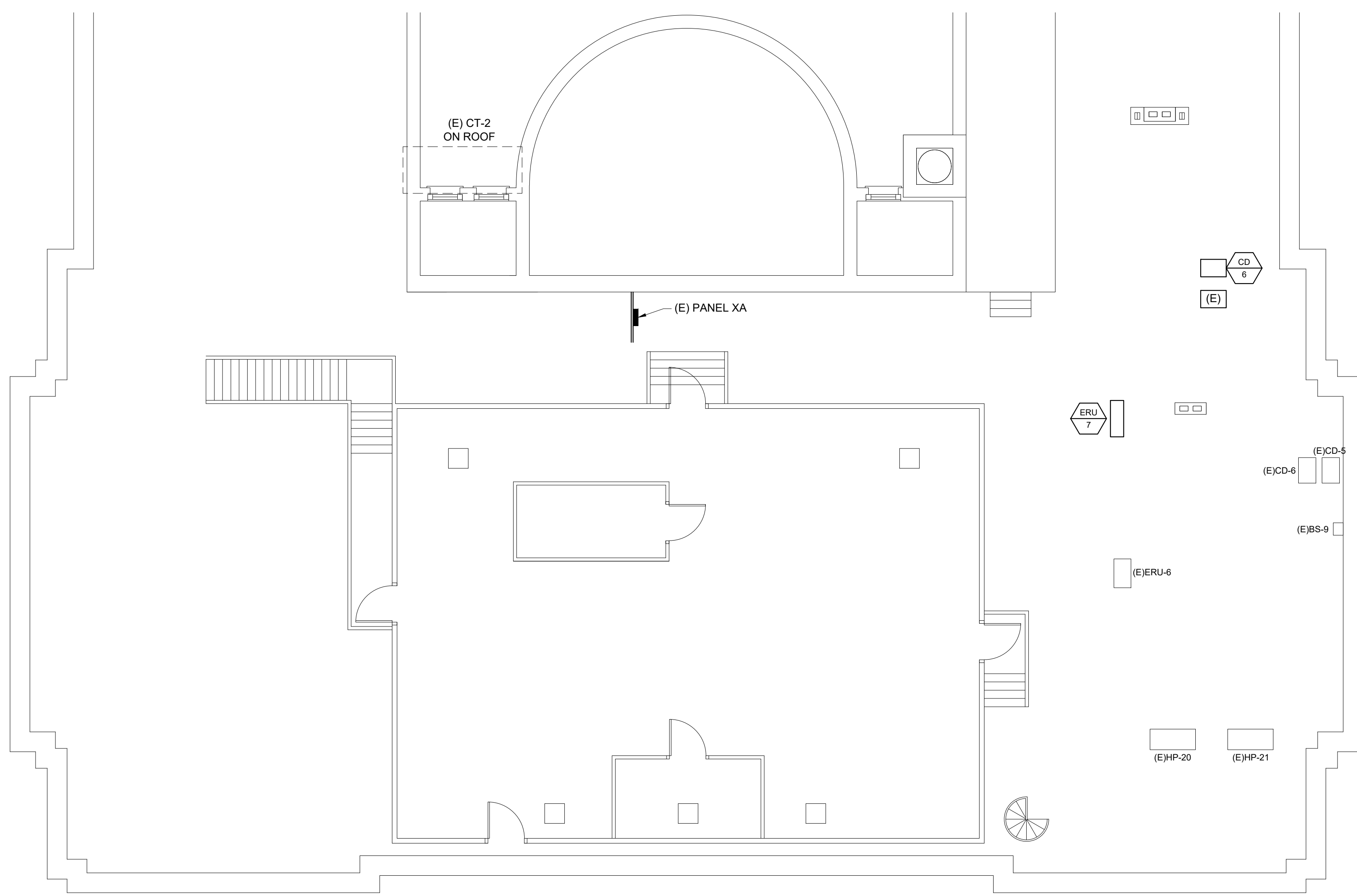
A1 ELECTRICAL SECOND FLOOR PART PLAN  
1/8"=1'-0"

A7 KEYNOTES

A9 SECOND FLOOR KEY PLAN  
NO SCALE

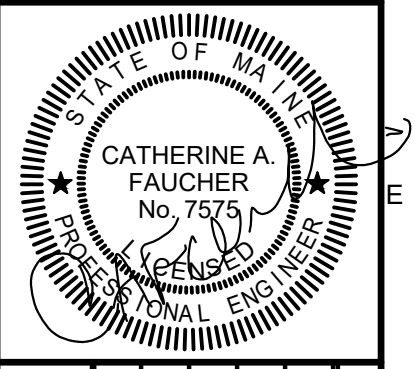
E-100

ELECTRICAL SCHEDULE OF MECHANICAL EQUIPMENT																	
TAG	DESCRIPTION	VOLTS	PH	FLA	MCA	MOPD	DISCONNECT SWITCH					STARTER (NEMA)		CBD	PANEL	WIRING IN CONDUIT	NOTES
							FRAME	POLES	FUSE	NEMA ENCL	FBD	SIZE/ VFD	FBD				
CD-6	WATER COOLED CONDENSING UNIT	208	3	22.4	22.4	30	30	3	30	3R	26	-	23	23	XA	(3)#10 + (1)#10G	
ERU-7	ENERGY RECOVERY UNIT	208	1	4.9	--	--	20	2	NF	1	26	1	26	23	XA	(2)#12 + (1)#12G	
HP-22	HEAT PUMP INDOOR UNIT	208	1	0.60	0.60	15	20	2	NF	1	26	--	--	23	X1	(2)#12 + (1)#12G	1
HP-23	HEAT PUMP INDOOR UNIT	208	1	0.60	0.60	15	20	2	NF	1	26	--	--	23	X1	(2)#12 + (1)#12G	1
HP-24	HEAT PUMP INDOOR UNIT	208	1	1.50	1.50	15	20	2	NF	1	26	--	--	23	X1	(2)#12 + (1)#12G	1
HP-25	CEILING CASSETTE	208	1	0.30	0.30	15	20	2	NF	1	26	--	--	23	X1	(2)#12 + (1)#12G	1
BS-10	BRANCH SELECTOR	208	1	0.4	0.4	15A	20	2	NF	1	26	--	--	23	X1	(2)#12 + (1)#12G	
NOTES:												ABBREVIATIONS:					
1	CONNECT VIA BRANCH SELECTOR BS-10.											FWE	FURNISHED WITH EQUIPMENT				
												NF	NOT FUSED				
												SWBD	SWITCHBOARD				
												FBD	FURNISHED BY DIVISION				
												CBD	CONTROL WIRING BY DIVISION				



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REVISIONS			
NUMBER	DATE	BY	DESCRIPTION

Date:	APRIL 16, 2020
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Checked By:	SRM
Project Mgr.:	ASD
Project No.:	20018
Cad File:	17051E.DWG
Graphic Scale:	0 1"

**ELECTRICAL ATTIC PART PLAN**

SJC HVAC UPGRADES AT  
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