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COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO. 2025.119.0
 DATE 2026.01.16
 DRAWN MDP
 REVIEWED ACT

SHEET NAME
 MECHANICAL SCHEDULES

SHEET NO.
M0.01

EQUIPMENT MANUFACTURERS AND MODEL NUMBERS LISTED IN THE SCHEDULES REPRESENT THE BASIS OF DESIGN. ALL EQUIPMENT PROVIDED SHALL COMPLY WITH THE BUY AMERICA ACT, 41 USC CHAPTER 83. CONFIRM COMPLIANCE WITH MANUFACTURER PRIOR TO PROCUREMENT.

HOT WATER GENERATOR SCHEDULE

TAG	MFGR / MODEL	DOMESTIC HOT WATER				HEATING MEDIUM				LABEL	REMARKS	
		RECOVERY (GPH)	STORAGE (GALLONS)	EWT	LWT	FLUID	FLOW RATE (GPM)	WPD (FT HD)	EFT			LFT
HWG-1	HTP / SSU-119N	334	119	40°F	140°F	WATER	14	12'	170°F	140°F	NSF	TEMPERATURE AND PRESSURE RELIEF VALVE
HWG-2	HTP / SSU-119N	334	119	40°F	140°F	WATER	14	12'	170°F	140°F	NSF	TEMPERATURE AND PRESSURE RELIEF VALVE

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	MINIMUM CONNECTION SIZE					MANUFACTURER	MODEL	COLOR	TRIM / REMARKS
		CW	HW	TRAP	VENT	WASTE				
WC-1	WATER CLOSET - FLOOR MOUNT - ADA	1/2"	1/2"	---	2"	3"	KOHLER	HIGHLINE K-3493 (-RA)	WHITE	ELONGATED BOWL, ELONGATED SEAT WITH LID, PROVIDE TRIP LEVER ON ACCESSIBLE SIDE
WC-2	WATER CLOSET - FLOOR MOUNT - ADA	1/2"	1/2"	---	2"	3"	KOHLER	HIGHLINE K-3493 (-RA)	WHITE	ELONGATED BOWL, SPLIT RIM SEAT, PROVIDE TRIP LEVER ON ACCESSIBLE SIDE
LV-1	LAVATORY - WALL HUNG - ADA	1/2"	1/2"	1-1/4"	1-1/4"	1-1/2"	KOHLER	KINGSTON K-2005	WHITE	DELTA FAUCET 22C821 WITH POP-UP DRAIN, ASSE 1070 THERMOSTATIC MIX VALVE FOR HOT WATER SUPPLY, LAMINAR OUTLET, ADA LEVER HANDLE
LV-2	LAVATORY - WALL HUNG - ADA	1/2"	1/2"	1-1/4"	1-1/4"	1-1/2"	KOHLER	KINGSTON K-2005	WHITE	DELTA FAUCET 22C821 WITH POP-UP DRAIN, ASSE 1070 THERMOSTATIC MIX VALVE FOR HOT WATER SUPPLY, LAMINAR OUTLET, ADA LEVER HANDLE
SK-1	SINK - DOUBLE COMPARTMENT	1/2"	1/2"	1-1/2"	1-1/2"	2"	ELKAY	LR-3322	STAINLESS	ELKAY LK5000 (CR) FAUCET WITH PULL OUT SPRAY, HOLE PUNCH AS REQUIRED FOR TRIM, DOUBLE CUP STAINLESS STEEL BASKET STRAINERS, DISHWASHER AIRGAP FITTING
SK-2	SINK - DOUBLE COMPARTMENT - ADA	1/2"	1/2"	1-1/2"	1-1/2"	2"	ELKAY	LRAD-3322-55	STAINLESS	ELKAY LK5000 (CR) FAUCET WITH PULL OUT SPRAY, HOLE PUNCH AS REQUIRED FOR TRIM, DOUBLE CUP STAINLESS STEEL BASKET STRAINERS, DISHWASHER AIRGAP FITTING
SK-3	SINK - HAND	1/2"	1/2"	1-1/2"	1-1/2"	2"	ELKAY	CHS1716C	STAINLESS	ELKAY FAUCET LK940GN04L 2H, ASSE 1070 THERMOSTATIC MIX VALVE FOR HOT WATER SUPPLY
SK-4	SINK - JANITOR	1/2"	1/2"	3"	1-1/2"	3"	FIAT	MSB-2424	WHITE	FIAT FAUCET 838-AA WITH VACUUM BREAKER, 832-AA HOSE AND BRACKET, E-77-AA VINYL BUMPER GUARD, 889-CC MOP HANGER
SK-5	SINK - LAUNDRY	1/2"	1/2"	2"	1-1/2"	2"	JUST	SLXD-2233-A-GR	STAINLESS	DELTA FAUCET 230533 WITH GOOSENECK, HOLE PUNCH AS REQUIRED FOR TRIM
SK-6	SINK - THREE COMPARTMENT	1/2"	1/2"	2"	1-1/2"	2"	ELKAY	PSMR-4322	STAINLESS	ELKAY LKGT1041 FAUCET WITH PULL OUT SPRAY, HOLE PUNCH AS REQUIRED FOR TRIM, DOUBLE CUP STAINLESS STEEL BASKET STRAINERS, DISHWASHER AIRGAP FITTING
BT-1	BATHTUB / SHOWER	1/2"	1/2"	1-1/2"	1-1/2"	2"	AQUATIC	260304P	WHITE	4-PIECE ASSEMBLY, LEFT HAND OR RIGHT HAND AS REQUIRED, DELTA T13491 WITH PRESSURE BALANCED MIX VALVE, TUB SPOUT WITH PULL-UP DIVERTER, AND SHOWER HEAD, R10000 SERIES UNIVERSAL VALVE BODY, FIELD CUT OUT SURROUND FOR TRIM AS REQUIRED OR CUSTOM FACTORY SURROUND CUT OUTS - COORDINATE WITH ARCHITECTURAL
BT-2	BATHTUB / SHOWER - ADA	1/2"	1/2"	1-1/2"	1-1/2"	2"	AQUATIC	260304P	WHITE	4-PIECE ASSEMBLY, LEFT HAND OR RIGHT HAND AS REQUIRED, DELTA T13491 WITH PRESSURE BALANCED MIX VALVE, TUB SPOUT WITH PULL-UP DIVERTER, AND SHOWER HEAD, WITH ADJUSTABLE SLIDE AND 60" FLEXIBLE METAL HOSE, AUXILIARY HAND SHOWER SLIDE, R10000 SERIES UNIVERSAL VALVE BODY, GRAB BARS, FOLDING SEAT, FIELD CUT OUT SURROUND FOR TRIM AS REQUIRED OR CUSTOM FACTORY SURROUND CUT OUTS - COORDINATE WITH ARCHITECTURAL
BT-3	BATHTUB / SHOWER - ADA	1/2"	1/2"	1-1/2"	1-1/2"	2"	AQUATIC	260304P	WHITE	SAME TRIM / REMARKS AS BT-2 EXCEPT LESS FOLDING SEAT
SH-1	SHOWER STALL - ADA	1/2"	1/2"	2"	1-1/2"	2"	BARRIER FREE	4LBS4834B5B	WHITE	4-PIECE ASSEMBLY, 1/2" THRESHOLD WITH FLEXIBLE DAM, DRAIN WITH STRAINER, LEFT OR RIGHT HAND AS REQUIRED, GRAB BARS, FOLDING SEAT, DELTA T13091 PRESSURE BALANCED SHOWER VALVE, R10000 UNIVERSAL VALVE BODY, RPW324HDF HAND SHOWER WITH ADJUSTABLE SLIDE AND 60" FLEXIBLE METAL HOSE, FIELD CUT OUT SURROUND FOR TRIM AS REQUIRED OR CUSTOM FACTORY SURROUND CUT OUTS - COORDINATE WITH ARCHITECTURAL
EW-1	ELECTRIC WATER COOLER - ADA	1/2"	---	1-1/2"	1-1/4"	1-1/2"	ELKAY	LZS8WSSK	STAINLESS	WALL MOUNT WITH WALL CARRIER, VANDAL RESISTANT, BUBBLER, PUSH BUTTON, SENSOR BOTTLE FILLER, FILTERS, STAINLESS STEEL COOLER CABINETS, 370 WATTS / 120 VOLTS / 1PH

EXPANSION TANK SCHEDULE

TAG	MFGR / MODEL	SERVICE	FLUID	TOTAL VOLUME (GALLONS)	ACCEPTANCE VOLUME (GALLONS)	DIMENSIONS	MATERIAL	LABEL	REMARKS
ET-1	AMTROL / EXTROL 800-L	HYDRONIC EXPANSION	50% P.G.	211	211	30"Ø x 82"	STEEL/BUTYL	ASME	PRECHARGE TO 15 PSIG
ET-2	AMTROL / EXTROL 800-L	HYDRONIC EXPANSION	50% P.G.	211	211	30"Ø x 82"	STEEL/BUTYL	ASME	PRECHARGE TO 15 PSIG
ET-3	AMTROL / THERM-X-TROL ST-80V-C	DOMESTIC HOT WATER EXPANSION	WATER	53	34.5	24"Ø x 37"	STEEL/BUTYL	ASME/NSF	PRECHARGE TO WATER SUPPLY STATIC PRESSURE

GLYCOL MAKE-UP TANK SCHEDULE

TAG	MFGR / MODEL	SERVICE	FLUID	STORAGE (GALLONS)	DIMENSIONS	MATERIAL	ELECTRICAL DATA		LABEL	REMARKS
							AMPS/WATTS	VOLTS/PH		
GMT-1	AXIOM / SF100	BUILDING HEAT SYSTEM	50% P.G.	55.0	24"Ø x 49"H	PLASTIC	0.7 AMPS	120/1	ETL	WITH PACKAGED PUMP, CONTROLS, LOW LEVEL ALARM AND REMOTE MONITORING CONTACTS, 3-PRONG PLUG AND CORD

TEMPERING VALVE SCHEDULE

TAG	MFGR / MODEL	INLETS SIZE	OUTLET SIZE	FLOW RATE AT 5 PSI (GPM)	CV	CONSTRUCTION	ELECTRICAL DATA		LABEL	REMARKS
							AMPS	VOLTS/PH		
TV-1	HEAT TIMER / ETV-PLUS	2-1/2"	2-1/2"	162	73	STAINLESS STEEL	0.40 AMPS	120/1	ASSE 1017, NSF	SET OUTLET TEMPERATURE FOR 120°F, LEAD FREE, CONTROL MODULE, COLD WATER PROBE, HOT WATER PROBE AND MIX WATER PROBE

PUMP SCHEDULE

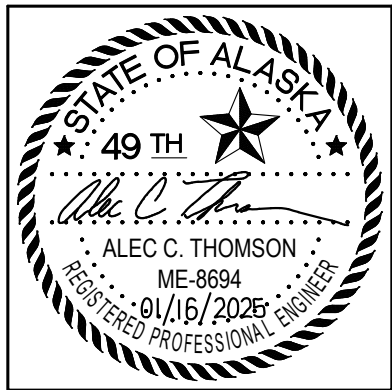
TAG	MFGR / MODEL	SERVICE	FLUID	FLOW RATE (GPM)	HEAD (FEET)	MOTOR DATA			REMARKS
						RPM	HP/W	VOLTS/PH	
BC-1	GRUNDFOS / MAGNA3 50-150	BOILER CIRCULATION	50% P.G.	76	20'	4,600	643W	120/1	EC MOTOR, SPEED CONTROL BY BOILER
BC-2	GRUNDFOS / MAGNA3 50-150	BOILER CIRCULATION	50% P.G.	76	20'	4,600	643W	120/1	EC MOTOR, SPEED CONTROL BY BOILER
BC-3	GRUNDFOS / MAGNA3 50-150	BOILER CIRCULATION	50% P.G.	76	20'	4,600	643W	120/1	EC MOTOR, SPEED CONTROL BY BOILER
CP-1	GRUNDFOS / UPS40-80	HOT WATER GENERATORS	50% P.G.	28	20'	3,450	480W	120/1	---
CP-2	GRUNDFOS / UPS32-160	HYDRONIC COILS	50% P.G.	19	40'	3,450	600W	208/3	---
CP-3	GRUNDFOS / UPS80-160	PERIMETER HEAT	50% P.G.	100	64'	3,450	2,050W	208/3	---
CP-4	GRUNDFOS / UPS15-58	BOILER CIRCULATION	50% P.G.	5.0	10'	2,450	87W	120/1	---
CP-5	GRUNDFOS / UPS15-58	RADIANT INJECTION	50% P.G.	2.6	10'	2,450	87W	120/1	---
CP-6	GRUNDFOS / MAGNA1 40-120	RADIANT CIRCULATION	50% P.G.	8.7	38'	4,034	456W	120/1	---
DCP-1	GRUNDFOS / UPS26-99SFC	DOMESTIC HOT WATER CIRCULATION	WATER	5.0	27'	3,380	197W	120/1	RATED FOR OPEN SYSTEMS, LEAD FREE, NSF LABELED

MECHANICAL LEGEND

- DENOTES DEMOLITION
- COLD WATER PIPING
- HOT WATER PIPING
- HOT WATER RECIRCULATED PIPING
- XXX PIPING, SEE ABBREVIATIONS FOR MEDIA
- DIRECTION OF FLOW
- PIPE UP
- PIPE DOWN
- TEE UP
- TEE DOWN
- REDUCER / INCREASER
- CAP
- UNION
- ISOLATION VALVE
- BALANCE VALVE
- CHECK VALVE
- STRAINER WITH BLOWDOWN
- FLEXIBLE PIPING CONNECTOR
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- PRESSURE REDUCING VALVE
- PRESSURE/TEMPERATURE RELIEF VALVE
- THERMOMETER
- PRESSURE GAUGE WITH ISOLATION COCK
- PUMP
- FLOOR DRAIN
- DUCT UP & DOWN (ROUND)
- THERMOSTAT OR SENSOR
- POINT OF CONNECTION TO EXISTING
- KEY NOTE
- X - DETAIL NUMBER
- MX - SHEET LOCATED ON
- BB-x - BASEBOARD DESIGNATION
- XX - ACTIVE FIN TUBE ELEMENT LENGTH
- X - FLOW RATE IN GPM

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COOK INLET HOUSING AUTHORITY
KENAITZE RENOVATIONS
ANCHORAGE, ALASKA

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JOB NO. 2025.119.0
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SHEET NAME
MECHANICAL SCHEDULES

SHEET NO.
M0.02

HALF SCALE WHEN PRINTED AT 11x17

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AAV	AUTOMATIC AIR VENT
AFF	ABOVE FINISHED FLOOR
AFT	AVERAGE FLUID TEMPERATURE
AMB	AMBIENT
AMPS	AMPERES
APD	AIR PRESSURE DROP
ARCH	ARCHITECTURAL
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BDD	BACKDRAFT DAMPER
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
CIA	COMBUSTION AIR
CFM	CUBIC FEET PER MINUTE
CO	CLEANOUT
CONN	CONNECTION
Cu	COPPER
CW	COLD WATER
Ø	DIAMETER
DB	DRY BULB
dB	DECIBELS
DEG	DEGREE
DWG	DRAWING
(E)	EXISTING
E/A	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE
EFT	ENTERING FLUID TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
°F	DEGREES FAHRENHEIT
FC	FORWARD CURVE
FCO	FLOOR CLEAN OUT
FD	FIRE DAMPER
FLA	FULL LOAD AMPERES
FPD	FLUID PRESSURE DROP
FPF	FINS PER FOOT
FBM	FEET PER MINUTE
FSD	FIRE SMOKE DAMPER
FT	FEET
G	NATURAL GAS
GA	GAUGE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
HD	HEAD
HGR	HEATING GLYCOL RETURN
HGS	HEATING GLYCOL SUPPLY
HR	HOUR
HW	HOT WATER
HWC	HOT WATER CIRCULATED
HP	HORSEPOWER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
ID	INSIDE DIAMETER
IMC	INTERNATIONAL MECHANICAL CODE
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB TEMPERATURE
LF	LINEAL FEET
LFT	LEAVING FLUID TEMPERATURE
LPG	LIQUID PROPANE GAS
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MFR	MANUFACTURER
MFS	MAXIMUM FUSE SIZE
MOP	MAXIMUM OVERCURRENT PROTECTION
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NSF	NATIONAL SANITARY FOUNDATION
NTS	NOT TO SCALE
O/A	OUTSIDE AIR
OD	OUTSIDE DIAMETER
OPI	OWNER FURNISHED, CONTRACTOR INSTALLED
OPD	OVERCURRENT PROTECTION DEVICE
OSD	OVERFLOW STORM DRAIN
PD	PRESSURE DROP
P.G.	PROPYLENE GLYCOL
PH	PHASE
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
R/A	RETURN AIR
RHGR	RADIANT HEATING GLYCOL RETURN
RHGS	RADIANT HEATING GLYCOL SUPPLY
RPM	REVOLUTIONS PER MINUTE
S/A	SUPPLY AIR
SD	STORM DRAIN
SNGR	SNOWMELT GLYCOL RETURN
SNGS	SNOWMELT GLYCOL SUPPLY
SP	STATIC PRESSURE
T/A	TRANSFER AIR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UPC	UNIFORM PLUMBING CODE
V	VENT
VEL	VELOCITY
VTR	VENT THROUGH ROOF
WC	WATER COLUMN
WG	WATER GAUGE
WCO	WALL CLEAN OUT
WHA	WATER HAMMER ARRESTOR
W	WASTE
WB	WET BULB
WPD	WATER PRESSURE DROP
YCO	YARD CLEAN OUT

AIR SEPARATOR SCHEDULE

TAG	MFGR / MODEL	SERVICE	FLUID	FLOW RATE (GPM)	WPD (FT HD)	INLET/OUTLET SIZE	DIMENSIONS	LABEL	REMARKS
AS-1	SPIROTHERM / VDT-400	BUILDING HEAT HYDRONIC SYSTEM	50% P.G.	152	<1.0'	4"	31.4"H x 8.6"D	ASME	COMBINATION AIR AND DIRT SEPARATOR WITH AUTO AIR VENT

BOILER SCHEDULE

TAG	MFGR / MODEL	TYPE	FLUID	FUEL	BURNER INPUT (MBH)	GROSS OUTPUT (MBH)	RELIEF VALVE (PSIG)	ELECTRICAL DATA	LABEL	REMARKS
								MCA	VOLTS/PH	
BLR-1	LOCHINVAR / KBX1000N	STAINLESS STEEL	50% P.G.	NATURAL GAS	999	843	50	8.3 120/1	ASME	WITH TRIM PER INTERNATIONAL MECHANICAL CODE CHAPTER 10, 185°F OPERATING SETPOINT
BLR-2	LOCHINVAR / KBX1000N	STAINLESS STEEL	50% P.G.	NATURAL GAS	999	843	50	8.3 120/1	ASME	WITH TRIM PER INTERNATIONAL MECHANICAL CODE CHAPTER 10, 185°F OPERATING SETPOINT
BLR-3	LOCHINVAR / KBX1000N	STAINLESS STEEL	50% P.G.	NATURAL GAS	999	843	50	8.3 120/1	ASME	WITH TRIM PER INTERNATIONAL MECHANICAL CODE CHAPTER 10, 185°F OPERATING SETPOINT

BASEBOARD SCHEDULE

TAG	MFGR / MODEL	OUTPUT (BTU/H/FT)	FLUID	EFT	LFT	TUBE SIZE	ELEMENT FIN SIZE	FIN PER FOOT	FIN THICKNESS	NUMBER OF TURNS	ENCLOSURE THICKNESS	ENCLOSURE HEIGHT	MOUNTING HEIGHT	COLOR	REMARKS
BB-1	STERLING / SR-3/4-60	760	50% P.G.	170°F	130°F	3/4" Ø Cu	2-3/4" x 2-1/2"	60	0.011" AL	1	16 GA	10"	10"	PER ARCH	OUTPUT SCHEDULED BASED ON WATER AT 160°F AVERAGE, ON-OFF VIA LOCAL WALL MOUNTED THERMOSTAT
BB-2	STERLING / JVB-S-C3/4-435	980	50% P.G.	170°F	150°F	3/4" Ø Cu	3-5/8" x 4-1/4"	50	0.020" AL	1	16 GA	14"	18"	PER ARCH	OUTPUT SCHEDULED BASED ON WATER AT 160°F AVERAGE, ON-OFF VIA LOCAL WALL MOUNTED THERMOSTAT

UNIT HEATER SCHEDULE

TAG	MFGR / MODEL	CAPACITY (MBH)	FLUID	FLOW RATE (GPM)	FPD (FT HD)	EFT	LFT	AIRFLOW (CFM)	MINIMUM BRANCH PIPING SIZE	MOTOR DATA	COLOR	REMARKS
										HP	VOLTS/PH	
CUH-1	MODINE / CW004	22.7	50% P.G.	2.3	<3'	170°F	150°F	450	3/4"	1/20 120/1	---	RECESSED FLOOR MOUNT WITH AIR FLOW ARRANGEMENT 98, ON-OFF VIA LOCAL WALL MOUNTED THERMOSTAT
CUH-2	MODINE / CW004	22.7	50% P.G.	2.3	<3'	170°F	150°F	450	3/4"	1/20 120/1	---	RECESSED CEILING MOUNT WITH AIR FLOW ARRANGEMENT 98, ON-OFF VIA LOCAL WALL MOUNTED THERMOSTAT
UH-1	MODINE / HC-18	11.9	50% P.G.	1.5	<3'	170°F	150°F	340	3/4"	1/60 120/1	PER ARCH	FINGER PROOF OSHA FAN GUARD, ON-OFF VIA LOCAL WALL MOUNTED THERMOSTAT
UH-2	MODINE / HC-165	123.6	50% P.G.	16.0	<3'	170°F	150°F	3,420	1-1/2"	1/3 120/1	PER ARCH	FINGER PROOF OSHA FAN GUARD, ON-OFF VIA LOCAL WALL MOUNTED THERMOSTAT

ROOFTOP HVAC UNIT SCHEDULE

TAG	MFGR / MODEL	SERVICE	AIRFLOW (CFM)	ESP (IN WG)	REFRIGERANT	TONS	EDB	EWB	LDB	AMB TEMP	FUEL TYPE	INPUT (MBH)	OUTPUT (MBH)	TEMP RISE	MCA	MOP	VOLTS/PH	SCCR RATING	UNIT WEIGHT (LBS)	REMARKS
RTU-1	TRANE / YSK060A3S0H	AREA A VENTILATION	2,120	0.80"	R-454B	5.0	75°F	61°F	55°F	85°F	NATURAL GAS	150	121.5	52°F	31.0	45.0	208/3	5 kA	798	100% ECONOMIZER, DRY BULB CONTROLLER, ROOF CURB ADAPTOR, INTEGRAL CONTROLS, CIRCUIT BREAKER, UNPOWERED CONVENIENCE OUTLET, HONEYWELL T7350 PROGRAMMABLE THERMOSTAT OR EQUAL, SET MINIMUM OUTSIDE AIR AT 425 CFM
RTU-2	AAON / RNA-011-B-A-8-FAA04	COMMON AREA VENTILATION	4,800	0.90"	R-454B	11.0	75°F	61°F	55°F	85°F	---	---	---	---	52.0	60.0	208/3	35 kA	1,762	100% ECONOMIZER, DRY BULB CONTROLLER, ROOF CURB ADAPTOR, INTEGRAL CONTROLS, CIRCUIT BREAKER, UNPOWERED CONVENIENCE OUTLET, HONEYWELL T7350 PROGRAMMABLE THERMOSTAT OR EQUAL, SET MINIMUM OUTSIDE AIR AT 1,920 CFM
RTU-3	TRANE / YSK180A3S0H	AREA B VENTILATION	5,000	0.90"	R-454B	15.0	75°F	61°F	55°F	85°F	NATURAL GAS	400	324	58°F	79.0	110.0	208/3	5 kA	2,362	100% ECONOMIZER, DRY BULB CONTROLLER, ROOF CURB ADAPTOR, INTEGRAL CONTROLS, CIRCUIT BREAKER, UNPOWERED CONVENIENCE OUTLET, HONEYWELL T7350 PROGRAMMABLE THERMOSTAT OR EQUAL, SET MINIMUM OUTSIDE AIR AT 1,000 CFM

HEATING COIL SCHEDULE

TAG	MFGR / MODEL	SIZE	LOCATION	MAXIMUM AIRFLOW (CFM)	MINIMUM AIRFLOW (CFM)	MAXIMUM AIR PD (IN WC)	MAXIMUM VELOCITY (FPM)	EAT	APPROX LAT	HEAT EXCHANGED (MBH)	FLUID	FLOW RATE (GPM)	FPD (FT HD)	EFT	APPROX LFT	MINIMUM BRANCH PIPING SIZE	REMARKS
HC-2	BY RTU MANUFACTURER	PER MFR	RTU-2	5,000	5,000	<0.20"	<700	37°F	85°F	277.7	50% P.G.	19.0	<2'	170°F	137°F	1-1/2"	---

FAN SCHEDULE

TAG	MFGR / MODEL	SERVICE	FAN TYPE	AIRFLOW (CFM)	ESP (IN WC)	DRIVE	SONES	MOTOR DATA			LABEL	REMARKS
								HP	WATTS	VOLTS/PH		
EF-1	GREENHECK / SP-AP031W	TOILET ROOM EXHAUST	CENTRIFUGAL	60	0.5"	DIRECT	2	26	26	120/1	UL	EG MOTOR, MULTI-SPEED TIMER MODULE, MOTION SENSOR MODULE, ADJUSTABLE HUMIDITY SENSOR MODULE, SET CONTINUOUS AIRFLOW TO 0 CFM
EF-2	GREENHECK / SP-A280	JANITOR ROOM EXHAUST	CENTRIFUGAL	95	0.50"	DIRECT	4	47	47	120/1	UL	---
EF-3	GREENHECK / SQ-S-911-VG	ELEVATOR MACHINE ROOM	INLINE	1,000	0.25"	DIRECT	<10	1/6	---	120/1	UL	ON-OFF VIA LOCAL REVERSE ACTIONING THERMOSTAT
EF-4	GREENHECK / Q-070-D	REFUGE CHUTE EXHAUST	CENTRIFUGAL	210	0.25"	DIRECT	<5	1/30	---	120/1	UL	---
VF-1	GREENHECK / SE1-16-428-VG	BOILER FAN VENT	PROPELLER	2,000	0.50"	DIRECT	<15	3/4	---	120/1	UL	WITH OSHA FAN GUARD

RANGE HOOD SCHEDULE

TAG	MFGR / MODEL	SERVICE	NOMINAL SPEED AIRFLOW (CFM)	DIMENSIONS LENGTH x WIDTH x HEIGHT	FINISH	AMPS	VOLTS/PH	LABEL	REMARKS
RH-1	BROAN / BXT130SS	DOMESTIC RANGE EXHAUST	120	30" x 18" x 6"	PER ARCH	1.3	120/1	UL	WITH REMOVABLE GREASE FILTER, TWO SPEED FAN ROCKER SWITCH, LIGHT SWITCH
RH-2	BROAN / DXT160SS-ADA	DOMESTIC RANGE EXHAUST	120	30" x 18" x 6"	PER ARCH	1.3	120/1	UL	WITH REMOVABLE GREASE FILTER, TWO SPEED FAN ROCKER SWITCH, LIGHT SWITCH, AUXILIARY REMOTE SWITCH

EQUIPMENT MANUFACTURERS AND MODEL NUMBERS LISTED IN THE SCHEDULES REPRESENT THE BASIS OF DESIGN. ALL EQUIPMENT PROVIDED SHALL COMPLY WITH THE BUY AMERICA ACT, 41 USC CHAPTER 83. CONFIRM COMPLIANCE WITH MANUFACTURER PRIOR TO PROCUREMENT.

SEQUENCE OF OPERATIONS

DOMESTIC HOT WATER SYSTEM (HWG-1, HWG-2, CP-1, TV-1, DCP-1, AND CONTROL VALVES)

INDIRECT WATER HEATERS, HWG-1 AND HWG-2, SHALL MAINTAIN INTERNAL AQUASTAT TEMPERATURE OF 140°F (ADJUSTABLE).

ON CALL FOR HEAT FROM AQUASTAT SIGNAL DHW CALL FOR HEAT TO BOILER PLANT; ASSOCIATED CONTROL VALVE SHALL OPEN; AND CIRCULATION PUMP CP-1 SHALL OPERATE.

CP-1 INTEGRAL CONTROLS SHALL MODULATE PUMP TO MAINTAIN DIFFERENTIAL PRESSURE SETPOINT. APPROPRIATE SETPOINT TO BE DETERMINED AT BALANCING TO PROVIDE SCHEDULED FLOW THROUGH WATER HEATERS.

TEMPERING VALVE TV-1 SHALL BE SET TO DELIVER 120°F (ADJUSTABLE).

HOT WATER RECIRCULATION PUMP DCP-1 SHALL OPERATE CONTINUOUSLY.

BOILERS AND BOILER CIRCULATION PUMPS (BLR-1 - BLR-3 AND BC-1 - BC-3)

BOILER SHALL BE OPERATED BY INTEGRAL CONTROLS. BOILER ALARMS SHALL BE MONITORED BY EXISTING BUILDING WIDE DDC SYSTEM. COORDINATE WITH OWNER'S PREFERRED DDC CONTRACTOR. BOILER INTEGRAL CONTROLS SHALL BE CAPABLE OF PROVIDING CONTROL AS FOLLOWS.

BOILERS SHALL BE CAPABLE OF INTERCOMMUNICATION ALLOWING SEQUENCING OF ALL BOILERS TO OPTIMIZE PLANT ENERGY EFFICIENCY. BLR-1 SHALL BE DESIGNATED THE MANAGING BOILER.

BOILERS SHALL BE ENABLED CONTINUOUSLY. BOILERS SHALL MAINTAIN BUILDING SUPPLY TEMPERATURE SETPOINT WHEN THE OUTSIDE AIR TEMPERATURE IS AT OR BELOW THE WARM WEATHER CUTOFF TEMPERATURE SETPOINT OR ON CALL FOR HEAT FROM DOMESTIC HOT WATER HEATERS. WARM WEATHER CUTOFF SETPOINT SHALL BE COORDINATED WITH EQUIVALENT EXISTING SETPOINT FOR BUILDING HEAT.

THE BUILDING SUPPLY TEMPERATURE SETPOINT SHALL RESET LINEARLY BETWEEN 150°F AND 190°F BASED ON AN OUTDOOR AIR RESET SCHEDULE BETWEEN 65°F AND 10°F RESPECTIVELY. ON CALL FOR HEAT FROM DOMESTIC HOT WATER SYSTEM THE SUPPLY TEMPERATURE SETPOINT SHALL RESET TO 190°F.

ALL RESET TEMPERATURE SETPOINTS SHALL BE ADJUSTABLE. BOILER SUPPLY TEMPERATURE SHALL NOT EXCEED 195°F.

BOILER INTEGRAL CONTROLS SHALL MODULATE THE BURNER AND OPERATE BOILER CIRCULATION PUMPS. ALL DIRECT BURNER CONTROL AND SAFETY INTERLOCKS SHALL BE CONTROLLED BY BOILER FACTORY CONTROLS.

PROVIDE ALL TRIM AS REQUIRED BY THE INTERNATIONAL MECHANICAL CODE CHAPTER 10.

BUILDING CIRCULATION PUMP (CP-2 - CP-6)

CONTROL BY EXISTING BUILDING WIDE DDC SYSTEM. INTERFACE TO MATCH EXISTING DDC SYSTEM AND SEQUENCE.

SPECIFICATIONS

GENERAL

- THE CONTRACTOR SHALL PROVIDE ALL THE MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY FOR THE INSTALLATION OF COMPLETE AND OPERABLE MECHANICAL SYSTEMS SHOWN OR DESCRIBED IN THE CONTRACT DOCUMENTS.
- THE PLANS ARE PARTLY DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS AND FITTINGS OR EXACT LOCATIONS OF PIPING AND DUCTS UNLESS SPECIFICALLY DIMENSIONED. PROVIDE FITTINGS, OFFSETS, AND ACCESSORIES AS REQUIRED TO INSTALL THE WORK.
- THE CONTRACTOR SHALL VERIFY EXACT SIZE, QUANTITIES, LOCATION, ROUTING, SERVICE, ETC. OF ALL EXISTING SYSTEMS WHICH ARE TO BE REMOVED, REPLACED, ABANDONED, CONNECTED TO, OR REMODELED AS REQUIRED AND INDICATED ON THE PLANS.
- THE CONTRACTOR SHALL BRING ALL SURFACES BACK TO ORIGINAL CONDITION AFTER ANY MODIFICATIONS HAVE BEEN MADE.
- COORDINATE ANY SERVICE DISRUPTION PERIODS WITH THE OWNER AND ANY AFFECTED TENANTS BEFORE START OF WORK.

CODES AND STANDARDS

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE FOLLOWING CODES AS AMENDED BY THE MUNICIPALITY OF ANCHORAGE, TITLE 23:
 - INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION.
 - INTERNATIONAL EXISTING BUILDING CODE (IEBC), 2018 EDITION.
 - INTERNATIONAL MECHANICAL CODE (IMC), 2018 EDITION.
 - INTERNATIONAL FUEL GAS CODE (IFGC), 2018 EDITION.
 - INTERNATIONAL ENERGY CONSERVATION CODE (IECC), 2018 EDITION.
 - UNIFORM PLUMBING CODE (UPC), 2018 EDITION.
 - NATIONAL ELECTRICAL CODE (NEC), 2020 EDITION.
 - ALASKA STATUTES, TITLE 18, CHAPTER 60 - BOILER AND UNFIRED PRESSURE VESSELS.
- AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADA).
- UNIFORM FEDERAL ACCESSIBILITY STANDARDS (UFAS).

PERMITS

- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND FEES.

WARRANTY

- ALL WORK PERFORMED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM ACCEPTANCE.
- ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.

SALVAGE EQUIPMENT AND MATERIALS

- PRESENT ALL REMOVED EQUIPMENT AND MATERIALS TO THE OWNER. THE OWNER SHALL RETAIN THE RIGHT TO CLAIM ANY AND ALL SALVAGED EQUIPMENT AND MATERIALS.
- ANY ITEMS THAT ARE NOT CLAIMED BY THE OWNER ARE TO BE HAULED OFF AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

PRODUCTS

- ALL PRODUCTS SHALL BE NEW AND UNUSED UNLESS INDICATED AS EXISTING TO BE REUSED IN THE DRAWINGS, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND IN THE BEST PRACTICE OF THE CRAFT.
- PRODUCTS INDICATED TO BE REUSED SHALL BE PROTECTED AND PROPERLY STORED DURING CONSTRUCTION AND CLEANED BEFORE REINSTALLATION.
- ALL PRODUCTS SHALL BE ASBESTOS FREE AND LEAD FREE.
- OBTAIN OWNER'S APPROVAL OF ALL PRODUCTS PRIOR TO ORDERING OR INSTALLING ANY PART OF ANY SYSTEM.

PRODUCT SUBSTITUTIONS

- ALL EQUIPMENT LISTED IS REPRESENTATIVE OF THE STANDARD OF QUALITY AND PERFORMANCE REQUIRED.
- SUBSTITUTED EQUIPMENT, SUCH AS PUMPS AND FANS, SHALL BE SELECTED IN THE MIDDLE OF THE EQUIPMENT'S RECOMMENDED OPERATION RANGE TO ALLOW INCREASE OR DECREASE FIELD ADJUSTMENTS OF UNITS OPERATION IF NEEDED.
- "APPROVED EQUAL" SUBSTITUTIONS WILL BE CONSIDERED IF THE SUBSTITUTES ARE SHOWN TO BE OF EQUAL OR BETTER QUALITY, INCLUDING EFFICIENCY OF PERFORMANCE, SIZE AND WEIGHT.
- WHERE ACCEPTED SUBSTITUTED EQUIPMENT VARIES IN SIZE AND/OR CONFIGURATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CHANGES.

PRODUCT SUBMITTALS

- THE CONTRACTOR SHALL SUBMIT THE MECHANICAL SYSTEMS EQUIPMENT AND MATERIALS AS AN ELECTRONIC PDF FILE FOR REVIEW. THE SUBMITTAL PRODUCT DATA PDF SHALL BE ARRANGED IN BASIC CSI CATEGORIES AND BOOKMARKED SEPARATING CATEGORIES, EQUIPMENT, AND DRAWINGS UNDER BASIC CATEGORIES. THE PDF SHALL BE LIMITED ONLY TO PRODUCT DATA RELEVANT FOR REVIEW.
- THE PRODUCT DATA SHALL BE CLEARLY MARKED TO INDICATE THE PROPOSED PRODUCT.
- THE PRODUCT DATA SHALL CLEARLY IDENTIFY AND INDICATED VARIATIONS OR DEVIATIONS FROM SPECIFIED OR SCHEDULED EQUIPMENT INCLUDING DEVIATIONS FROM ANY REQUIRED SEQUENCE OF OPERATION.
- INCLUDE COLOR SELECTION CHARTS WITH PRODUCTS REQUIRING COLOR SELECTION.
- ALL PRODUCT DATA SHALL BE SUBMITTED AT ONE TIME. PARTIAL SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.
- PROVIDE A SUBMITTAL REGISTER FOR REVIEW AND APPROVAL AT START OF PROJECT.

OPERATION AND MAINTENANCE MANUAL

- PROVIDE THE OWNER WITH AN OPERATION AND MAINTENANCE MANUAL.
- INCLUDE MANUFACTURER'S SPECIFICATIONS, OPERATING AND MAINTENANCE INSTRUCTIONS, WARRANTY INFORMATION ON EACH PIECE OF EQUIPMENT, START-UP REPORTS, TESTING REPORTS, BALANCE REPORT, SCHEMATIC DIAGRAMS OF CONTROL SYSTEMS, A SOURCE OF SUPPLY FOR SPARE PARTS AND SERVICE, AND AS-BUILTS.

EQUIPMENT INSTALLATION

- INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDED SERVICE CLEARANCES.
- PROVIDE ALL MISCELLANEOUS MATERIALS, APPURTENANCES, ACCESSORIES, SUPPORTS, AND CONTROL CONNECTIONS AS REQUIRED FOR A COMPLETE AND OPERATING PIECE OF EQUIPMENT.

ACCESS

- PROVIDE WORKABLE ACCESS TO ALL SERVICEABLE AND/OR OPERABLE EQUIPMENT.
- PROVIDE ACCESS DOOR OF REQUIRED RATING FOR ACCESS TO ALL SERVICEABLE AND/OR OPERABLE EQUIPMENT LOCATED ABOVE HARD CEILINGS OR IN WALLS.

SUPPORTS AND ANCHORS

- PIPING AND EQUIPMENT SHALL BE ADEQUATELY SUPPORTED IN ACCORDANCE WITH CODE REQUIREMENTS, SEISMIC REQUIREMENTS AND GOOD PRACTICE.
- PIPING SUPPORTS SHALL BE CARBON STEEL, ADJUSTABLE SWIVEL HANGERS WITH THREADED ROD SUPPORT.
- INSULATED PIPING SHALL BE ROUTED THROUGH HANGERS AND PROVIDED WITH SHEET METAL INSULATION PROTECTION SADDLES.
- ALL SUPPORTS SHALL BE SECURED TO BUILDING STRUCTURAL ELEMENTS.
- EQUIPMENT CURBS SHALL BE PREMANUFACTURED OR CONTRACTOR FABRICATED WITH APPROPRIATE FLASHING IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S REQUIREMENTS.

SEISMIC RESTRAINT

- EQUIPMENT AND PIPING SYSTEMS SHALL BE SEISMICALLY RESTRAINED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AND ASCE 7-10, CHAPTER 13, AND THE MUNICIPALITY OF ANCHORAGE REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE STRUCTURAL ENGINEERING CALCULATIONS AND SHOP DRAWINGS OF THE PROPOSED RESTRAINT SYSTEMS FOR REVIEW AND APPROVAL BASED ON ACTUAL EQUIPMENT AND ACTUAL PIPING LAYOUT TO BE USED ON THE PROJECT TO THE MUNICIPALITY OF ANCHORAGE AS A DEFERRED SUBMITTAL.

MECHANICAL IDENTIFICATION

- PIPING SHALL BE PROVIDED WITH IDENTIFICATION.
- EQUIPMENT IN MECHANICAL SPACES, NORMALLY NON-OCCUPIED SPACES OR CONCEALED IN NORMALLY OCCUPIED SPACES SHALL BE PROVIDED WITH IDENTIFICATION.
- EQUIPMENT SHALL BE LABELED WITH HEAT RESISTANT LAMINATED THREE LAYER PLASTIC NAMEPLATES. PROVIDE WITH ENGRAVED BLACK LETTERS ON LIGHT CONTRASTING BACKGROUND COLOR.

PIPING

- ABOVEGROUND SANITARY WASTE AND VENT PIPING SHALL BE ASTM A888/CISPI 301 NO-HUB CAST IRON, ASTM B306 COPPER DWV, ASTM D2661 ABS DWV OR ASTM D2665 SOLID WALL PVC DWV. SLOPE PIPING AT A MINIMUM OF 1/4" PER FOOT UNLESS OTHERWISE NOTED. NO EXPOSED PLASTIC PIPING ALLOWED IN FINISHED AREAS OR WITHIN CABINetry.
- ABOVEGROUND DOMESTIC WATER PIPING SHALL BE ASTM B88 TYPE L COPPER, HARD DRAWN. JOINTS FOR COPPER PIPES SHALL BE SOLDERED ASTM B32 95-5 TA OR LEAD-FREE OR BRAZED ANSIAIWS A5.8 BCUP. PROGRESS STYLE FITTINGS/JOINTS ALLOWED. PIPING SHALL COMPLY WITH ANSINSF 61 AS SUITABLE FOR POTABLE WATER USE.
- PROVIDE NSF 61 AND UPC CERTIFIED BRAIDED STAINLESS STEEL FLEXIBLE PIPING FOR FINAL CONNECTIONS AT FAUCETS, APPLIANCES, ETC. LENGTH AS REQUIRED.
- HEATING WATER/GLYCOL PIPING SHALL BE ASTM B88 TYPE L COPPER FOR SIZES 3" AND SMALLER AND ASTM A53 SCHEDULE 40 STEEL FOR SIZES 4" AND LARGER. JOINTS FOR COPPER PIPING SHALL BE SOLDERED ASTM B32 95-5 TA OR LEAD-FREE OR BRAZED ANSIAIWS A5.8 BCUP AND FOR STEEL PIPING SCHEDULE 40 STEEL WELDED FITTINGS. PROGRESS STYLE FITTINGS/JOINTS ALLOWED. VICTAULIC NOT ALLOWED.
- ABOVEGROUND NATURAL GAS PIPING SHALL BE ASTM A53 SCHEDULE 40 STEEL. THREADED FITTINGS FOR LOW PRESSURE OR VIEGA MEGAPRESS-G SYSTEM. WELDED FITTINGS FOR MEDIUM PRESSURE OR VIEGA MEGAPRESS-G SYSTEM.
- ROUTE PIPES PARALLEL WITH BUILDING LINES UNLESS OTHERWISE INDICATED. CONCEAL ALL PIPING IN FINISHED AREAS UNLESS AUTHORIZED BY OWNER.
- PROVIDE CHROME PLATED SPRING CLIP TYPE ESCUTCHEON PLATES AT EXPOSED WALL, FLOOR AND CEILING PIPE PENETRATIONS AND AT PENETRATIONS WITHIN CABINETS.
- PROVIDE DIELECTRIC UNIONS OR NIPPLES AT PIPING JOINTS BETWEEN DISSIMILAR METALS.

VALVES

- ISOLATION VALVES SHALL BE BALL VALVES OR BUTTERFLY VALVES. GATE VALVES AND GLOBE VALVES ARE NOT ACCEPTABLE.
- ISOLATION VALVES SHALL BE FULL LINE SIZE AND FULL PORT.
- VALVES FOR DOMESTIC WATER SYSTEMS SHALL MEET LOW-LEAD CODES AND REGULATIONS.
- STOPS AT FIXTURES SHALL BE LOW LEAD BRASS BODY AND STEM, CHROME PLATED, QUARTER TURN, STRAIGHT OR ANGLED.
- VALVES FOR GAS SERVICE SHALL BE CSA/ANSI Z21.15-21 / CSA 9.1:21 APPROVED.
- BALANCE VALVES SHALL BE B&G CIRCUIT SETTER OR APPROVED EQUAL. BALANCING VALVES ON DOMESTIC WATER SYSTEMS SHALL BE LOW LEAD, NSF-61.
- CONTROL VALVES SHALL BE BRONZE BODY AND SEAT WITH STAINLESS STEEL STEM AND SCREWED ENDS. ANSI CLASS 250 BODY. SUITABLE FOR FLUID TEMPERATURES OF UP TO 300°F. CONTROL VALVES SHALL BE CORRECTLY SELECTED FOR SERVICE AND FLOW OF THE SYSTEM SERVED. A PRESSURE DROP OF 3 PSI SHALL BE USED FOR SIZING OF MODULATING VALVES. TWO POSITION SHUTOFF VALVES SHALL BE LINE SIZE AND FULL PORT. PROVIDE ELECTRONIC ACTUATORS WITH SUFFICIENT CLOSE-OFF PRESSURE TO CLOSE VALVE AGAINST SYSTEM PUMP PRESSURE.
- PROVIDE GAS ISOLATION VALVES AT EACH GAS APPLIANCE.
- PROVIDE BALANCE VALVES AT PUMPS, TERMINAL HEATING UNITS AND WHERE INDICATED ON DRAWINGS. INSTALL PER MANUFACTURER'S REQUIREMENTS.
- PRESSURE GAUGES SHALL MEET ASME B40.1 GRADE 1A WITH METAL CASING, BLACK SCALE ON WHITE BACKGROUND AND PSI SCALE. THE INDICATION RANGE SHALL BE SUITABLE FOR APPLICATION.

PLUMBING

- PLUMBING EQUIPMENT SHALL BE COMMERCIAL GRADE WITH MANUFACTURER AND MODEL AS INDICATED ON THE EQUIPMENT SCHEDULES OR APPROVED EQUAL.
- PLUMBING FIXTURES SHALL BE COMMERCIAL GRADE WITH MANUFACTURER AND MODEL AS INDICATED ON THE PLUMBING FIXTURE SCHEDULE OR APPROVED EQUAL.
- COORDINATE WITH ARCHITECTURAL PLANS AND ELEVATIONS, CODE REQUIREMENTS AND MANUFACTURER'S INSTALLATION REQUIREMENTS FOR THE FINAL PLUMBING FIXTURE AND TRIM LOCATIONS.
- PLUMBING FIXTURES WITH A LEFT-HAND OR RIGHT-HAND CONFIGURATION OPTION SHALL BE COORDINATED WITH THE PLANS.
- ADA ACCESSIBLE LAVATORY'S AND SINKS P-TRAP, ANGLE STOPS, COLD AND HOT WATER PIPING SHALL BE PROVIDED WITH A PREMANUFACTURED SAFETY COVER SYSTEM AND IN ACCORDANCE WITH REQUIREMENTS OF ADA 4.19.4, AND THE UPC. TRUEBRO OR APPROVED EQUAL.

HEATING

- HEATING EQUIPMENT SHALL BE COMMERCIAL GRADE WITH MANUFACTURER AND MODEL AS INDICATED ON THE EQUIPMENT SCHEDULES OR APPROVED EQUAL.
 - AUTOMATIC AIR VENTS SHALL BE PROVIDED AT ALL HIGH POINTS OF THE PIPING SYSTEM, HEATING COILS, UNIT HEATERS AND FAN COIL UNITS. MANUAL AIR VENTS SHALL BE PROVIDED AT BASEBOARD.
 - LOW POINT DRAINS SHALL BE PROVIDED AT ALL LOW POINTS OF THE PIPING SYSTEMS.
 - VENTING PER EQUIPMENT MANUFACTURER'S INSTRUCTIONS. FLUE PIPING SHALL BE LISTED FOR USE WITH CATEGORY IV CONDENSING APPLIANCES AND AS APPROVED BY EQUIPMENT MANUFACTURER EXCEPT FOR PVC. PVC FOR FLUE VENTING NOT ALLOWED.
- GLYCOL**
- FOR HYDRONIC HEATING SYSTEMS PROVIDE PRE-MIXED HYDRONIC GRADE PROPYLENE GLYCOL WITH INHIBITORS AT A RATE OF 50% GLYCOL TO 50% WATER FOR A 28°F FREEZE PROTECTION / 50°F BURST PROTECTION OR BETTER. DOWFROST HD OR APPROVED EQUAL.
 - TEST GLYCOL AT PROJECT COMPLETION. TESTING SHALL BE BY THE GLYCOL MANUFACTURER OR AN INDEPENDENT TESTING FACILITY APPROVED BY THE GLYCOL MANUFACTURER. PROVIDE ANY CORRECTIVE ACTIONS RECOMMENDED BY THE TESTING AND RETEST. SUBMIT ALL TEST REPORT(S) TO THE OWNER AND PROVIDE A RECOMMENDED TESTING SCHEDULE FOR THE OWNER TO FOLLOW.

VENTILATION

- VENTILATION SYSTEM SHALL BE PROTECTED DURING CONSTRUCTION PER SMACNA RECOMMENDATIONS. DUCT OPENINGS SHALL BE COVERED DURING CONSTRUCTION TO PREVENT THE ENTRANCE OF DUST AND DEBRIS.
- VENTILATION EQUIPMENT SHALL BE COMMERCIAL GRADE WITH MANUFACTURER AND MODEL AS INDICATED ON THE EQUIPMENT SCHEDULES OR APPROVED EQUAL.
- DUCTWORK SHALL BE CONSTRUCTED, INSTALLED, AND TESTED IN ACCORDANCE WITH SMACNA STANDARDS. APPLY DUCT MASTIC AT DUCT CONNECTIONS, PLENUM EDGES AND CORNERS.
- DUCTWORK SHALL BE GALVANIZED SHEET METAL, RECTANGULAR OR ROUND AS INDICATED ON PLANS.

INSULATION

- ALL INSULATION INSTALLED INSIDE THE BUILDING SHALL HAVE 25 OR LESS FLAME SPREAD, 50 OR LESS SMOKE DEVELOPED RATING.
- FIBERGLASS PIPING INSULATION, ASTM C547, SHALL HAVE A MAXIMUM K VALUE OF 0.23 AT 75°F MEAN TEMPERATURE, ASTM C1045.
- FLEXIBLE FIBERGLASS DUCT INSULATION, ASTM C553, SHALL HAVE A MAXIMUM K VALUE OF 0.29 AT 75°F MEAN TEMPERATURE, ASTM C518.
- ABOVEGROUND DOMESTIC COLD WATER, HOT WATER AND HOT WATER CIRCULATING PIPING SHALL BE INSULATED WITH PRE-FORMED FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER ALL SERVICE JACKET AND PREMANUFACTURED PLASTIC FITTING INSULATION. MECHANICAL AND SIMILAR ROOMS SHALL BE INSULATED WITH PRE-FORMED FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER AND CANVAS JACKET TO A POINT 8" AFF.
 - 1/2" INSULATION THICKNESS FOR COLD WATER PIPE 1-1/4" AND SMALLER.
 - 1-1/2" INSULATION THICKNESS FOR COLD WATER PIPE 1-1/2" AND LARGER.
 - 1" INSULATION THICKNESS FOR HOT WATER PIPE 1-1/4" AND SMALLER.
 - 1-1/2" INSULATION THICKNESS FOR HOT WATER PIPE 1-1/2" AND LARGER.
- HEATING WATER/GLYCOL PIPING SHALL BE INSULATED WITH PRE-FORMED FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER ALL SERVICE JACKET AND SIMILAR ROOMS SHALL BE INSULATED WITH PRE-FORMED FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER AND CANVAS JACKET TO A POINT 8" AFF.
 - 1-1/2" INSULATION THICKNESS FOR PIPE 1-1/4" AND SMALLER.
 - 2" INSULATION THICKNESS FOR PIPE 1-1/2" AND LARGER.

CONTROLS

- EQUIPMENT REQUIRING DDC CONTROL WILL BE CONTROLLED BY THE BUILDING'S EXISTING CONTROL SYSTEM. DDC WORK SHALL BE BY THE OWNER'S PREFERRED DDC CONTRACTOR. COORDINATE WITH THE OWNER.
- ROOF TOP UNITS SHALL BE CONTROLLED VIA INTEGRAL CONTROLS. IF INTEGRAL CONTROLS NEED ACCESSORIES INSTALLED EXTERNAL OF THE ASSOCIATED EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSTALLATION ASPECTS OF THE ACCESSORIES. LOCATE CONTROLLERS AT EXISTING CONTROLLER LOCATIONS. FIELD VERIFY LOCATIONS.
- ROOF TOP SEQUENCE OF OPERATION SHALL MATCH EXISTING. COORDINATE WITH THE OWNER.

- PROVIDE A COMPLETE AND OPERATIONAL CONTROLS AS REQUIRED TO PROVIDE EQUIPMENT CONTROL AS SPECIFIED UNDER THE SEQUENCE OF OPERATIONS AND AS NOTED ON THE SCHEDULES.
- THE DDC SYSTEM SHALL HAVE APPROPRIATE SYSTEM GRAPHICS OR MODIFIED/UPDATED SYSTEM GRAPHICS FOR WORK PERFORMED WITH THIS PROJECT.
- ALL LABOR, MATERIALS, EQUIPMENT, POWER, WIRING, CONDUIT, CONTROLLERS, THERMOSTATS, ACTUATORS, TRANSFORMERS, AND ASSOCIATED CONTROL COMPONENTS FOR A COMPLETE AND OPERATIONAL SYSTEM.
- ALL CONTROL WIRING ABOVE 24V SHALL BE ROUTED IN CONDUIT. 24V AND LESS CONTROL WIRING ABOVE HARD OR OTHERWISE INACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. 24V AND LESS CONTROL WIRING NOT IN CONDUIT SHALL BE PLENUM RATED.
- THERMOSTATS FOR RESIDENTIAL UNITS SHALL BE PROGRAMMABLE, LOW VOLTAGE, HEATING ONLY WITH DIGITAL DISPLAY. HONEYWELL PRO 2000 OR EQUAL.
- THERMOSTATS FOR PUBLIC SPACES SHALL BE PROGRAMMABLE, LOW VOLTAGE, HEATING ONLY WITH DIGITAL DISPLAY. HONEYWELL PRO 2000 OR EQUAL. PROVIDE LOCKING COVER.

TEST AND START-UP

- TEST ALL REMODELED PLUMBING PIPING SYSTEMS IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE.
- TEST ALL REMODELED GAS PIPING SYSTEMS IN ACCORDANCE WITH THE INTERNATIONAL FUEL GAS CODE.
- TEST ALL REMODELED HYDRONIC PIPING SYSTEMS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE.
- FLUSH AND DISINFECT THE DOMESTIC POTABLE WATER PIPING SYSTEMS IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE.
- FLUSH AND CLEAN HYDRONIC PIPING SYSTEMS IN ACCORDANCE WITH GLYCOL MANUFACTURER'S REQUIREMENTS, WATER TREATMENT RECOMMENDATIONS AND GOOD PRACTICE.
- PROVIDE BOILER START-UP WITH THE SERVICES OF THE BOILER MANUFACTURER'S AUTHORIZED REPRESENTATIVE. PERFORM PROCEDURES AND TESTS REQUIRED BY THE MANUFACTURER AND PROVIDE THE OWNER WITH A COPY OF THE START-UP REPORT AT END OF PROJECT.

TESTING, ADJUSTING, AND BALANCING (TAB)

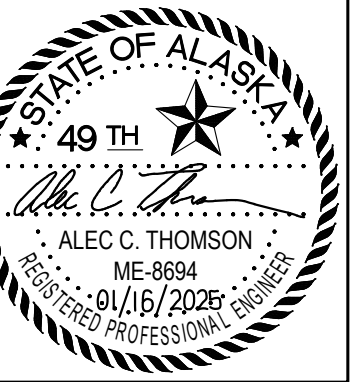
- TEST, ADJUST, AND BALANCE THE AIR SYSTEMS IN AREAS OF REMODEL. BALANCE EXHAUST FANS WHEN AFTER ALL FANS HAVE BEEN REPLACED. COORDINATE WITH OWNER FOR BALANCING TAKING PLACE IN RESIDENTIAL UNITS.
- TEST, ADJUST, AND BALANCE THE ENTIRE HYDRONIC SYSTEMS. BALANCE PUMPS WHEN PUMPS ARE INSTALLED. BALANCE TERMINAL UNITS WHEN AFTER ALL TERMINAL UNITS HAVE BEEN REPLACED AND REBALANCE PUMPS WITH THIS EFFORT. COORDINATE WITH OWNER FOR BALANCING TAKING PLACE IN RESIDENTIAL UNITS.
- AIR AND HYDRONIC FLOWS ARE TO BE BALANCED TO WITHIN +/-10% OF DESIGN VALUES. BALANCING PROCEDURES SHALL BE IN ACCORDANCE WITH NEBB OR AABC REQUIREMENTS.
- PRIOR TO START OF TAB, VERIFY THE SYSTEMS AND EQUIPMENT ARE READY FOR THIS WORK.
- CORRECT ANY AIR AND/OR HYDRONIC DEFICIENCIES FOUND DURING INITIAL TESTING PRIOR TO FINAL TESTING.
- NOTIFY THE ENGINEER OF ANY PROBLEMS ENCOUNTERED DURING THE BALANCING PROCEDURE.
- PERMANENTLY MARK THE FINAL SETTING OF VALVES, DAMPERS AND OTHER ADJUSTMENT DEVICES.
- COMPLETE AND SUBMIT NEBB OR AABC OR SIMILAR TEST REPORT FORMS AT CONCLUSION OF TAB FOR REVIEW AND APPROVAL. REPORT SHALL INCLUDE A "% OF DESIGN" VALUE FOR EACH AIR AND HYDRONIC DEVICE BALANCED.

RECORD DRAWINGS

- MAINTAIN ACCURATE PROJECT RECORD DRAWINGS INDICATING ALL FIELD CHANGES IN RED INK FROM THE ORIGINAL PLANS MADE DURING INSTALLATION OF WORK.
- SUBMIT RECORD DRAWINGS TO OWNER AT COMPLETION OF PROJECT.

TRAINING

- PROVIDE ON-SITE INSTRUCTION FOR THE OWNER'S PERSONNEL IN THE OPERATION, CARE AND MAINTENANCE OF ALL SYSTEMS AND EQUIPMENT.



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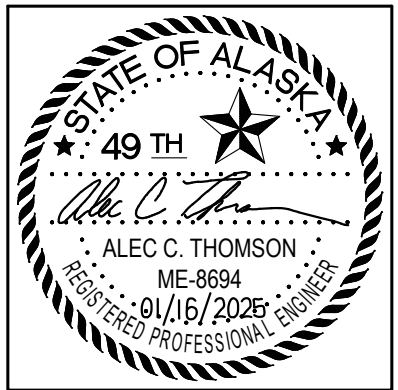
REVISION SCHEDULE

#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DRAWN	2026.01.16
REVIEWED	MDP
	ACT

SHEET NAME
MECHANICAL SPECIFICATIONS

SHEET NO.
M0.03



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COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO. 2025.119.0
 DATE 2026.01.16
 DRAWN MDP
 REVIEWED ACT

SHEET NAME
 BASEMENT
 PLUMBING PLAN
 AREA A

SHEET NO.
M1.01

SHEET NOTES

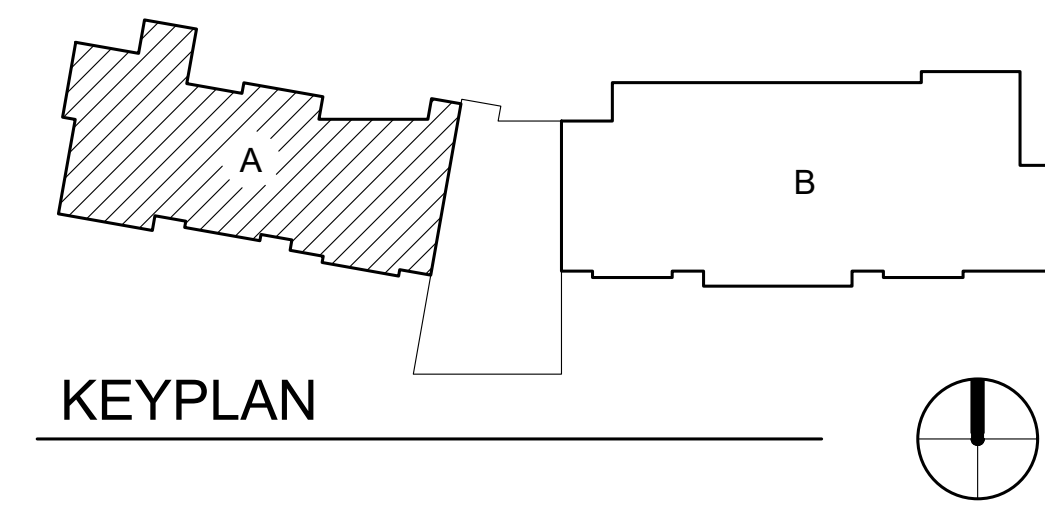
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- BRANCH PIPING TO INDIVIDUAL PLUMBING FIXTURES SHALL EQUAL THE SIZE INDICATED ON THE PLUMBING FIXTURE SCHEDULE UNLESS OTHERWISE INDICATED.
- PROVIDE CLEANOUT ON ALL INDIVIDUAL SINK RISERS.
- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

KEY NOTES

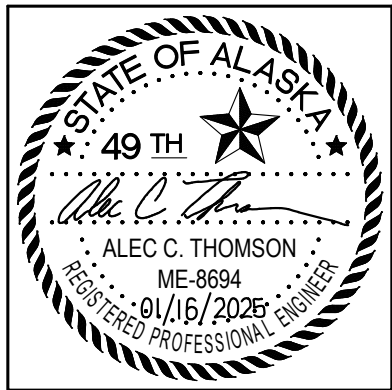
- REMOVE AND REPLACE EXISTING TENANT UNIT PLUMBING FIXTURES. PROVIDE / MODIFY PIPING AS REQUIRED FOR RECONNECTIONS. CONTRACTOR TO FIELD VERIFY EXISTING INTERIOR DIMENSIONS PRIOR TO FINAL BATH TUB SELECTION.
- REMOVE AND REPLACE EXISTING COMMON AREA PLUMBING FIXTURES. PROVIDE / MODIFY PIPING AS REQUIRED FOR RECONNECTIONS. CONTRACTOR TO FIELD VERIFY EXISTING INTERIOR DIMENSIONS PRIOR TO FINAL SINK SELECTION.



1 BASEMENT - PLUMBING PLAN - AREA A
 SCALE: 1/8" = 1'-0"



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 ANCHORAGE, ALASKA**

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SHEET NAME
 BASEMENT
 PLUMBING PLAN
 AREA B

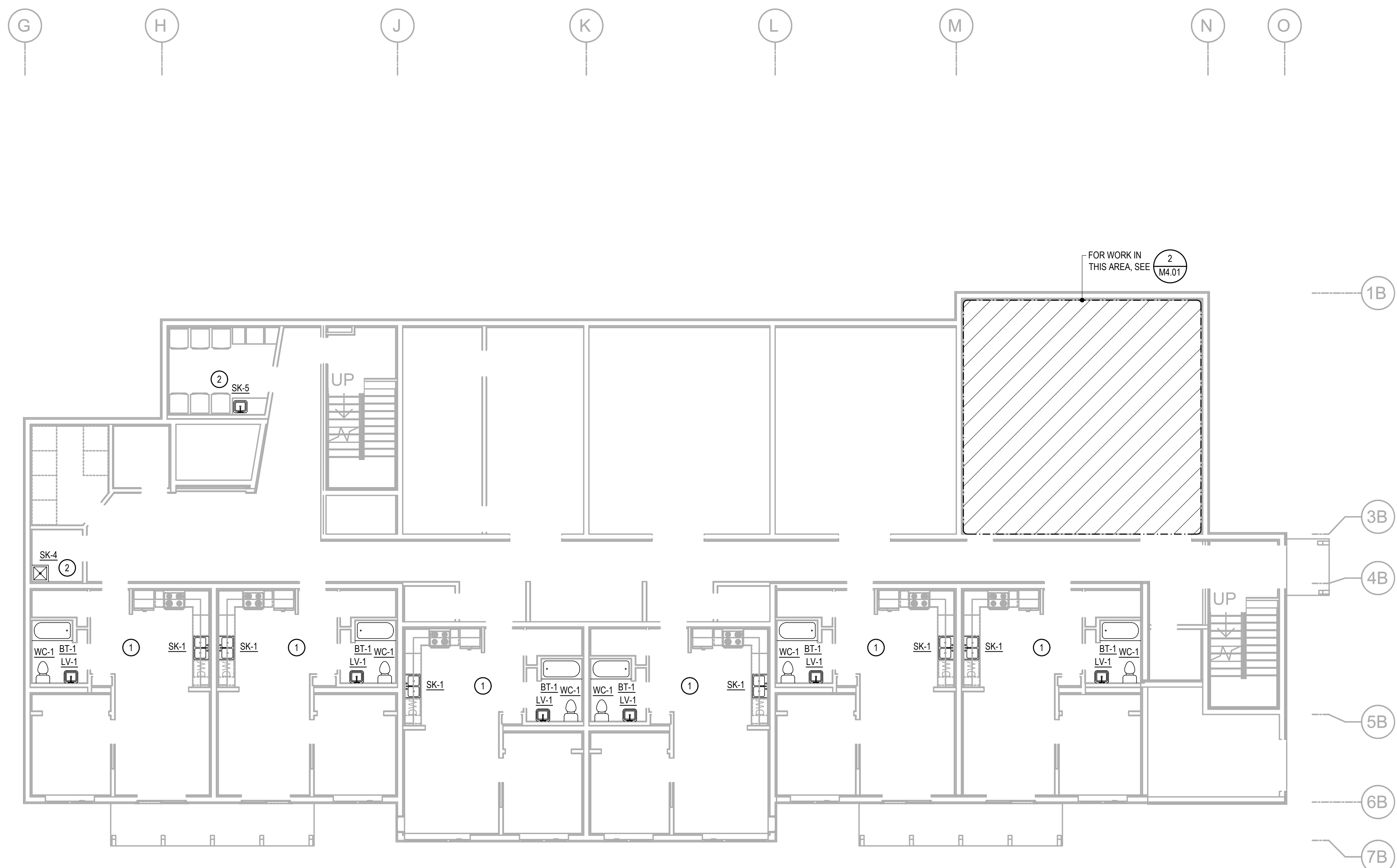
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M1.02

SHEET NOTES

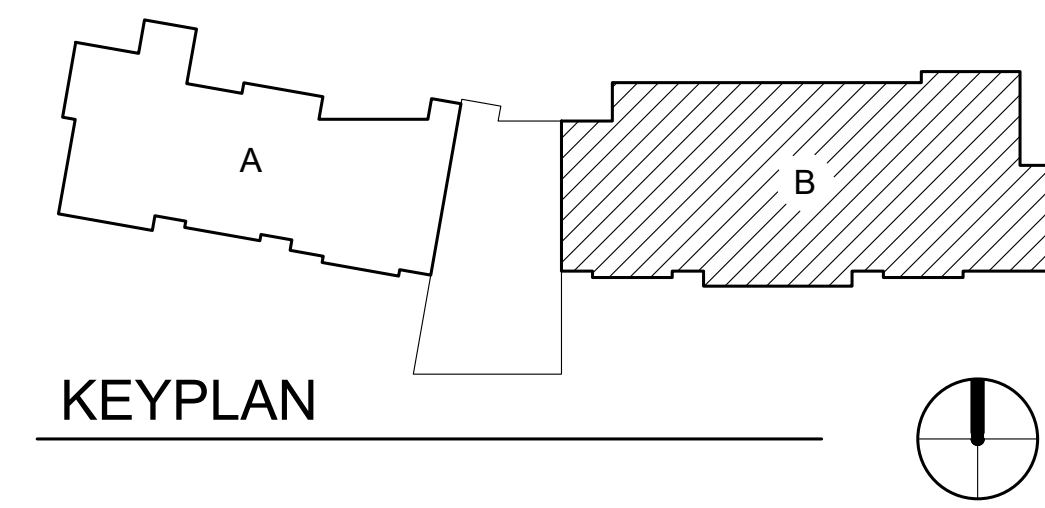
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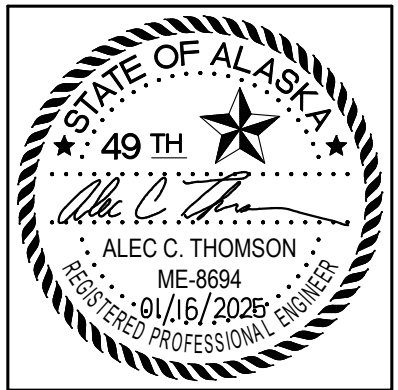
KEY NOTES

- REMOVE AND REPLACE EXISTING TENANT UNIT PLUMBING FIXTURES. PROVIDE / MODIFY PIPING AS REQUIRED FOR RECONNECTIONS. CONTRACTOR TO FIELD VERIFY EXISTING INTERIOR DIMENSIONS PRIOR TO FINAL BATH TUB SELECTION.
- REMOVE AND REPLACE EXISTING COMMON AREA PLUMBING FIXTURES. PROVIDE / MODIFY PIPING AS REQUIRED FOR RECONNECTIONS. CONTRACTOR TO FIELD VERIFY EXISTING INTERIOR DIMENSIONS PRIOR TO FINAL SINK SELECTION.



1 BASEMENT - PLUMBING PLAN - AREA B
 SCALE: 1/8" = 1'-0"





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 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
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JOB NO. 2025.119.0
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 REVIEWED ACT

SHEET NAME
 FIRST FLOOR
 PLUMBING PLAN
 AREA A

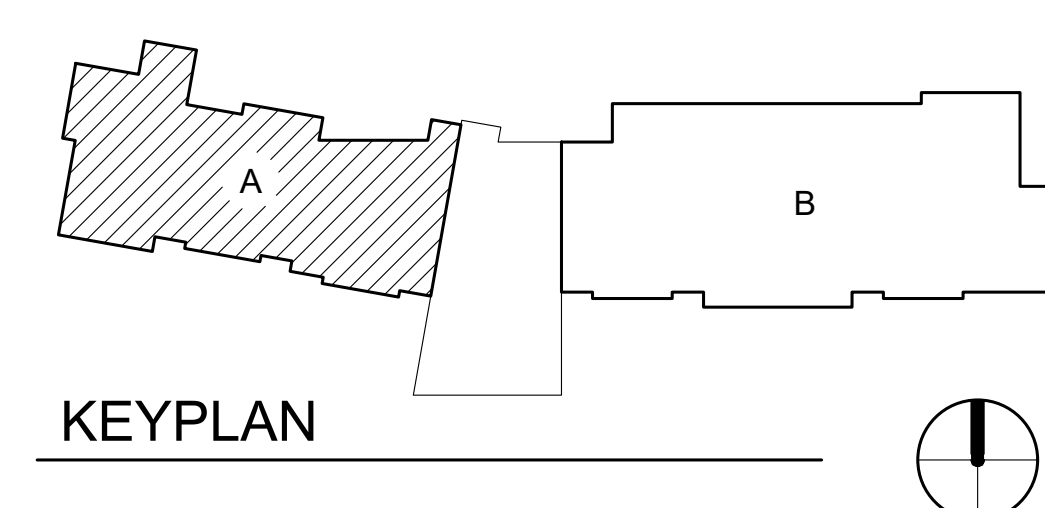
SHEET NO.
M1.03

SHEET NOTES

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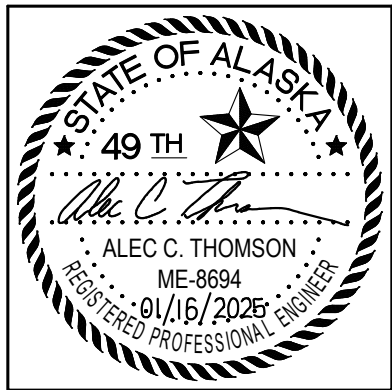
KEY NOTES

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- REMOVE AND REPLACE EXISTING DRINKING FOUNTAIN WITH BOTTLE FILLER, EWC-1. PROVIDE/MODIFY PIPING AS REQUIRED FOR RECONNECTIONS. CONTRACTOR TO FIELD VERIFY EXISTING INTERIOR DIMENSIONS PRIOR TO FINAL BOTTLE FILLER SELECTION.



1 FIRST FLOOR - PLUMBING PLAN - AREA A
 SCALE: 1/8" = 1'-0"

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 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
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JOB NO. 2025.119.0
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SHEET NAME
 FIRST FLOOR
 PLUMBING PLAN
 AREA B

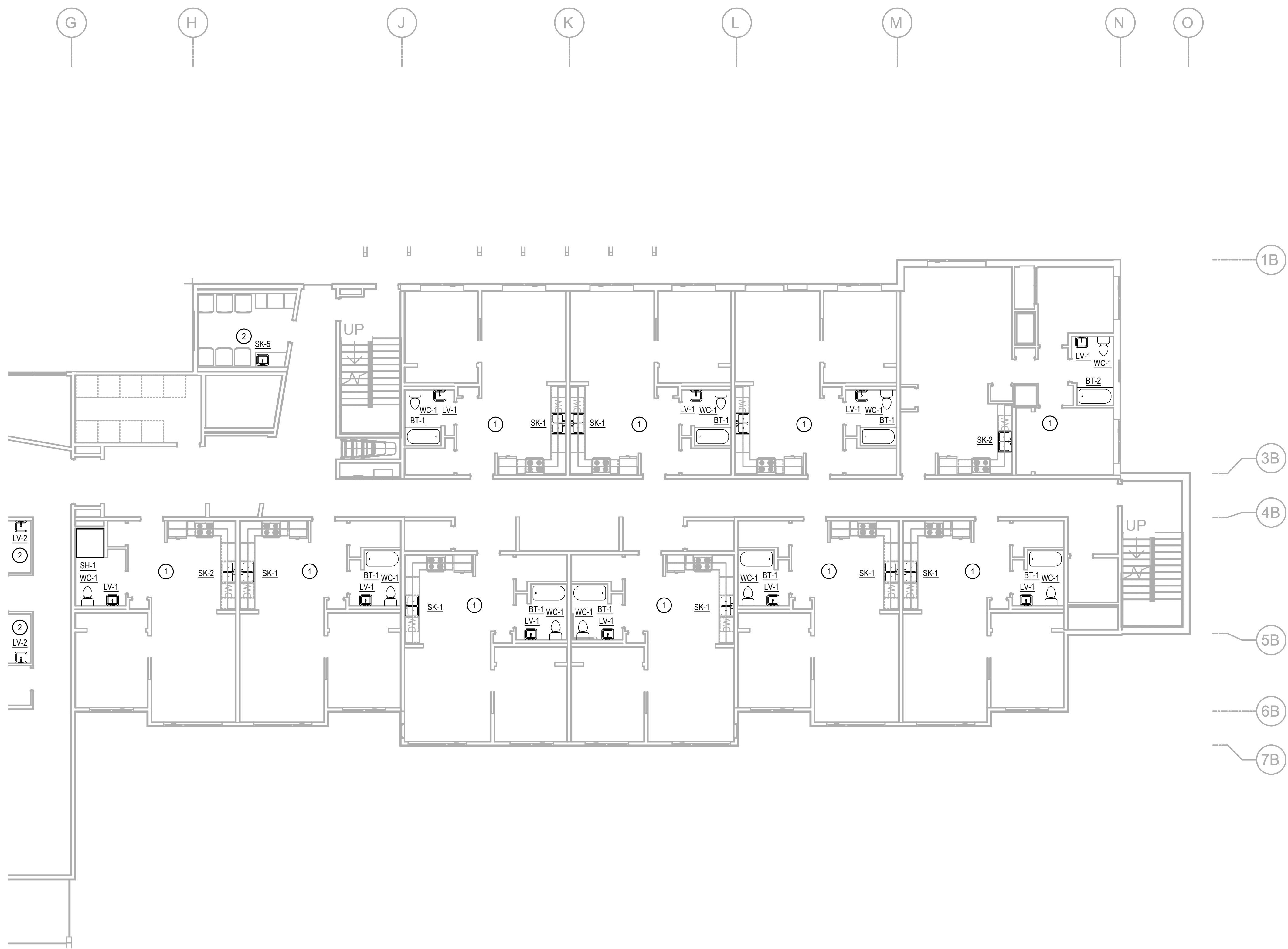
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M1.04

SHEET NOTES

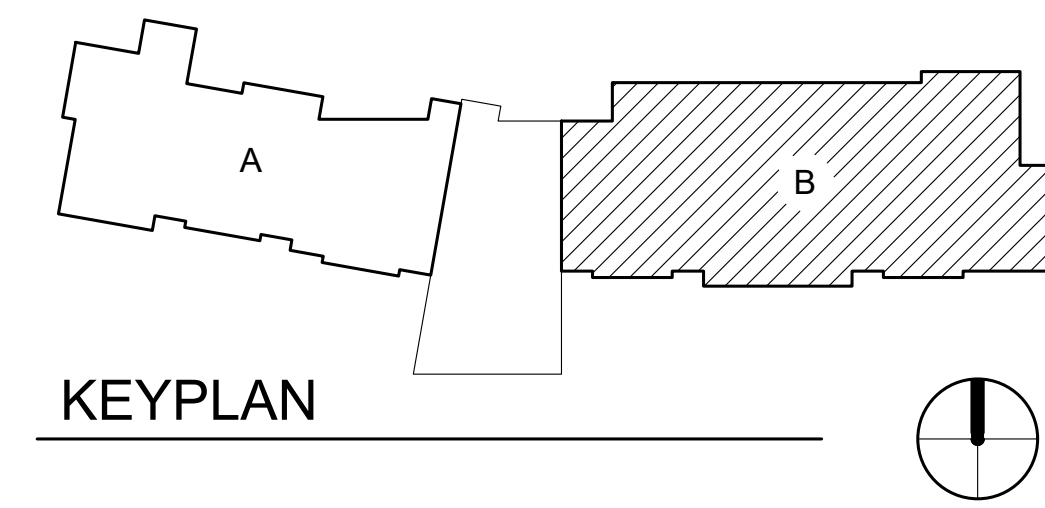
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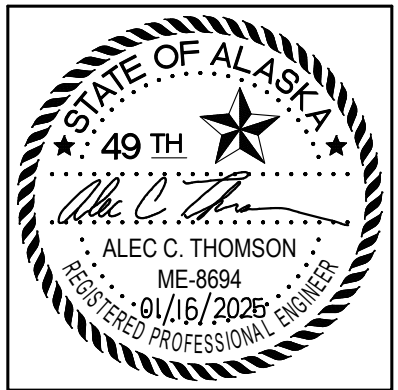
KEY NOTES

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1 FIRST FLOOR - PLUMBING PLAN - AREA B
 SCALE: 1/8" = 1'-0"





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 ANCHORAGE, ALASKA**

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KEY NOTES

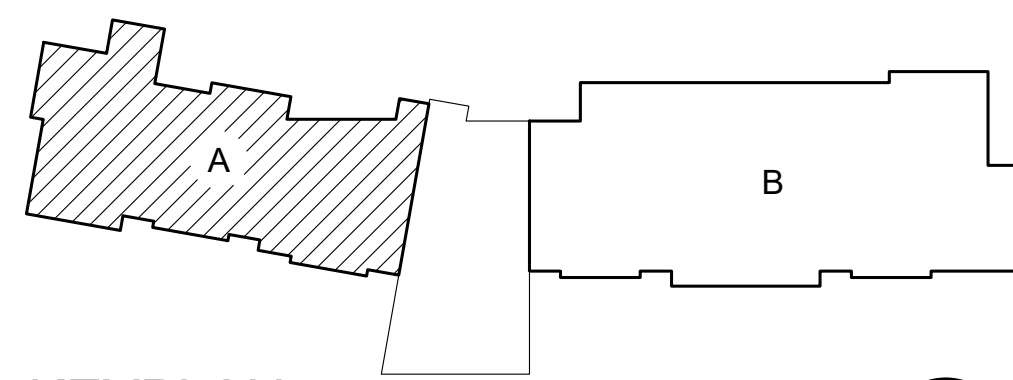
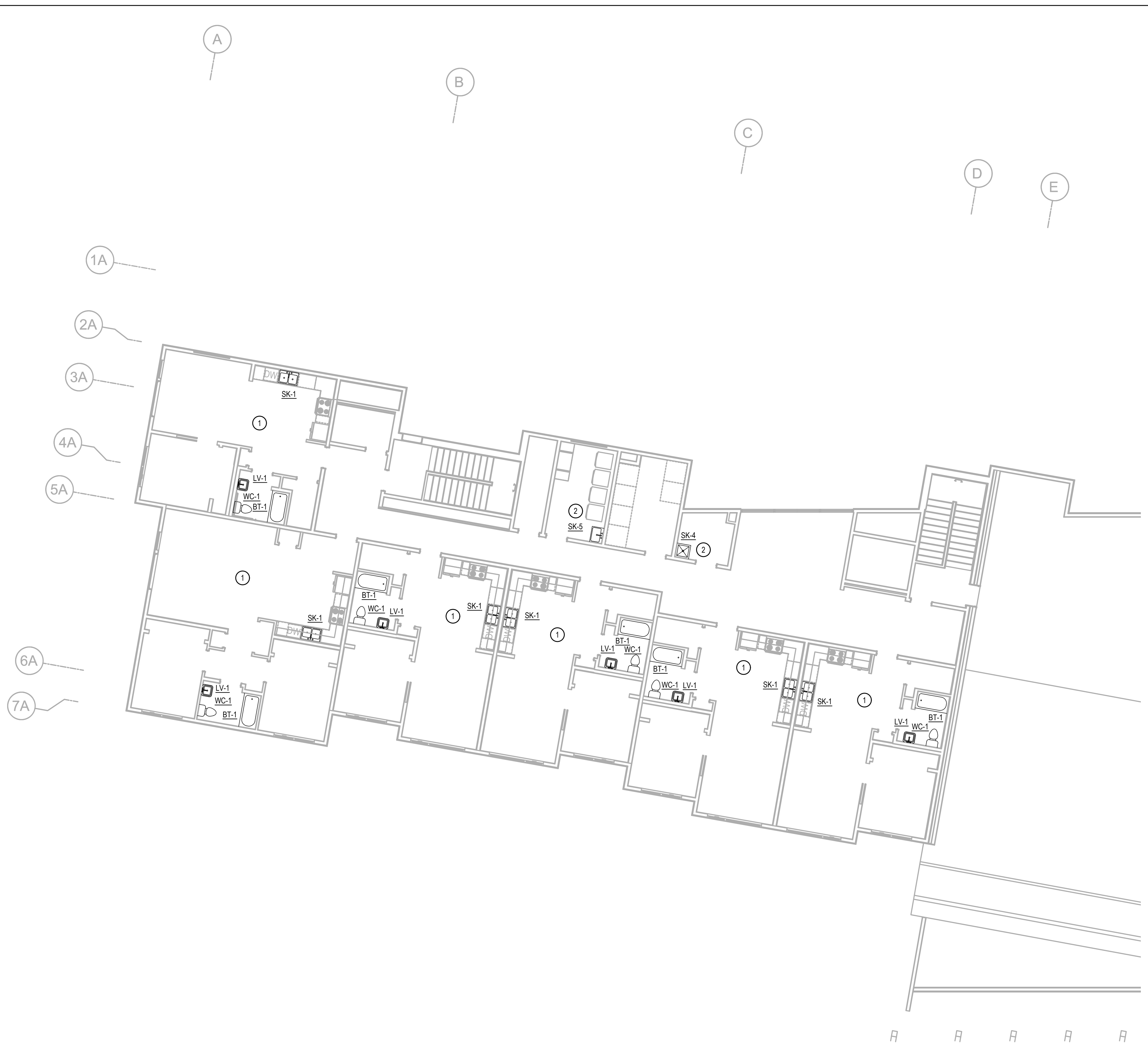
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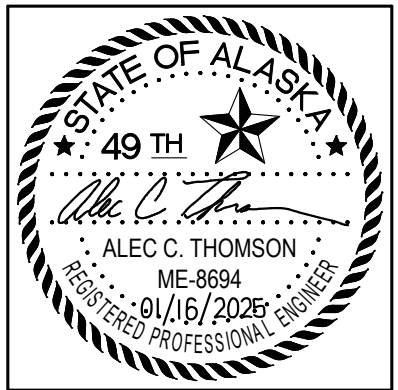
JOB NO.	2025.119.0
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DRAWN	MDP
REVIEWED	ACT

SHEET NAME
SECOND FLOOR
PLUMBING PLAN
AREA A

SHEET NO.
M1.05



1 SECOND FLOOR - PLUMBING PLAN - AREA A
SCALE: 1/8" = 1'-0"



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 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
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REVIEWED	ACT

SHEET NAME
 SECOND FLOOR
 PLUMBING PLAN
 AREA B

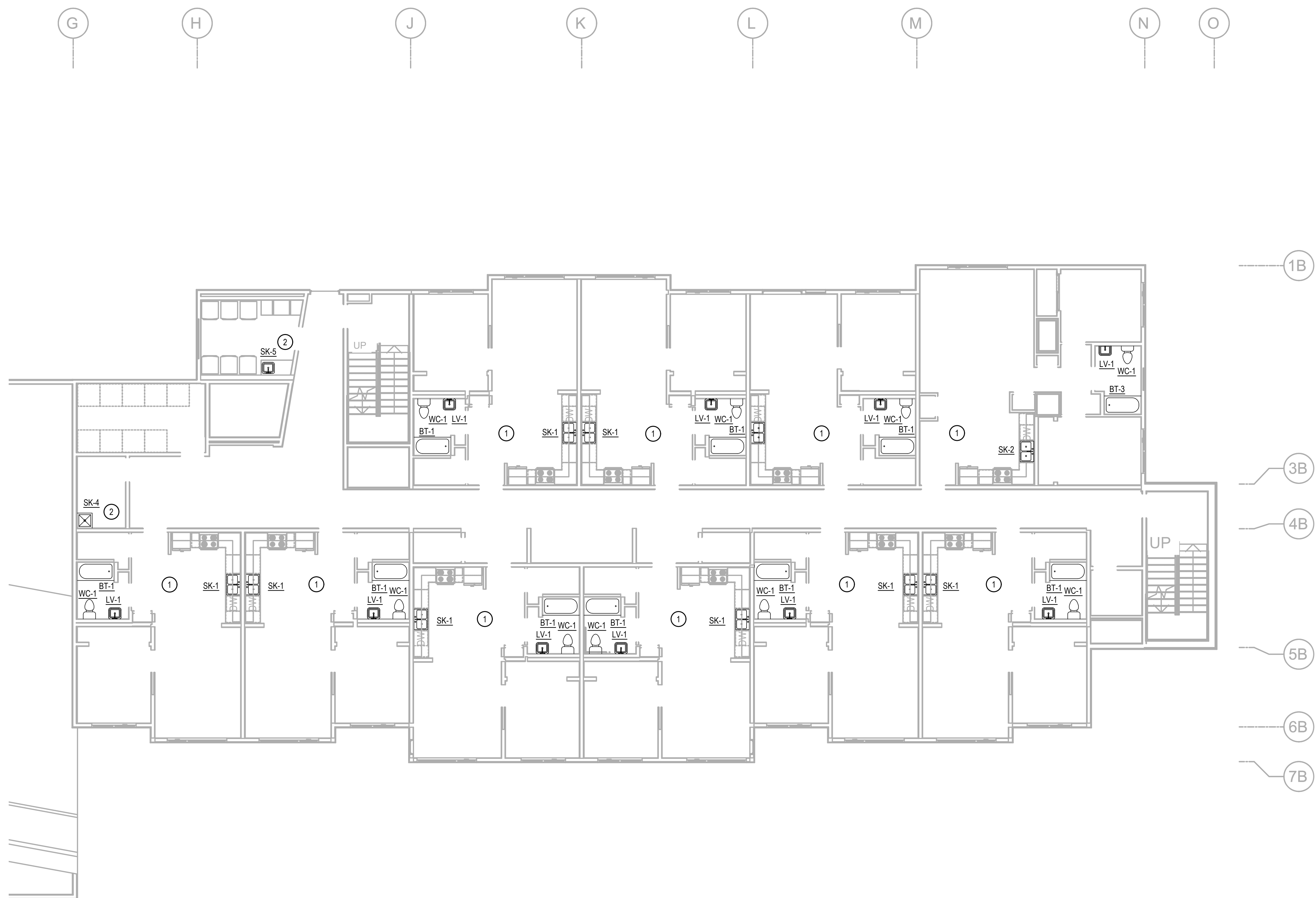
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M1.06

SHEET NOTES

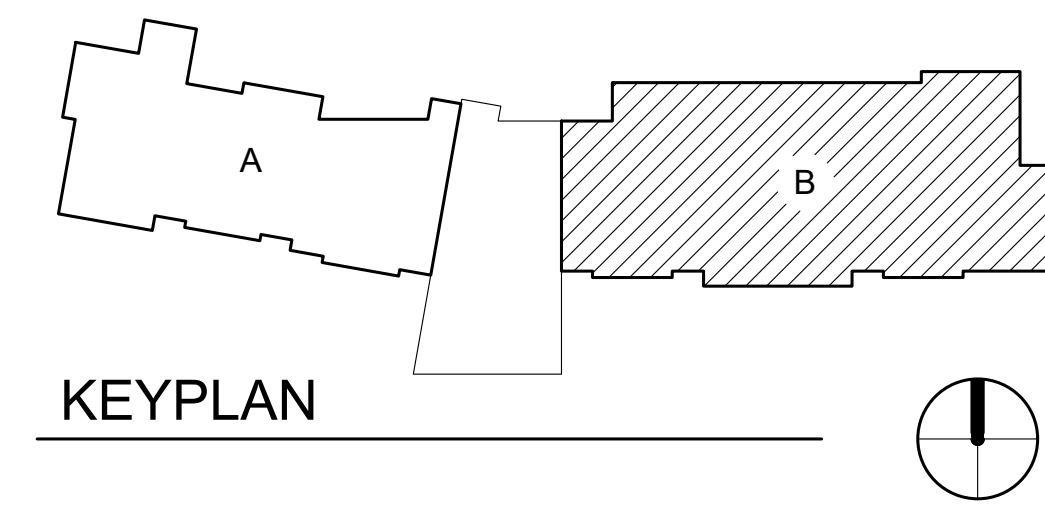
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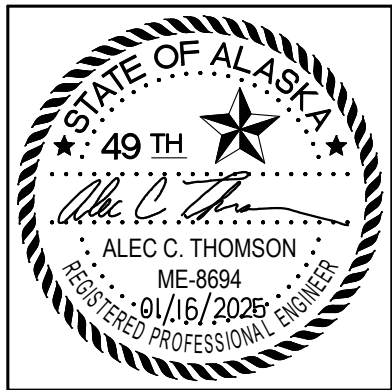
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1 SECOND FLOOR - PLUMBING PLAN - AREA B
 SCALE: 1/8" = 1'-0"





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 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
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 DRAWN MDP
 REVIEWED ACT

SHEET NAME
 THIRD FLOOR
 PLUMBING PLAN
 AREA B

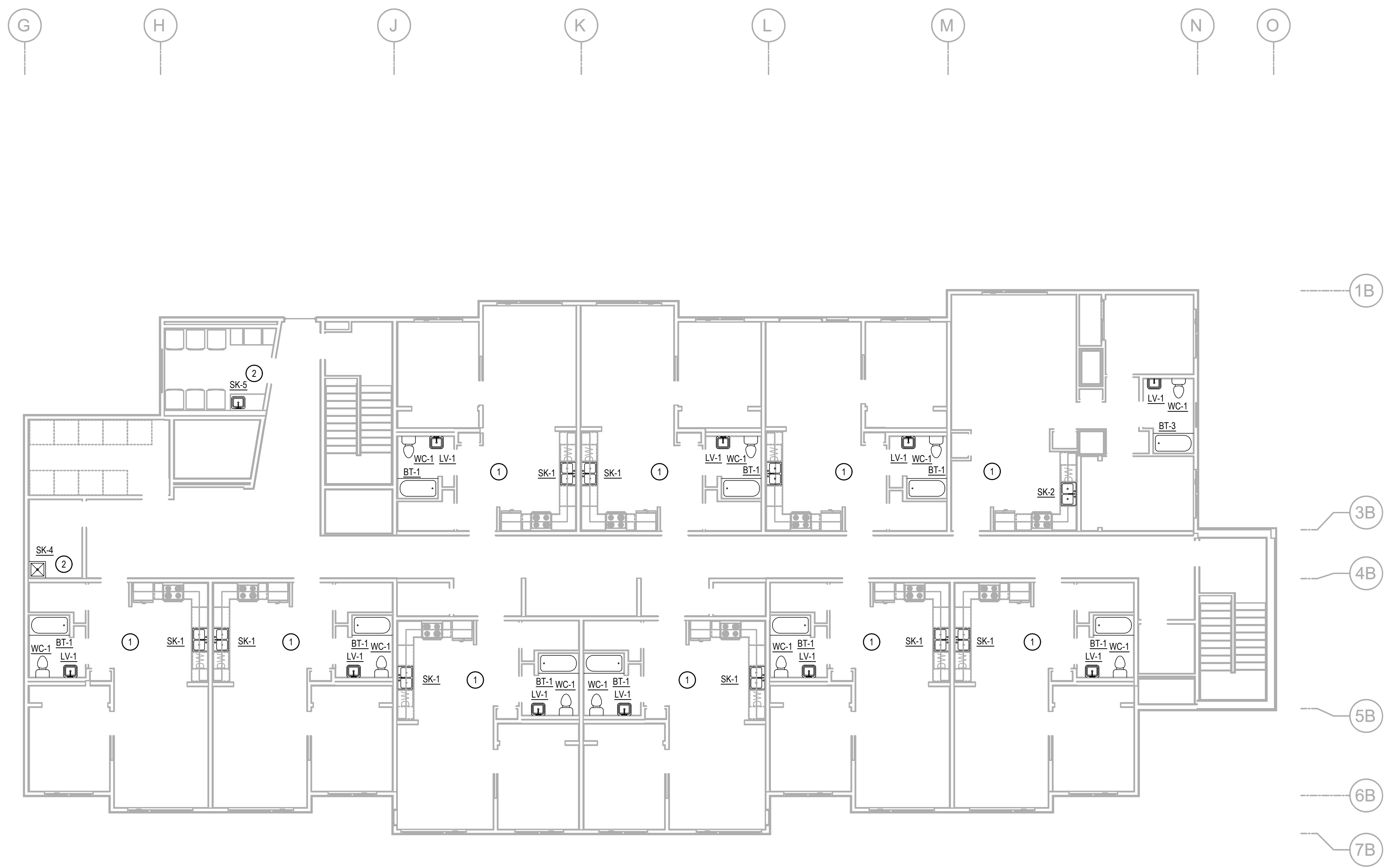
SHEET NO.
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SHEET NOTES

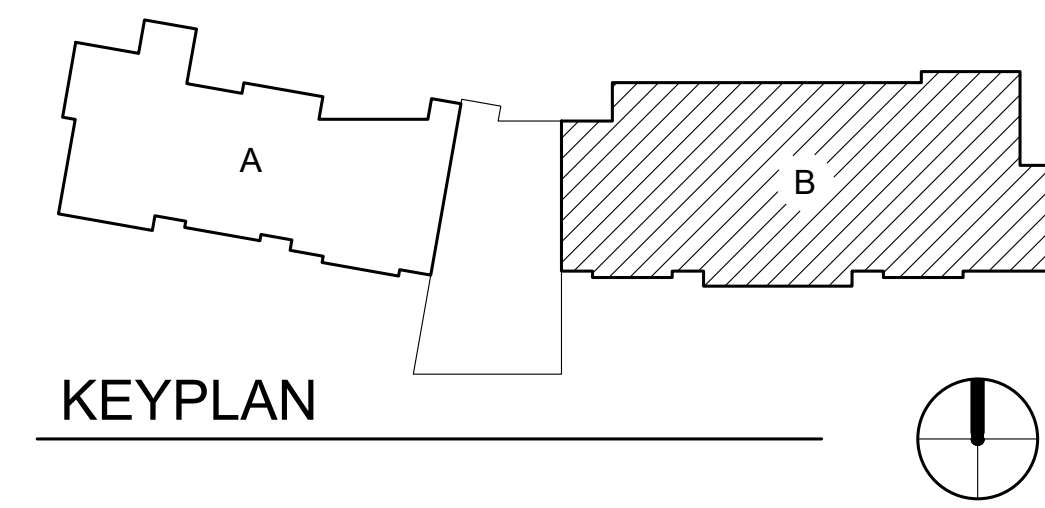
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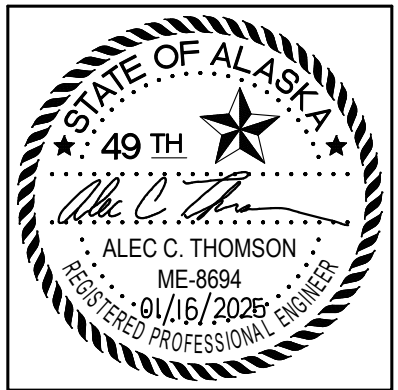
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1 THIRD FLOOR - PLUMBING PLAN - AREA B
 SCALE: 1/8" = 1'-0"





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REVISION SCHEDULE		
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DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
BASEMENT HVAC PLAN
AREA A

SHEET NO.
M2.01

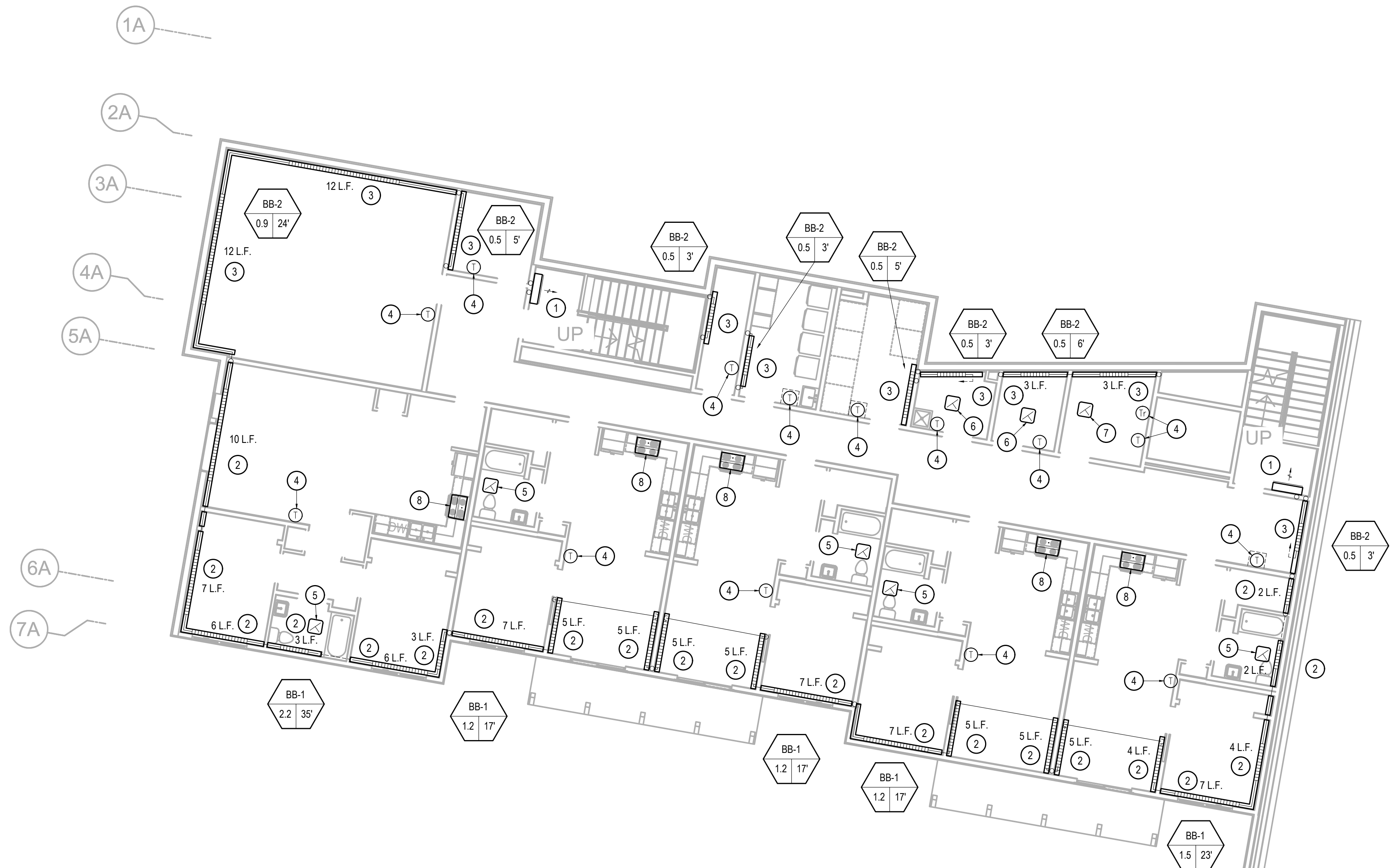
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- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

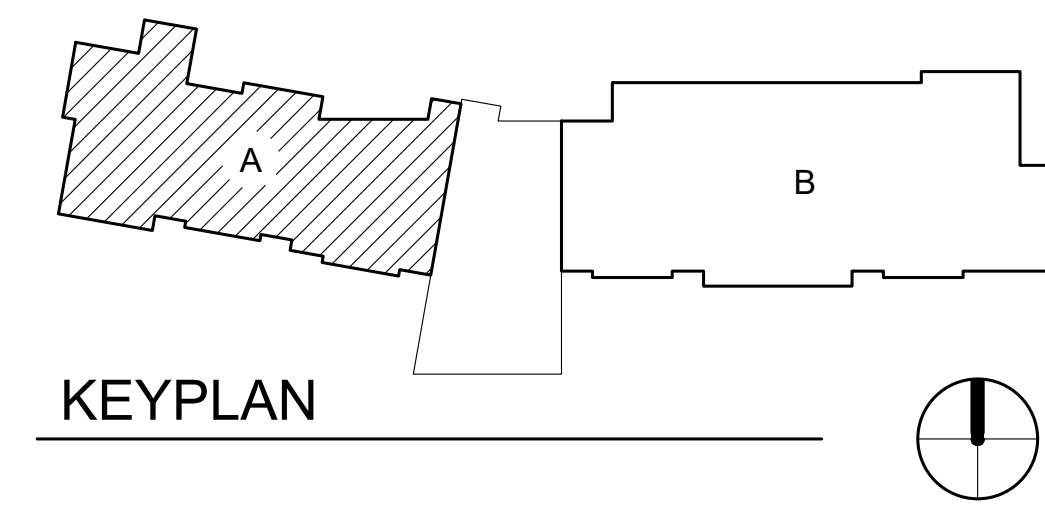
KEY NOTES

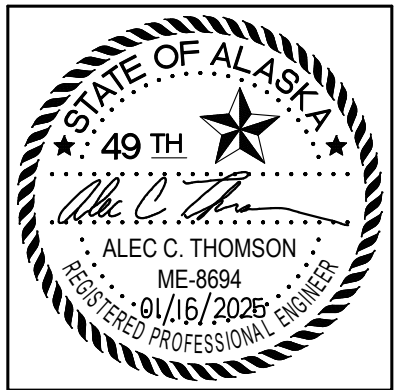
- REMOVE EXISTING CABINET UNIT HEATER. REPLACE WITH CUH-1. SEE DETAIL 5/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2/M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-2. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-3. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 BASEMENT - HVAC PLAN - AREA A
 SCALE: 1/8" = 1'-0"





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SHEET NAME
 BASEMENT HVAC PLAN
 AREA B

SHEET NO.
M2.02

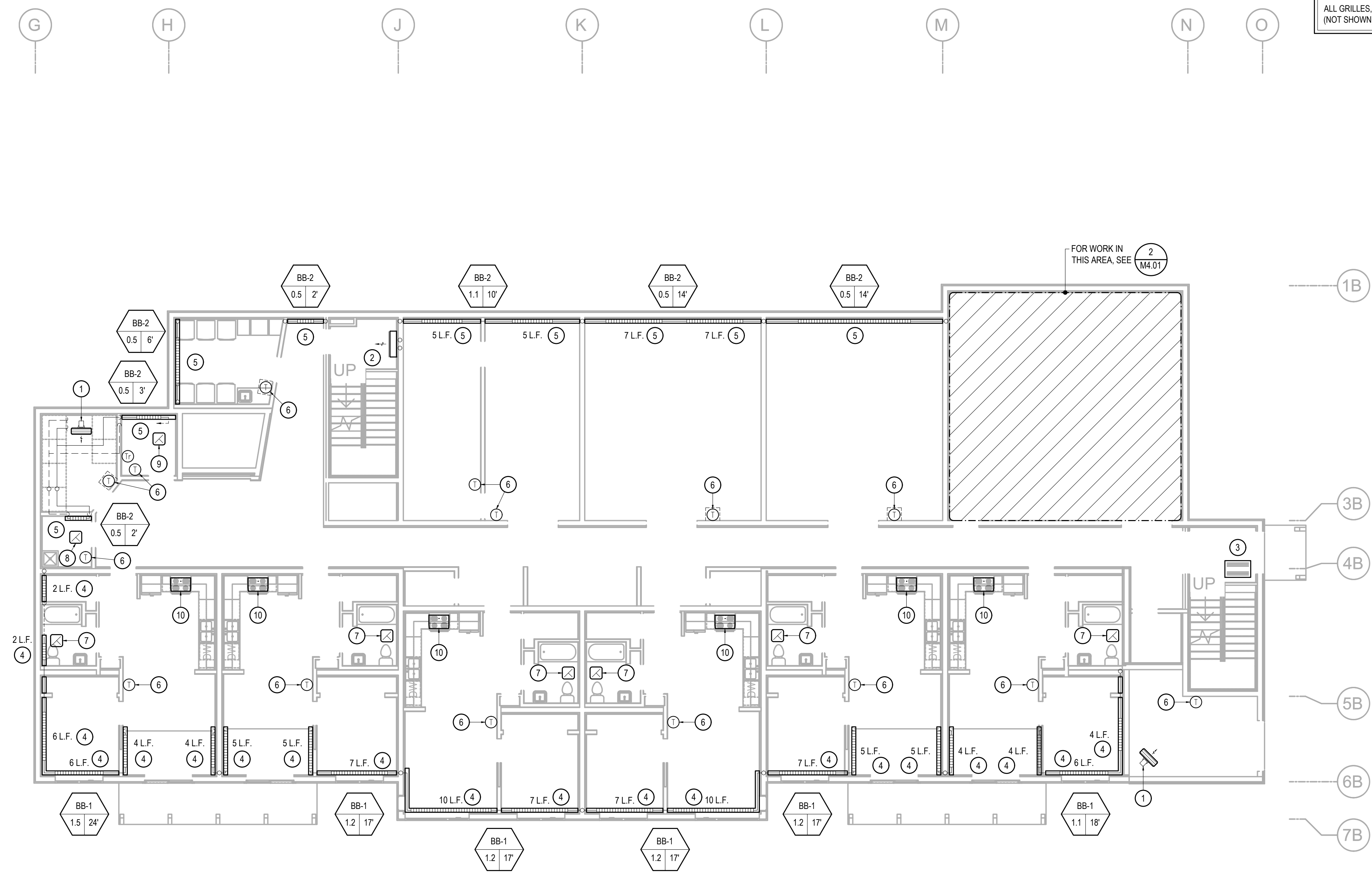
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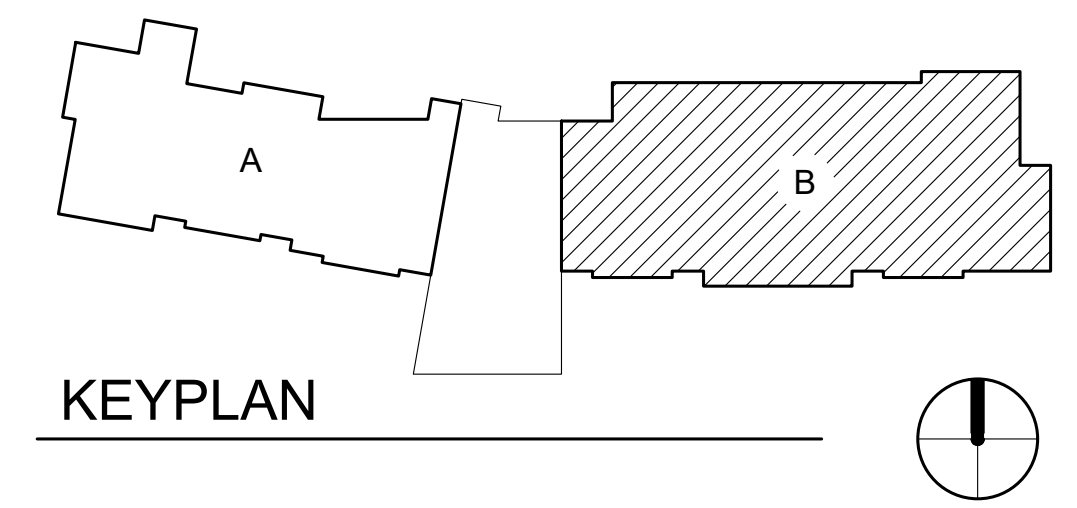
KEY NOTES

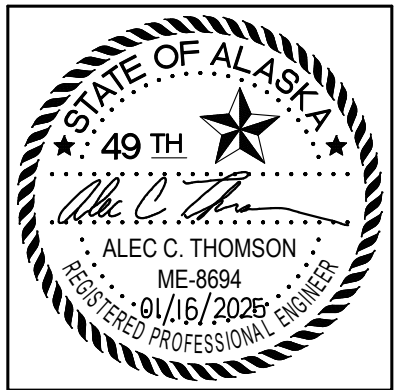
- REMOVE EXISTING UNIT HEATER. REPLACE WITH UH-1. SEE DETAIL 3/M6.01.
- REMOVE EXISTING CABINET UNIT HEATER. REPLACE WITH CUH-1. SEE DETAIL 5/M6.01.
- REMOVE EXISTING CABINET UNIT HEATER. REPLACE WITH CUH-2. SEE DETAIL 4/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. SEE ARCHITECTURAL.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2/M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-2. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-3. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 BASEMENT - HVAC PLAN - AREA B
 SCALE: 1/8" = 1'-0"





CERTIFICATE OF AUTHORIZATION NO:
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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
FIRST FLOOR HVAC PLAN
AREA A

SHEET NO.
M2.03

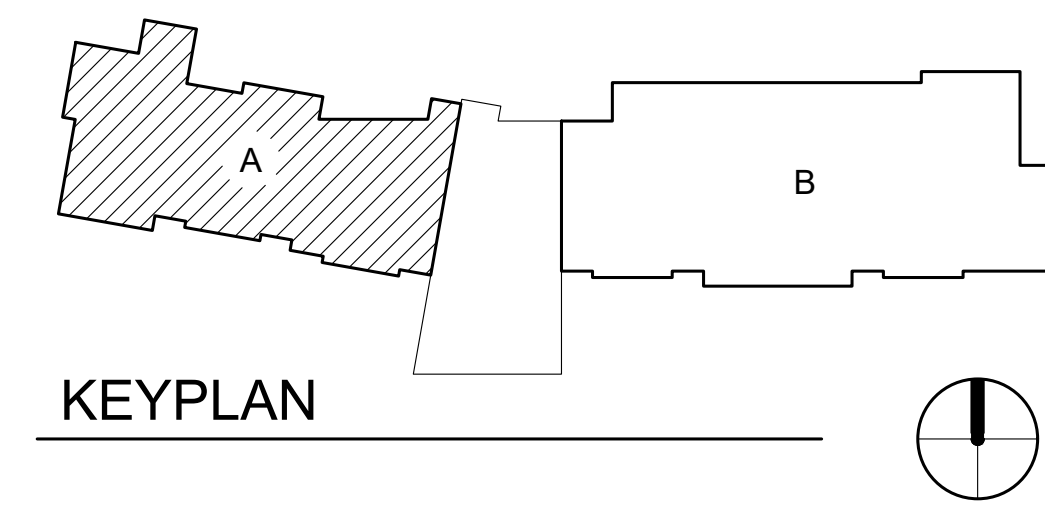
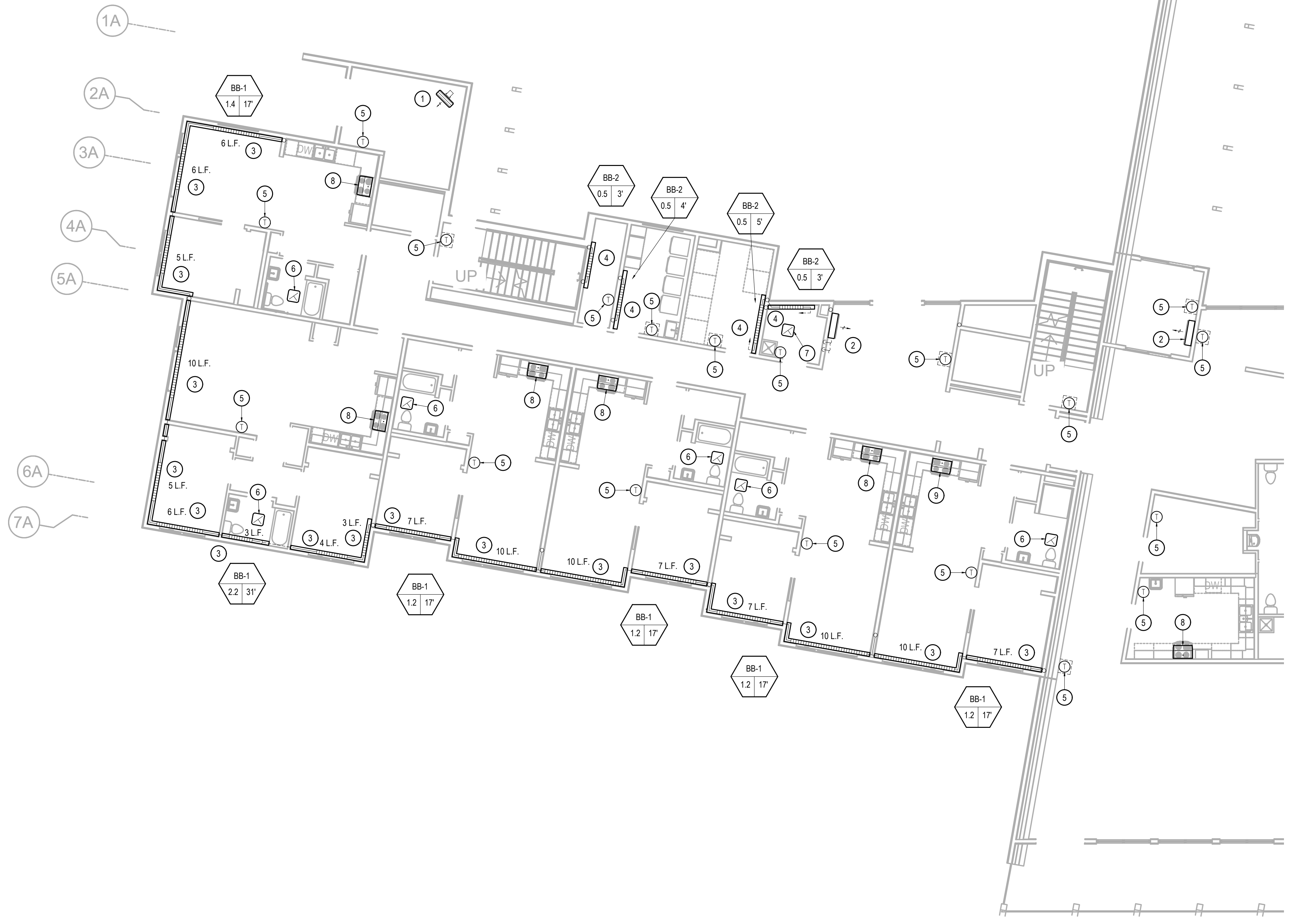
SHEET NOTES

- EXISTING SYSTEMS SHOWN ON THE DRAWINGS ARE FROM RECORD DRAWINGS. ACTUAL SYSTEMS MAY VARY FROM THE INFORMATION INDICATED ON THE DRAWINGS. THE DRAWINGS MAY NOT SHOW ALL EXISTING SYSTEMS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, LOCATIONS, SERVICE, AND SIZES BEFORE START OF WORK.
- COORDINATE WITH BUILDING OWNER FOR ALL WORK TAKING PLACE IN OCCUPIED TENANT SPACES AND FOR WORK REQUIRING SHUT DOWN OF BUILDING SYSTEMS.
- BRANCH PIPING TO INDIVIDUAL TERMINAL HEATING UNITS OF 3 GPM OR LESS SHALL BE 3/4" UNLESS OTHERWISE INDICATED ON PLANS OR SCHEDULES.
- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

KEY NOTES

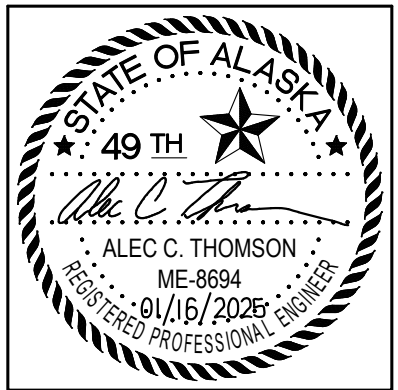
- REMOVE EXISTING UNIT HEATER. REPLACE WITH UH-1. SEE DETAIL 3/M6.01.
- REMOVE EXISTING CABINET UNIT HEATER. REPLACE WITH CUH-1. SEE DETAIL 5/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2/M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-2. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-2. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 FIRST FLOOR - HVAC PLAN - AREA A
 SCALE: 1/8" = 1'-0"

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**COOK INLET HOUSING AUTHORITY
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 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
FIRST FLOOR HVAC PLAN
AREA B

SHEET NO.
M2.04

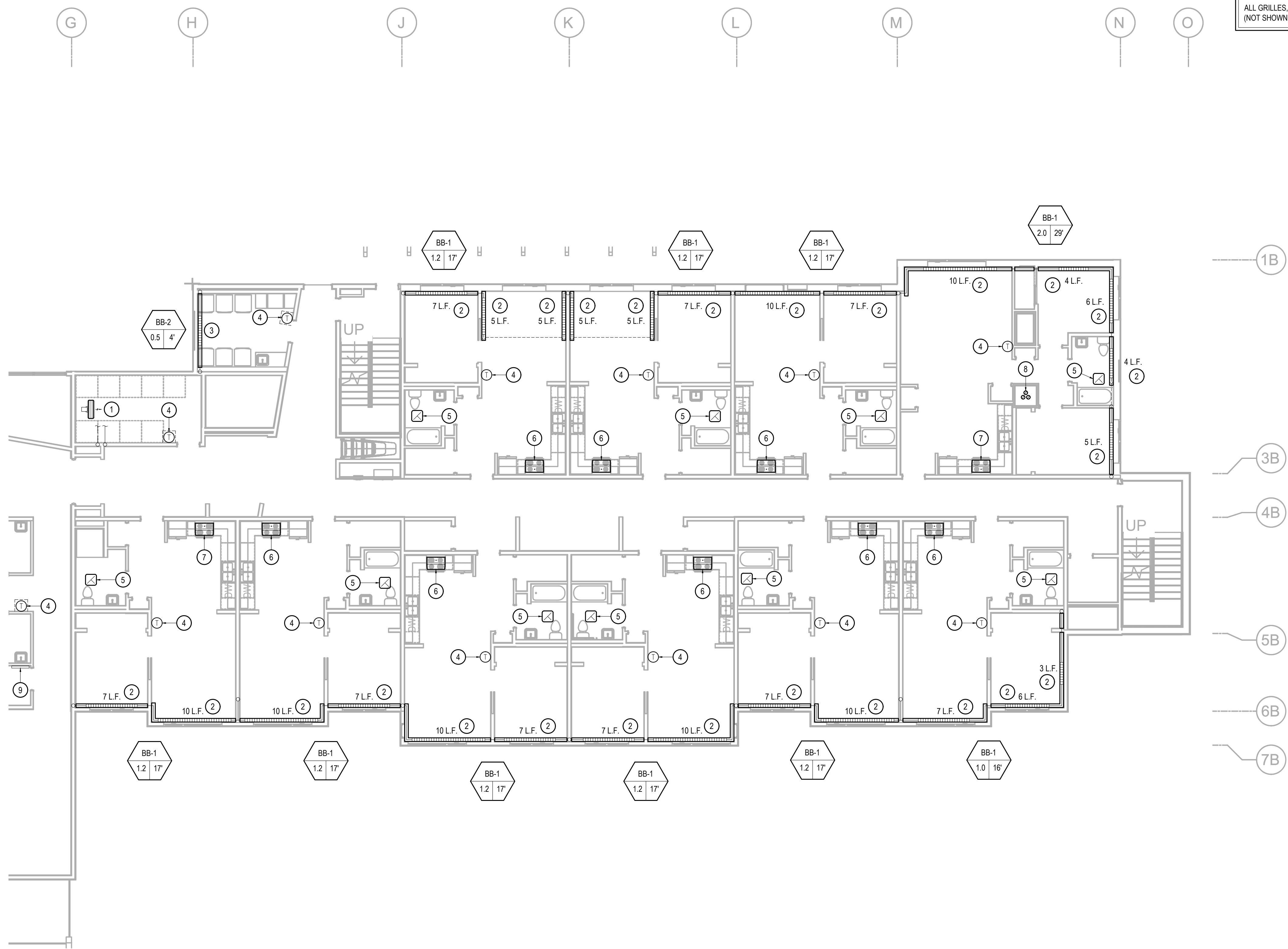
SHEET NOTES

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- BRANCH PIPING TO INDIVIDUAL TERMINAL HEATING UNITS OF 3 GPM OR LESS SHALL BE 3/4" UNLESS OTHERWISE INDICATED ON PLANS OR SCHEDULES.
- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

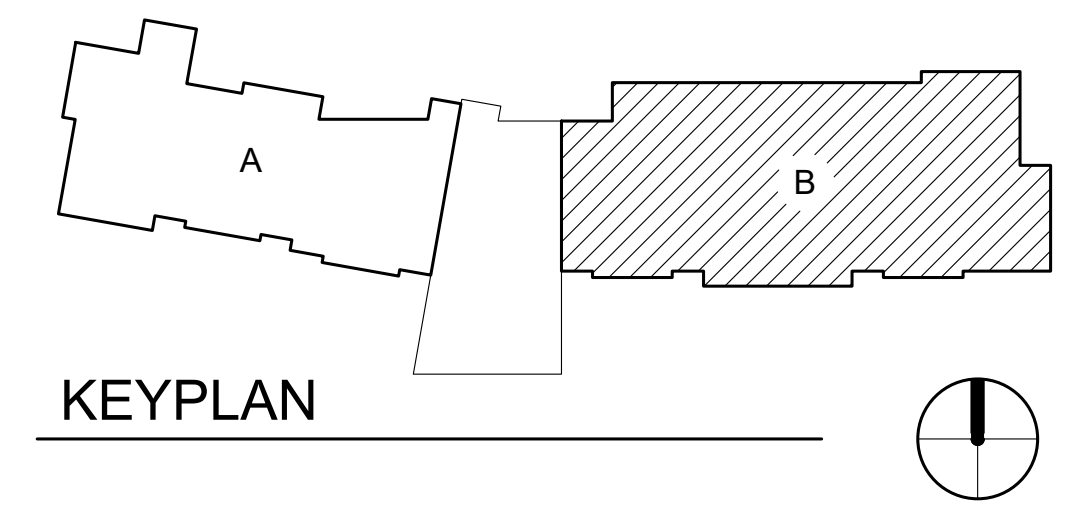
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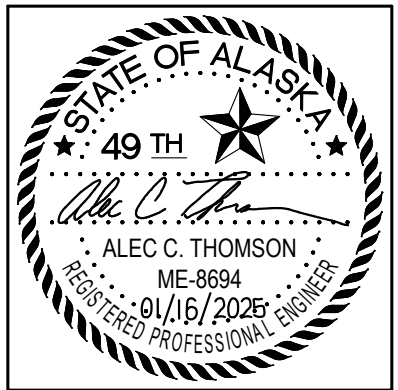
- REMOVE EXISTING UNIT HEATER. REPLACE WITH UH-1. SEE DETAIL 3/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2/M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-2. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- 6"Ø BOILER VENT UP THROUGH EXISTING SHAFT (TYPICAL OF THREE). REMOVE EXISTING BOILER FLUE AND REUSE EXISTING SHAFT. BOILER VENT PIPING PER SPECIFICATIONS. INSTALL AND SUPPORT PER VENT MANUFACTURER REQUIREMENTS.
- REMOVE AND REPLACE EXISTING VALVES AND FITTINGS ASSOCIATED WITH RADIANT MANIFOLD. VERIFY THERMOSTAT CONTROL VALVE OPERATION AND REPLACE AS REQUIRED (TYPICAL OF FOUR.)

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 FIRST FLOOR - HVAC PLAN - AREA B
 SCALE: 1/8" = 1'-0"





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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
SECOND FLOOR HVAC PLAN
AREA A

SHEET NO.
M2.05

HALF SCALE WHEN PRINTED AT 11x17

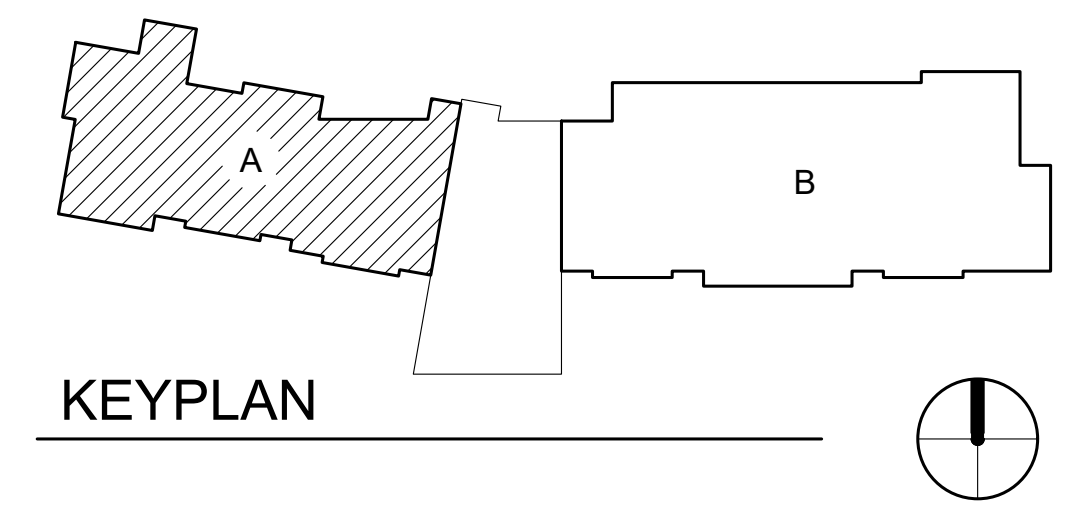
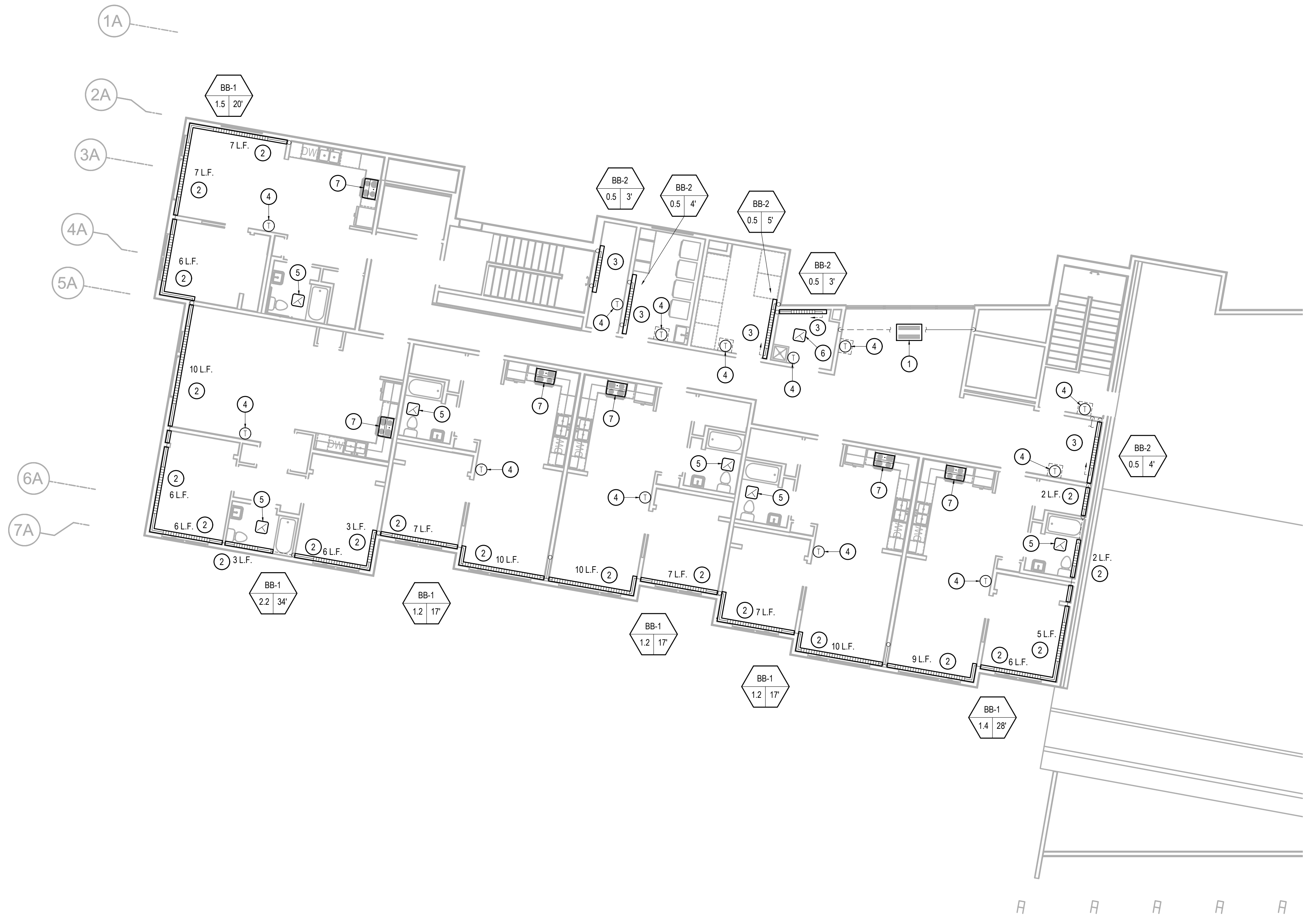
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- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

KEY NOTES

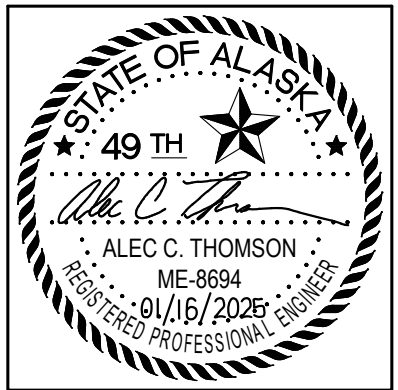
- REMOVE EXISTING CABINET UNIT HEATER. REPLACE WITH CUH-2. SEE DETAIL 4M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. SEE ARCHITECTURAL.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-2. SEE DETAIL 6M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 SECOND FLOOR - HVAC PLAN - AREA A
 SCALE: 1/8" = 1'-0"

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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
SECOND FLOOR HVAC PLAN
AREA B

SHEET NO.
M2.06

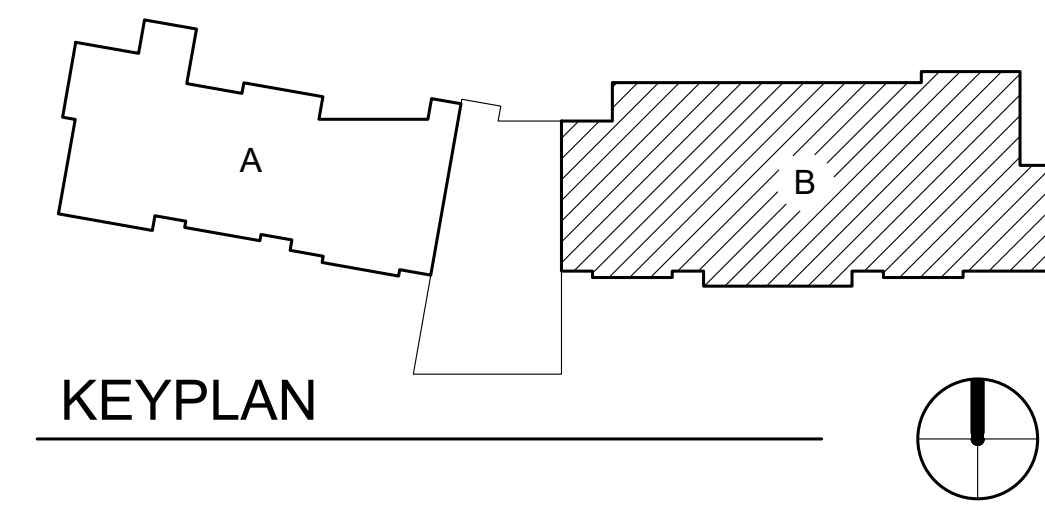
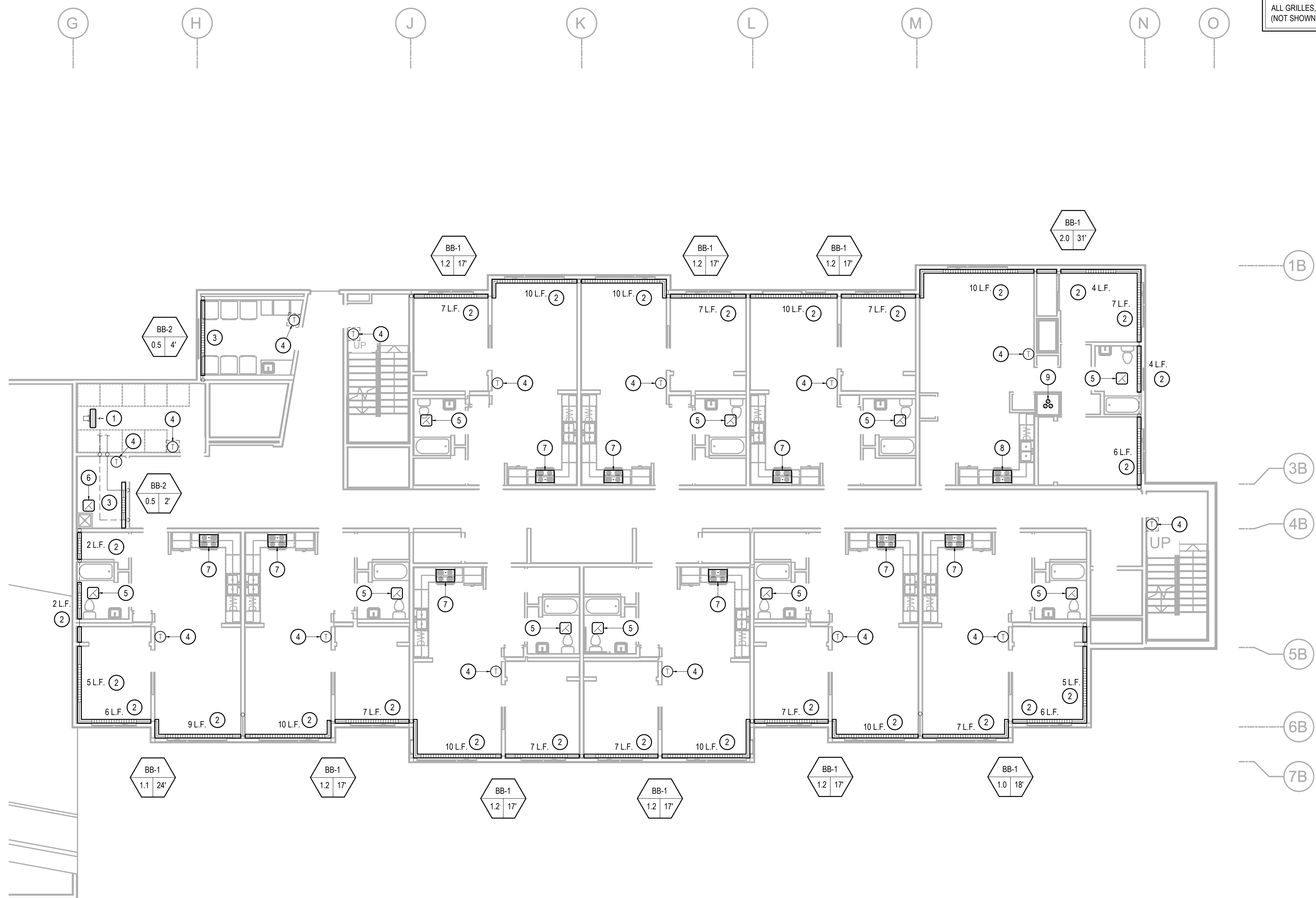
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- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

KEY NOTES

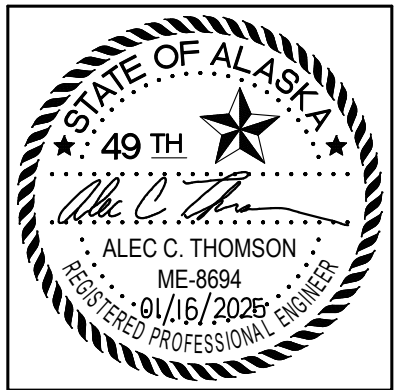
- REMOVE EXISTING UNIT HEATER. REPLACE WITH UH-1. SEE DETAIL 3/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2/M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-2. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-2. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- 6"Ø BOILER VENT UP THROUGH EXISTING SHAFT (TYPICAL OF THREE). REMOVE EXISTING BOILER FLUE AND REUSE EXISTING SHAFT. BOILER VENT PIPING PER SPECIFICATIONS. INSTALL AND SUPPORT PER VENT MANUFACTURER REQUIREMENTS.

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 SECOND FLOOR - HVAC PLAN - AREA B
 SCALE: 1/8" = 1'-0"

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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
THIRD FLOOR HVAC PLAN
AREA B

SHEET NO.
M2.07

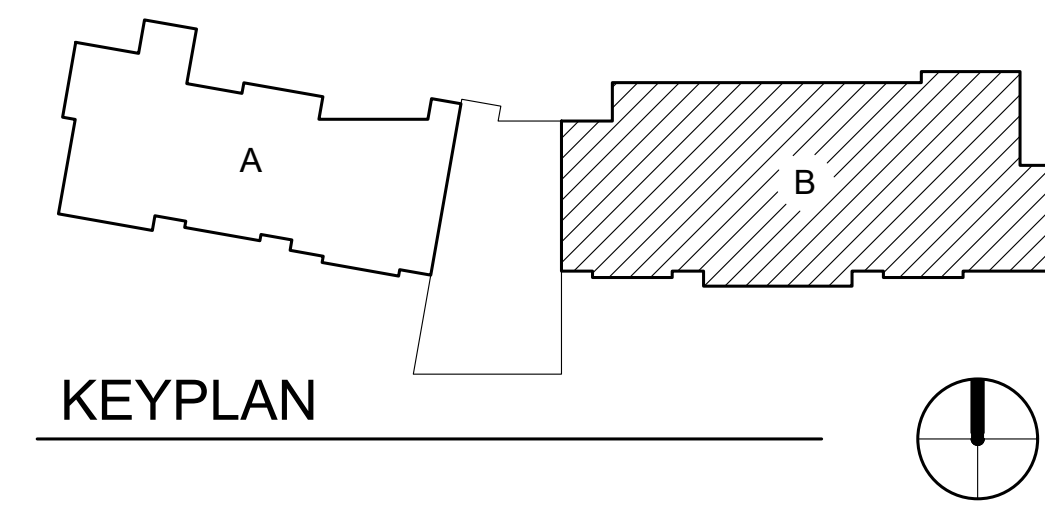
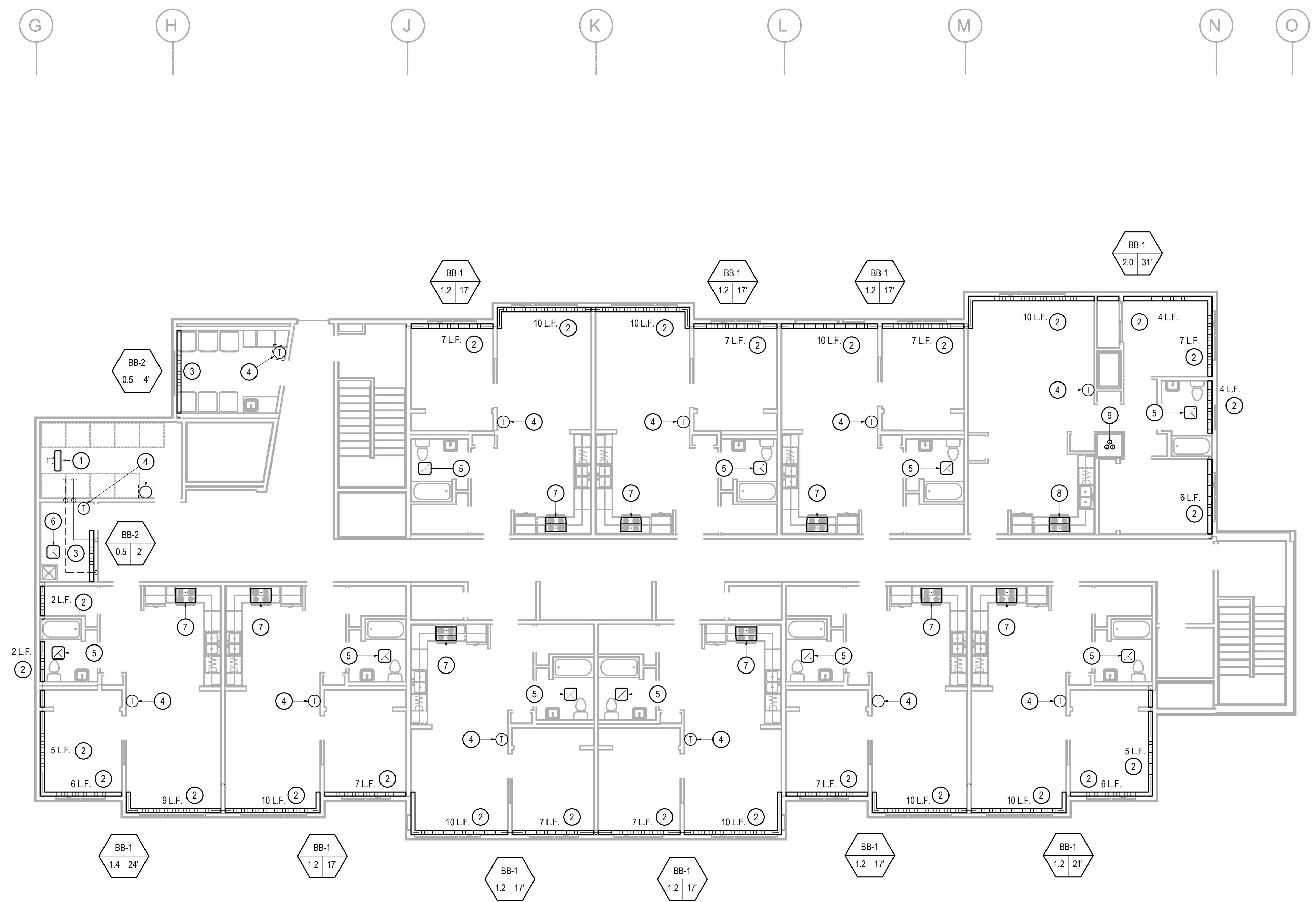
SHEET NOTES

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- BRANCH PIPING TO INDIVIDUAL TERMINAL HEATING UNITS OF 3 GPM OR LESS SHALL BE 3/4" UNLESS OTHERWISE INDICATED ON PLANS OR SCHEDULES.
- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

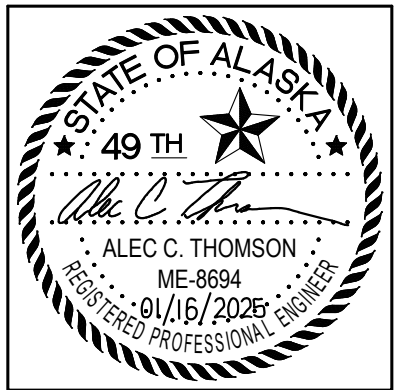
KEY NOTES

- REMOVE EXISTING UNIT HEATER. REPLACE WITH UH-1. SEE DETAIL 3/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-1. SEE DETAIL 1/M6.01.
- REMOVE EXISTING BASEBOARD. REPLACE WITH BB-2. SEE DETAIL 2/M6.01.
- REMOVE AND REPLACE EXISTING THERMOSTAT.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-1. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING. REMOVE EXISTING HUMIDISTAT. PATCH AND REPAIR WALL OR PROVIDE COVER PLATE AS APPLICABLE TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL.
- REMOVE EXISTING EXHAUST FAN. REPLACE WITH EF-2. SEE DETAIL 6/M6.01. PATCH AND REPAIR CEILING SURFACE AS REQUIRED TO MATCH EXISTING.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-1. PROVIDE UFAS COMPLIANT CONTROLS. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- REMOVE AND REPLACE EXISTING RANGE HOOD. REPLACE WITH RH-2. RECONNECT TO EXISTING DUCTWORK. COORDINATE WITH ARCHITECTURAL CASEWORK.
- 6"Ø BOILER VENT UP THROUGH EXISTING SHAFT (TYPICAL OF THREE). REMOVE EXISTING BOILER FLUE AND REUSE EXISTING SHAFT. BOILER VENT PIPING PER SPECIFICATIONS. INSTALL AND SUPPORT PER VENT MANUFACTURER REQUIREMENTS.

ALL GRILLES, DIFFUSERS AND REGISTERS (NOT SHOWN) TO BE CLEANED.



1 THIRD FLOOR - HVAC PLAN - AREA B
 SCALE: 1/8" = 1'-0"



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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
MECHANICAL ROOF PLAN
AREA A

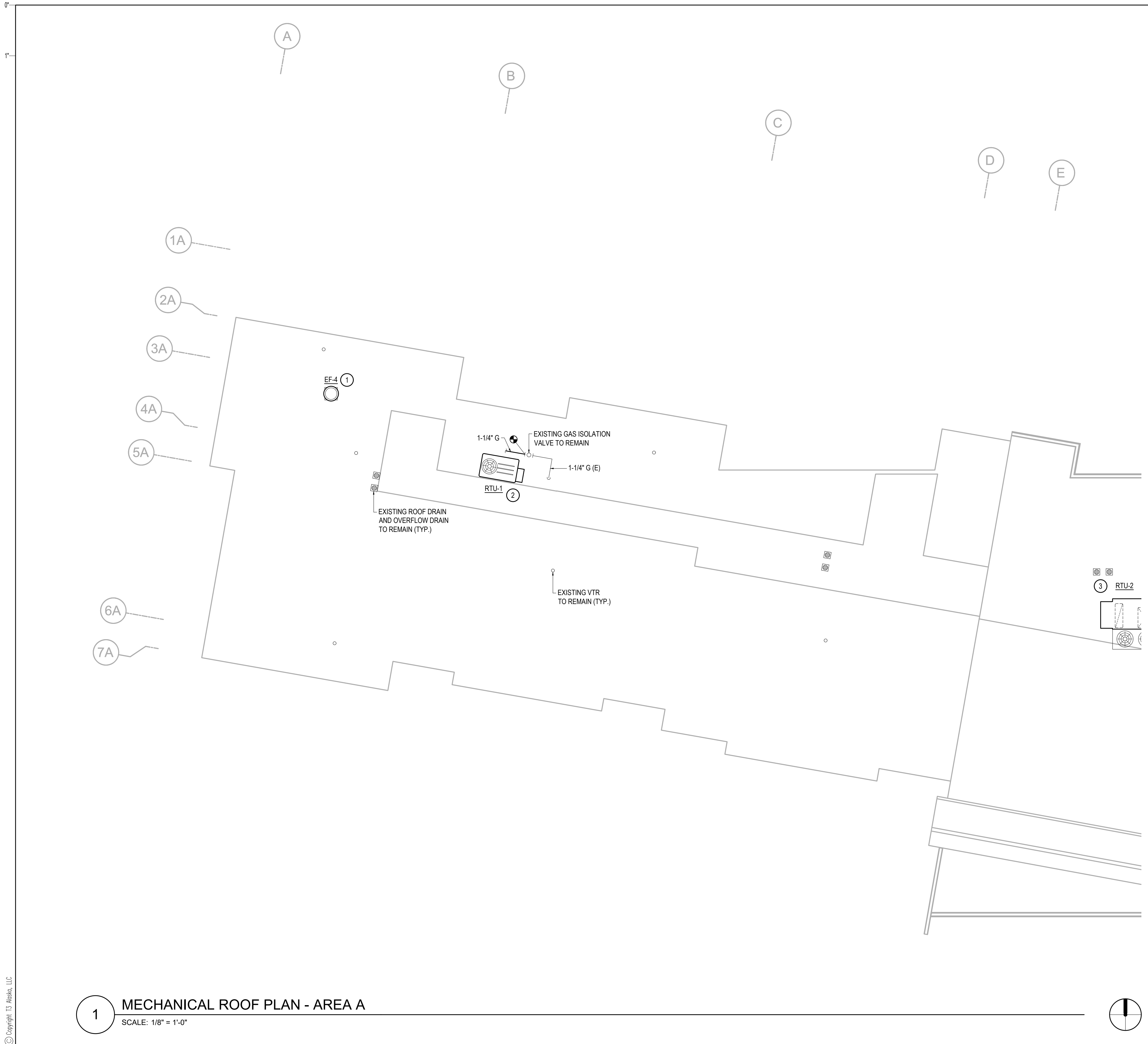
SHEET NO.
M3.01

SHEET NOTES

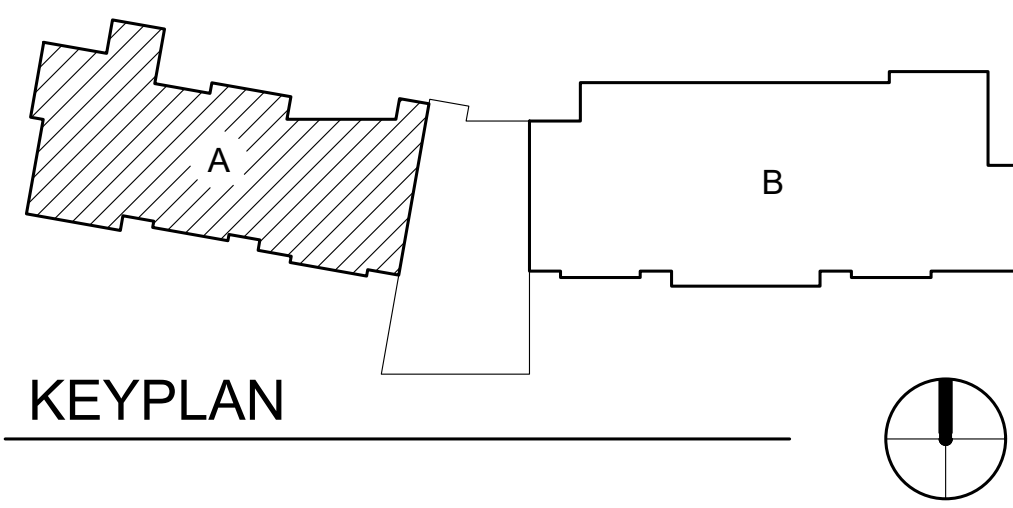
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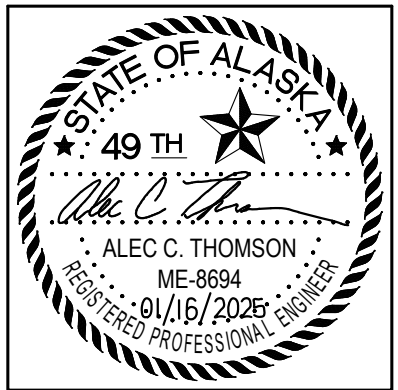
KEY NOTES

- REMOVE AND REPLACE EXISTING ROOF MOUNTED EXHAUST FAN WITH EF-4. REUSE EXISTING ROOF CURB IF ABLE.
- REMOVE AND REPLACE EXISTING ROOF TOP UNIT WITH RTU-1. DISCONNECT EXISTING GAS PIPING AND DUCTWORK AS REQUIRED, SEE 8/M6.01 AND 9/M6.01. 130 MBH GAS INPUT REMOVED, 150 MBH GAS INPUT INSTALLED, TOTAL ADDED LOAD: 30 MBH.
- REMOVE AND REPLACE EXISTING ROOF TOP UNIT WITH RTU-2. DISCONNECT EXISTING HYDRONIC PIPING AND DUCTWORK AS REQUIRED, SEE 10/M6.01 AND 11/M6.01.



1 MECHANICAL ROOF PLAN - AREA A
 SCALE: 1/8" = 1'-0"





CERTIFICATE OF AUTHORIZATION NO:
T3 ALASKA, LLC AECL #: 1625

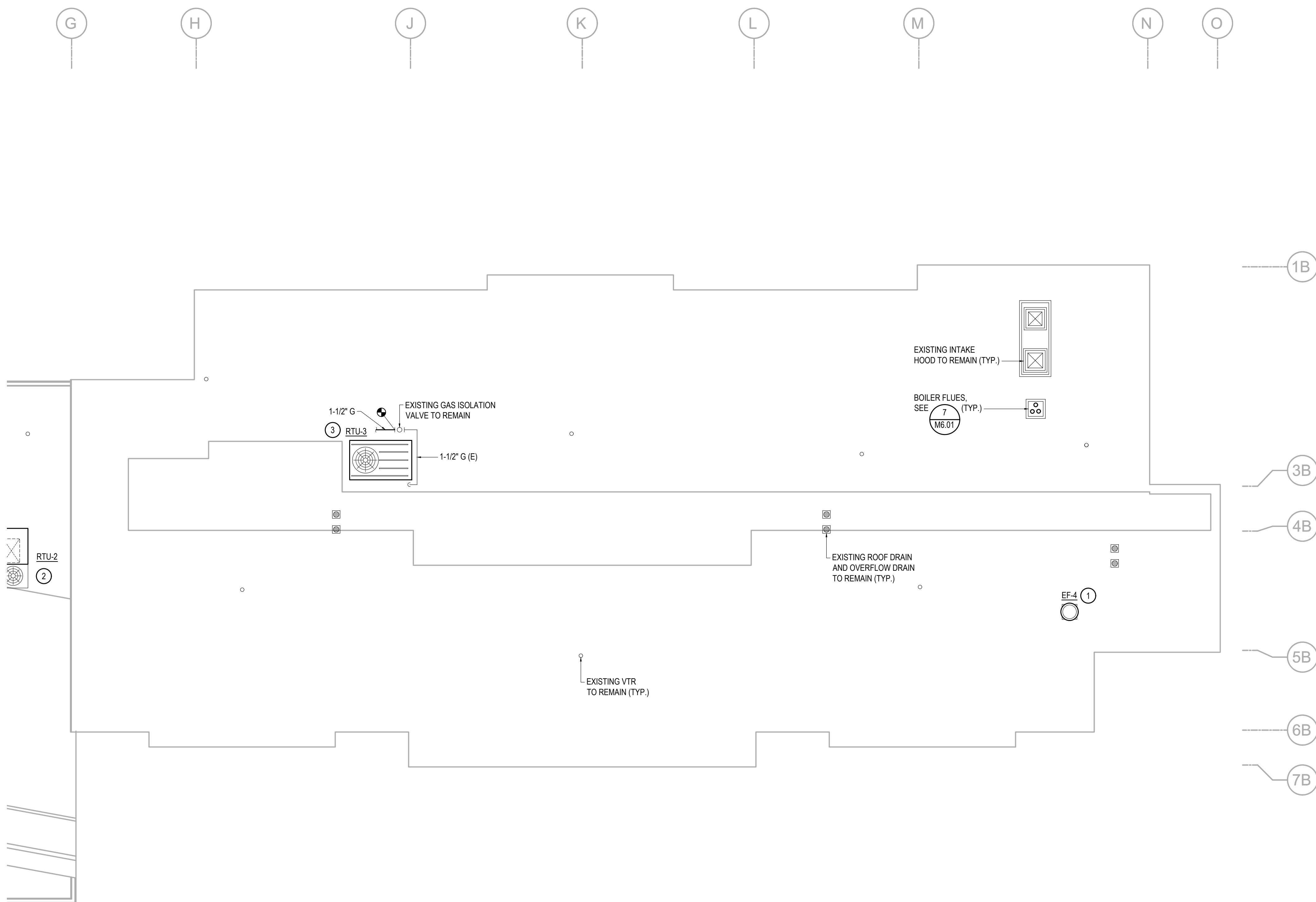
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SHEET NOTES

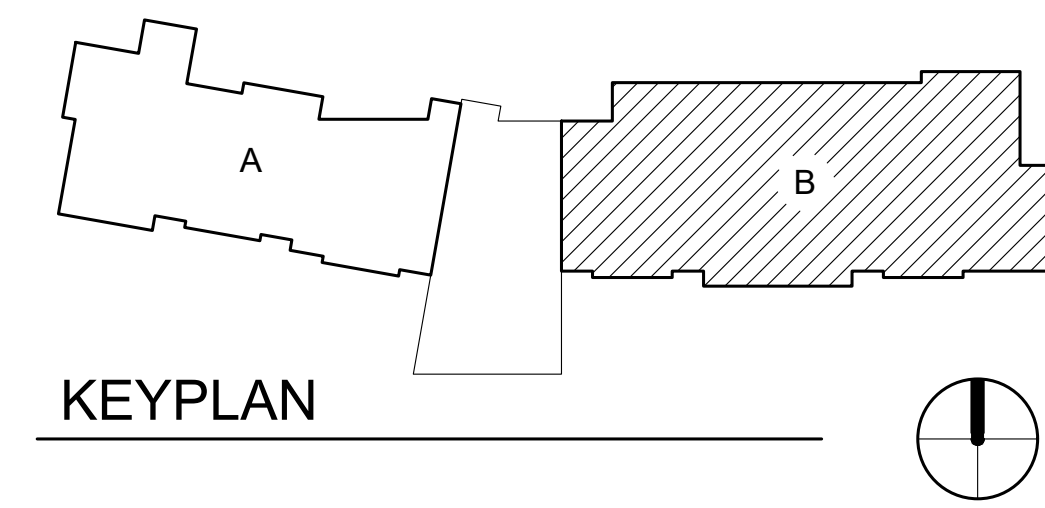
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- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.

KEY NOTES

- REMOVE AND REPLACE EXISTING ROOF MOUNTED EXHAUST FAN WITH EF-4. REUSE EXISTING ROOF CURB IF ABLE.
- REMOVE AND REPLACE EXISTING ROOF TOP UNIT WITH RTU-2. DISCONNECT EXISTING HYDRONIC PIPING AND DUCTWORK AS REQUIRED. SEE 10/M6.01 AND 11/M6.01.
- REMOVE AND REPLACE EXISTING ROOF TOP UNIT WITH RTU-3. DISCONNECT EXISTING GAS PIPING AND DUCTWORK AS REQUIRED. SEE 8/M6.01 AND 9/M6.01. 350 MBH GAS INPUT REMOVED, 400 MBH GAS INPUT INSTALLED, TOTAL ADDED LOAD: 50 MBH.



1 MECHANICAL ROOF PLAN - AREA B
 SCALE: 1/8" = 1'-0"

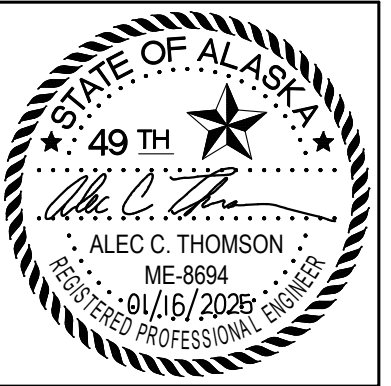


REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
 MECHANICAL ROOF PLAN
 AREA B

SHEET NO.
M3.02



CERTIFICATE OF AUTHORIZATION NO:
T3 ALASKA, LLC AECL #: 1625

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T3 ALASKA llc
 Mechanical & Electrical Engineering
 301 Calista Court, Suite 100
 Anchorage, AK 99516
 Ph: 907-665-7900 Fax: 907-965-7975

**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO. 2025.119.0
 DATE 2026.01.16
 DRAWN MDP
 REVIEWED ACT

SHEET NAME
 MECHANICAL ROOM PLANS

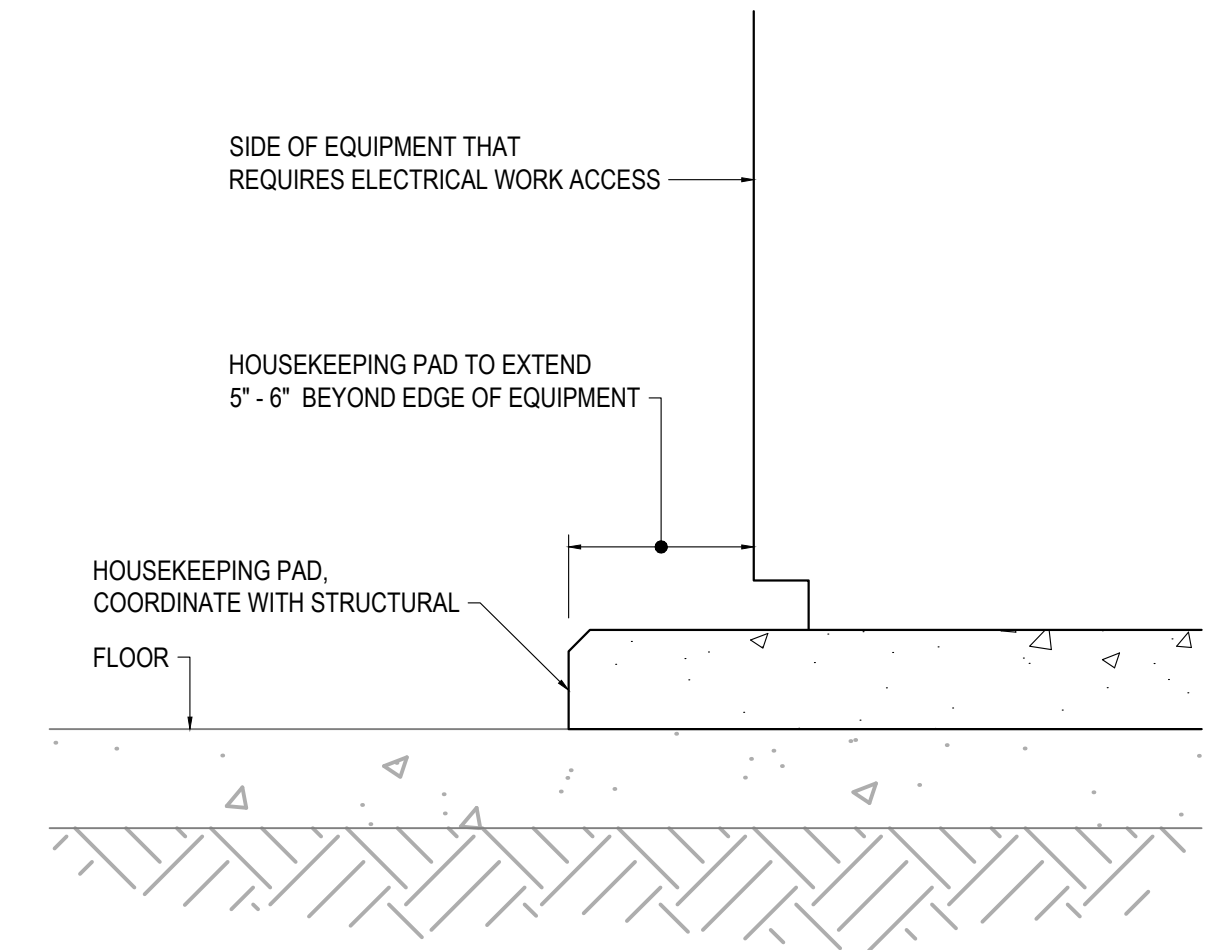
SHEET NO.
M4.01

SHEET NOTES

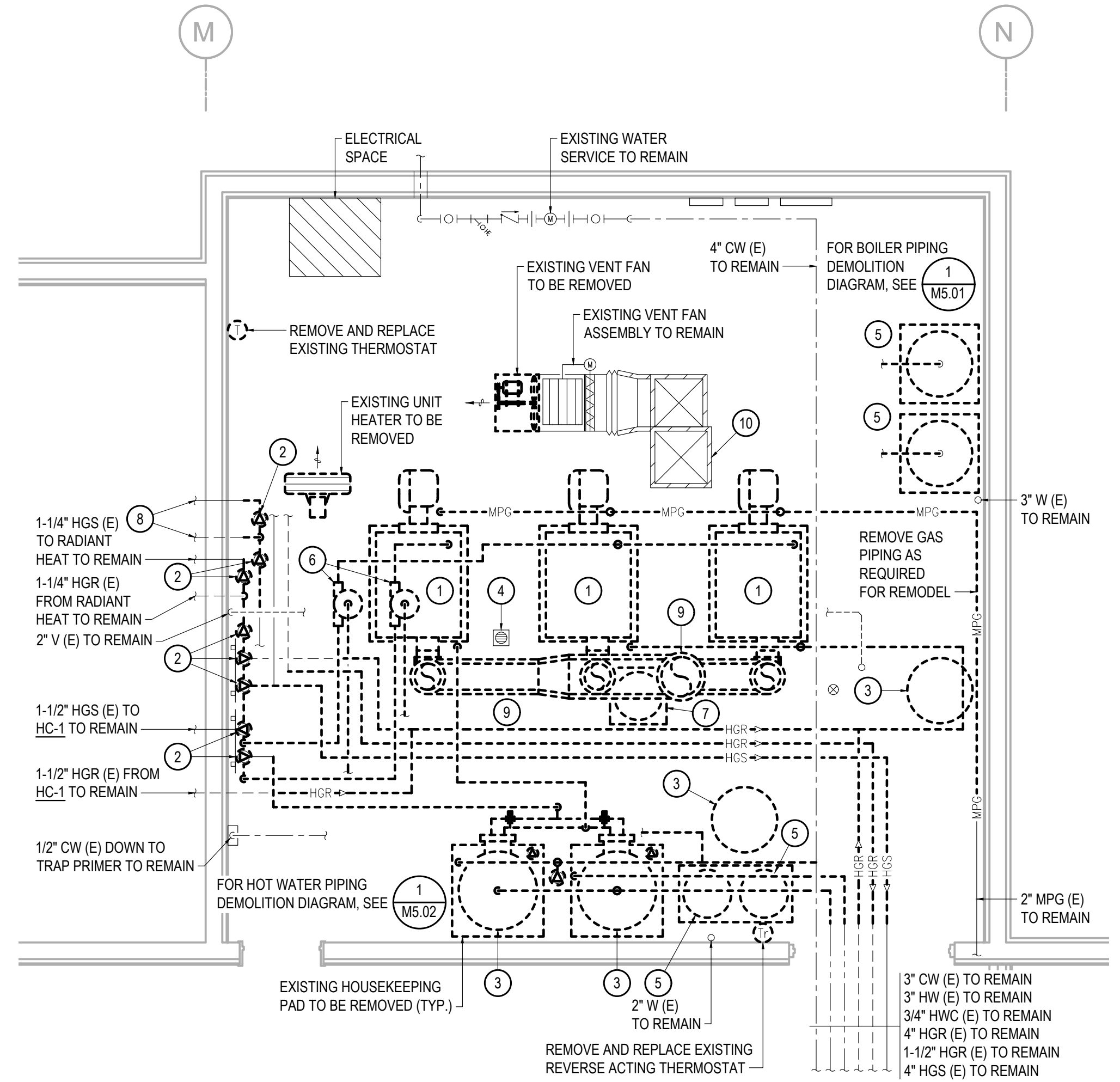
- EXISTING SYSTEMS SHOWN ON THE DRAWINGS ARE FROM RECORD DRAWINGS. ACTUAL SYSTEMS MAY VARY FROM THE INFORMATION INDICATED ON THE DRAWINGS. THE DRAWINGS MAY NOT SHOW ALL EXISTING SYSTEMS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, LOCATIONS, SERVICE, AND SIZES BEFORE START OF WORK.
- COORDINATE WITH BUILDING OWNER FOR ALL WORK TAKING PLACE IN OCCUPIED TENANT SPACES AND FOR WORK REQUIRING SHUT DOWN OF BUILDING SYSTEMS.
- REPAIR ALL AFFECTED SURFACES TO MATCH EXISTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL.
- AIR SEPARATORS ARE TO BE SUPPORTED AND RESTRAINED FOR UNIT WEIGHT AND FULL WATER CAPACITY.

KEY NOTES

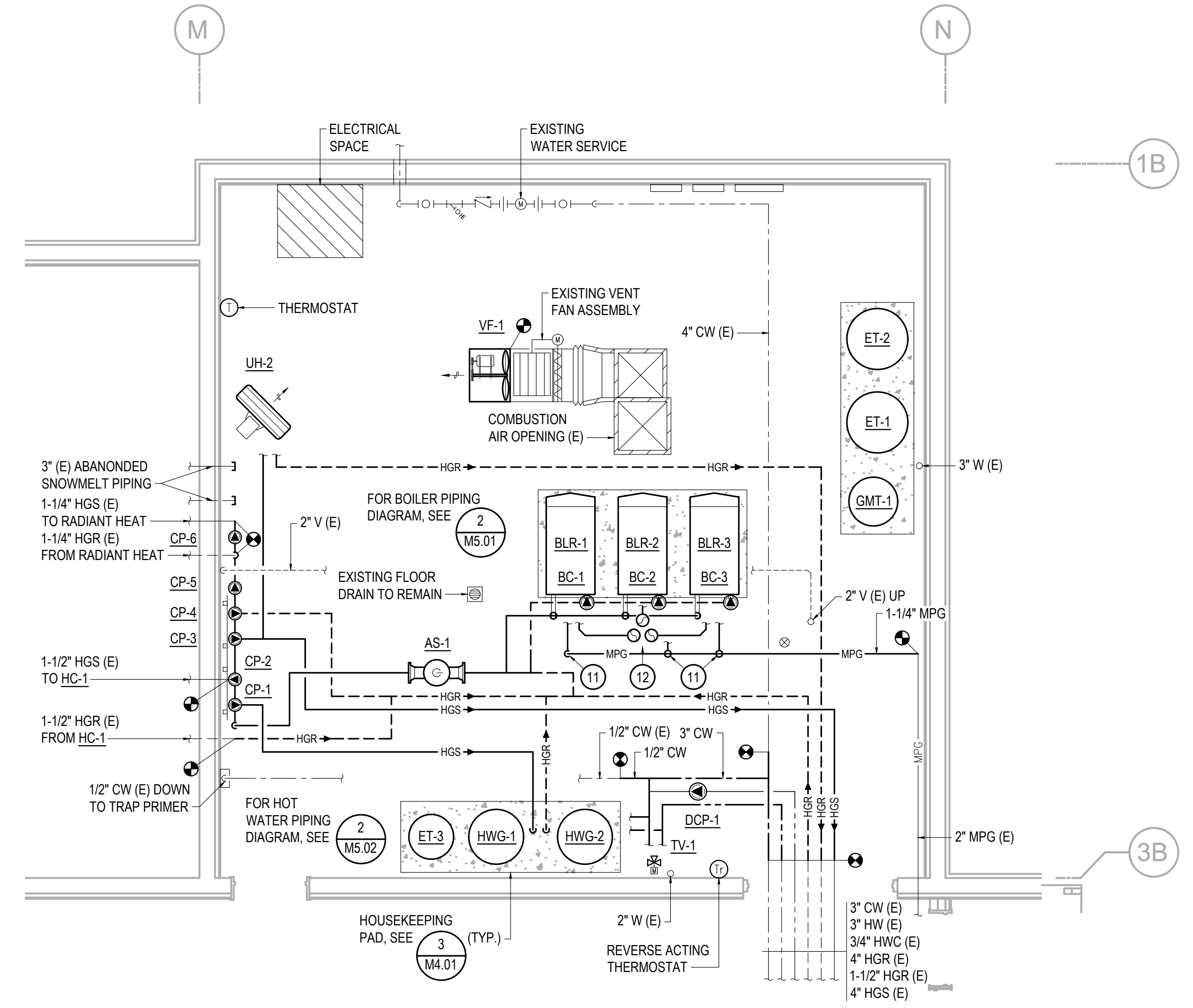
- EXISTING BOILER TO BE REMOVED. REMOVE EXISTING ASSOCIATED HYDRONIC AND GAS PIPING AS REQUIRED FOR REMODEL WORK. COORDINATE WITH REMODEL WORK.
- EXISTING PUMP TO BE REMOVED. MODIFY PIPING AS REQUIRED FOR REMODEL WORK. COORDINATE WITH REMODEL WORK.
- EXISTING HOT WATER GENERATORS TO BE REMOVED. REMOVE EXISTING ASSOCIATED HYDRONIC AND DOMESTIC PIPING AS REQUIRED FOR REMODEL WORK. COORDINATE WITH REMODEL WORK.
- EXISTING FLOOR DRAIN AND ASSOCIATED VENT AND COLD WATER TRAP PRIMER PIPING TO REMAIN.
- EXISTING EXPANSION TANK TO BE REMOVED.
- EXISTING AIR SEPARATOR TO BE REMOVED.
- EXISTING GLYCOL MAKE UP TANK TO BE REMOVED.
- REMOVE EXISTING 3" SNOWMELT SUPPLY AND RETURN PIPING WITHIN MECHANICAL ROOM. DRAIN ABANDONED SNOWMELT SYSTEM AND CAP ABANDONED PIPING AT WALL PENETRATION, CLEARLY LABEL SERVICE AND MARK AS ABANDONED.
- EXISTING EXHAUST FLUE TO BE REMOVED IN ITS ENTIRETY.
- EXISTING COMBUSTION AIR OPENING TO REMAIN.
- 1" MEDIUM PRESSURE GAS PIPING DOWN TO BOILER. COORDINATE FINAL CONNECTION TO BOILER PER MANUFACTURER'S REQUIREMENTS.
- 6"Ø BOILER VENT UP THROUGH EXISTING SHAFT (TYPICAL OF THREE). FOR FLUE TERMINATION DETAIL, SEE 7/M6.01. VENT PIPING PER SPECIFICATIONS. FINAL CONNECTIONS AND INSTALLATION PER BOILER MANUFACTURER REQUIREMENTS.



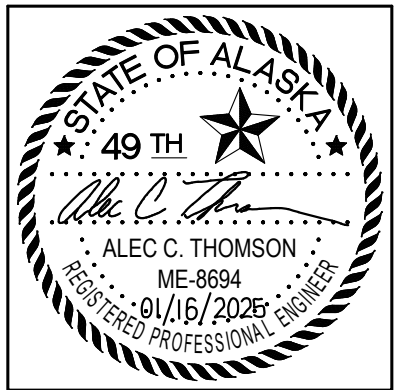
3 HOUSEKEEPING PAD LIMITS DETAIL
 SCALE: NONE



1 MECHANICAL ROOM DEMOLITION PLAN
 SCALE: 3/8" = 1'-0"



2 MECHANICAL ROOM REMODEL PLAN
 SCALE: 3/8" = 1'-0"



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COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA

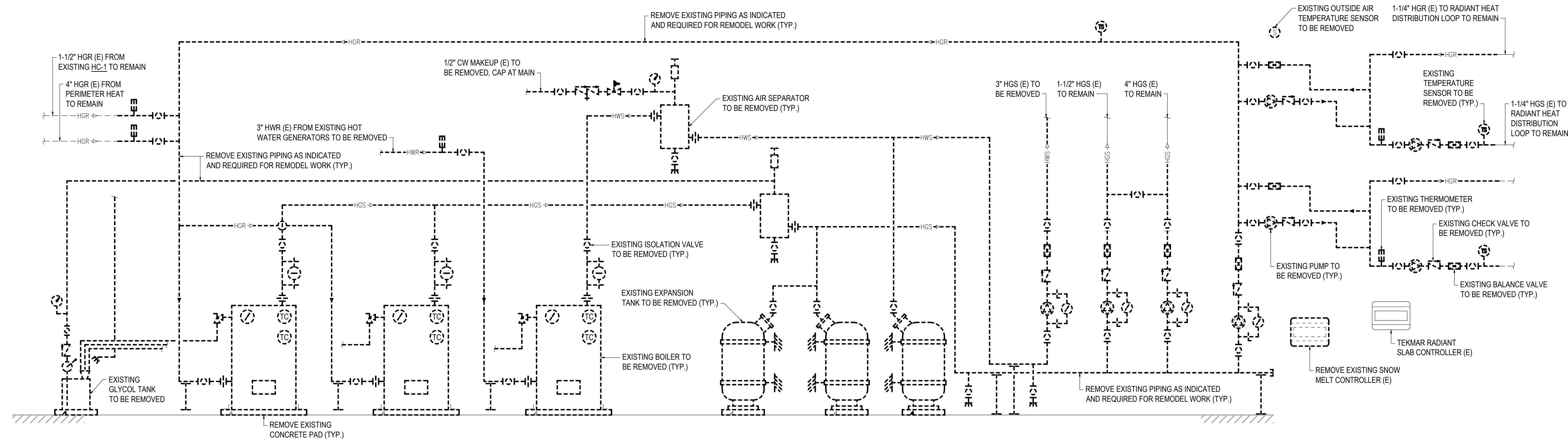
REVISION SCHEDULE		
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 DATE 2026.01.16
 DRAWN MDP
 REVIEWED ACT

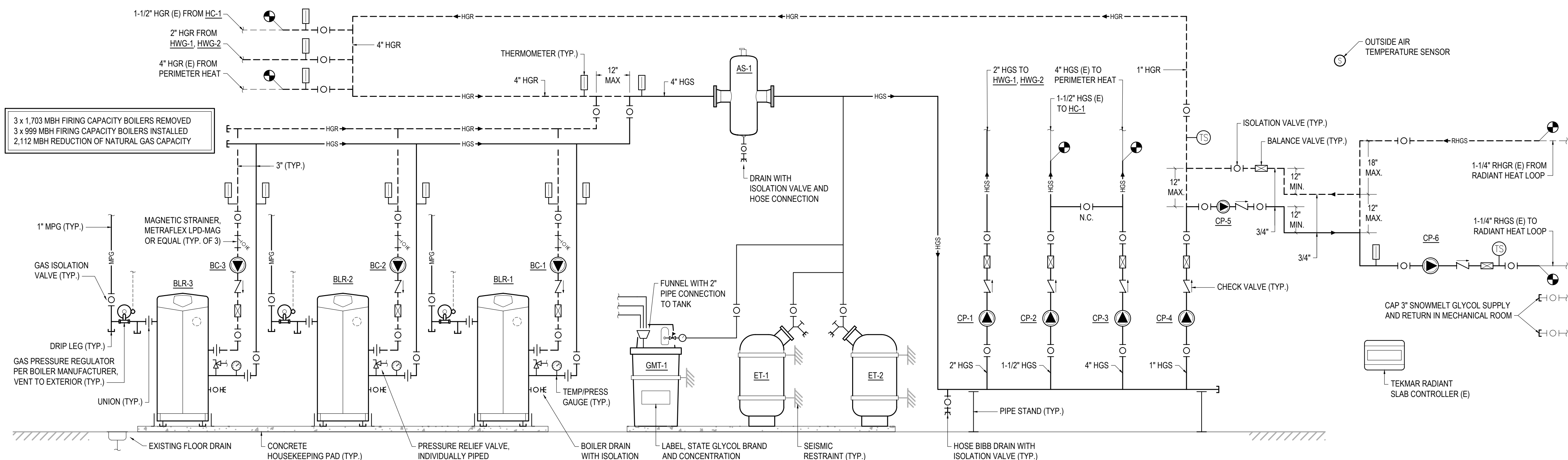
SHEET NAME
 MECHANICAL DIAGRAMS

SHEET NO.
M5.01

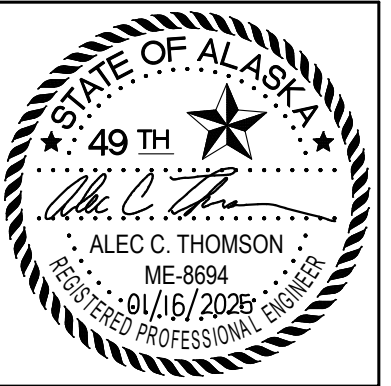
HALF SCALE WHEN PRINTED AT 11x17



1 BOILER PIPING DEMOLITION DIAGRAM
 SCALE: NONE



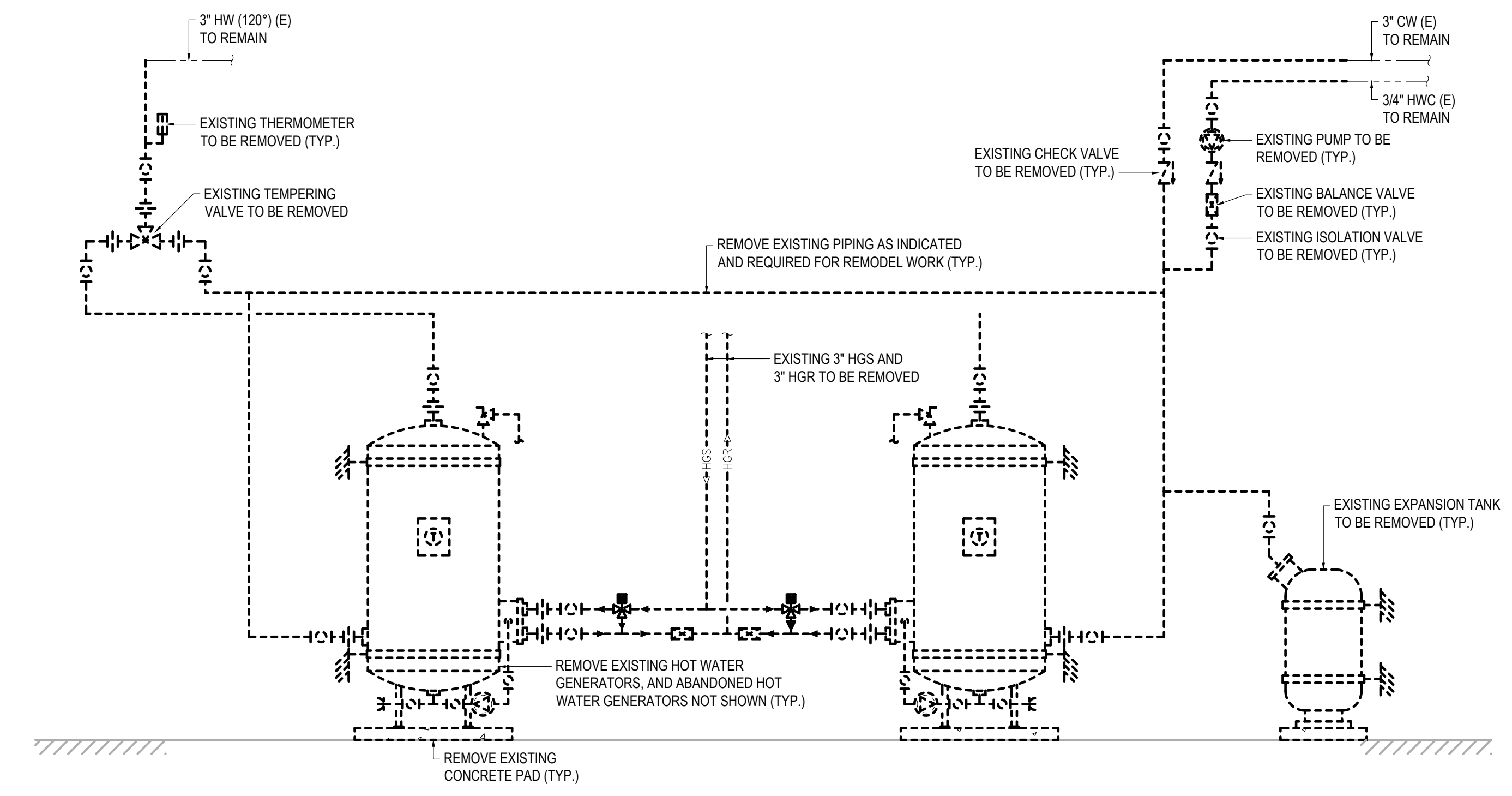
2 BOILER PIPING REMODEL DIAGRAM
 SCALE: 3/8" = 1'-0"



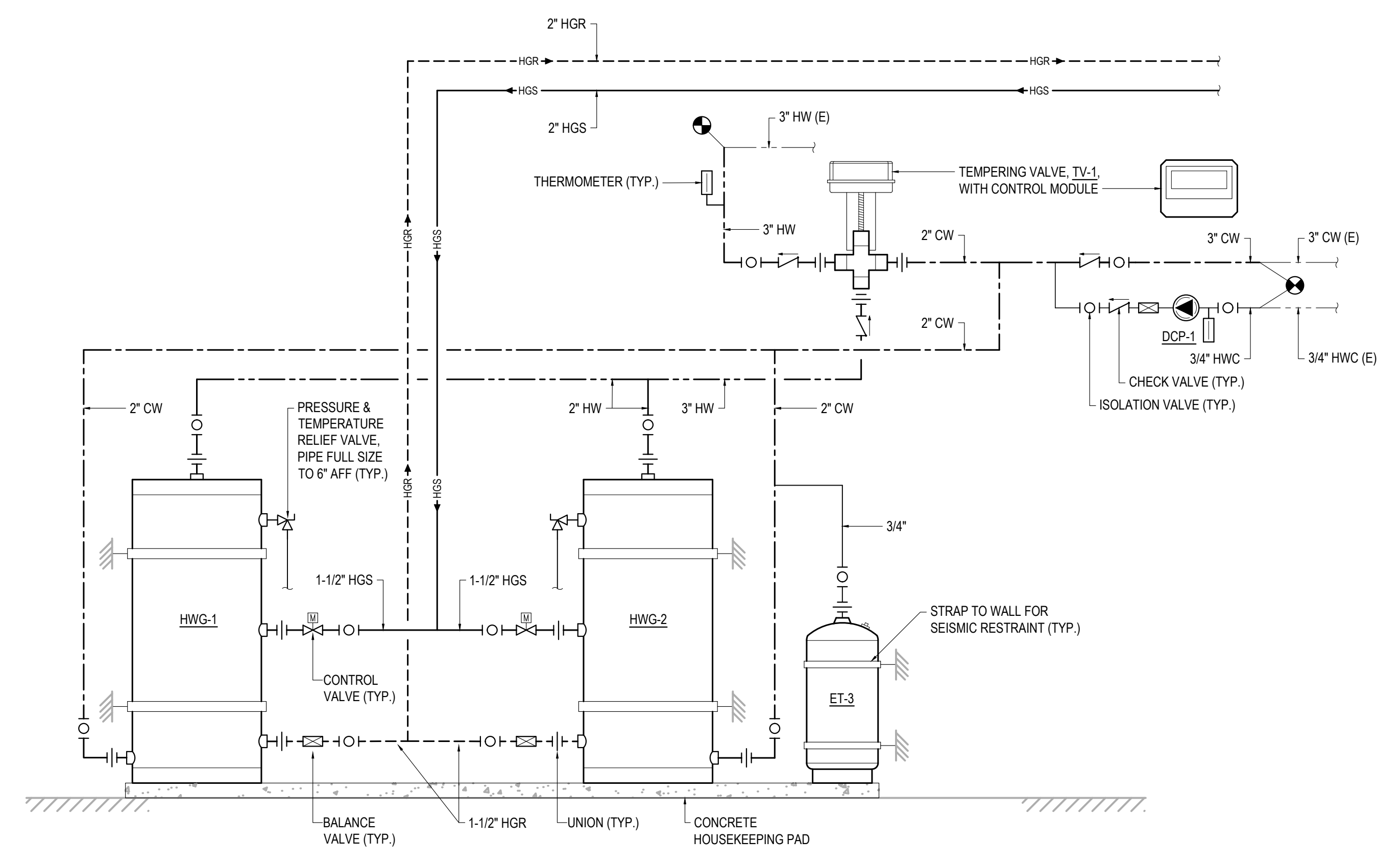
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 ANCHORAGE, ALASKA



1 HOT WATER GENERATOR DEMOLITION DIAGRAM
 SCALE: NONE



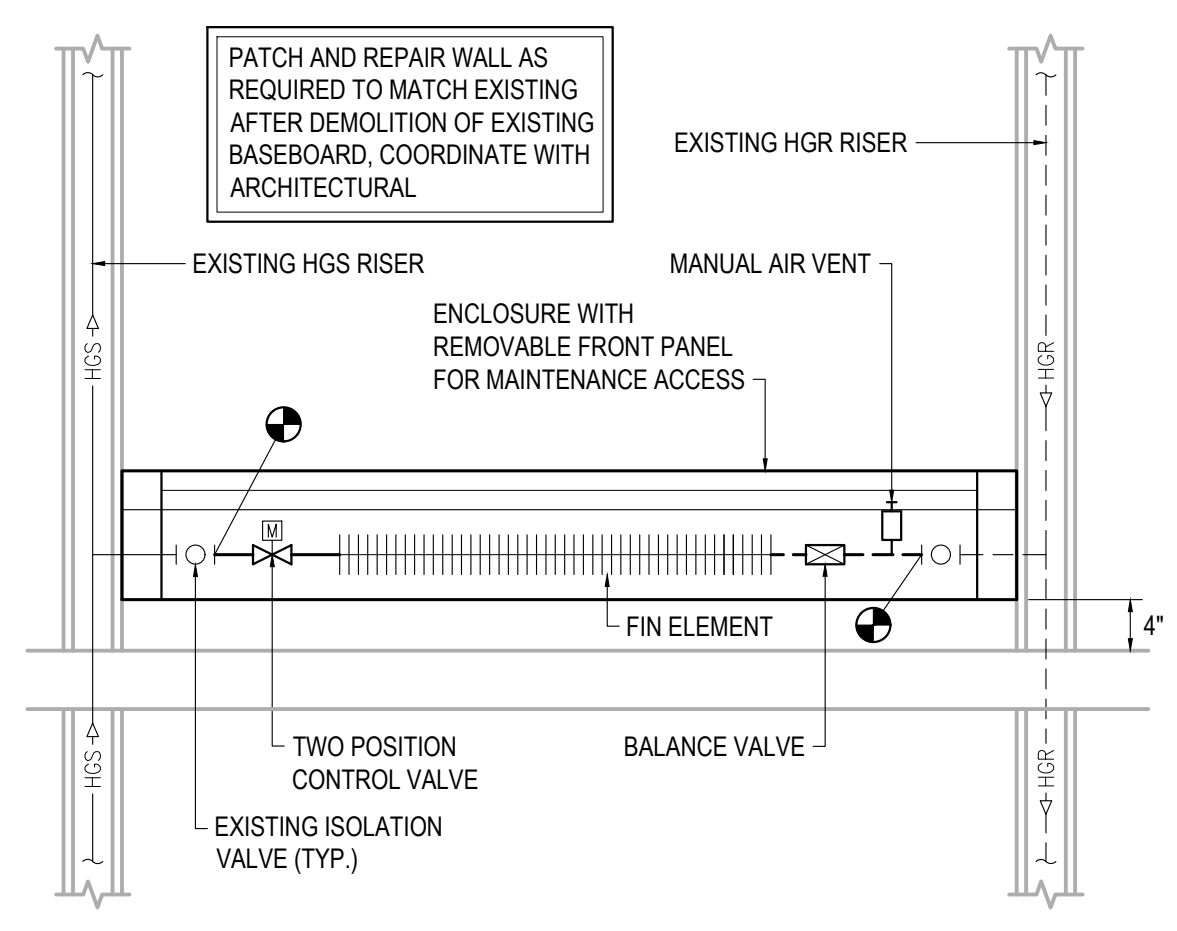
2 HOT WATER GENERATOR REMODEL DIAGRAM
 SCALE: 3/8" = 1'-0"

REVISION SCHEDULE		
#	DESCRIPTION	DATE

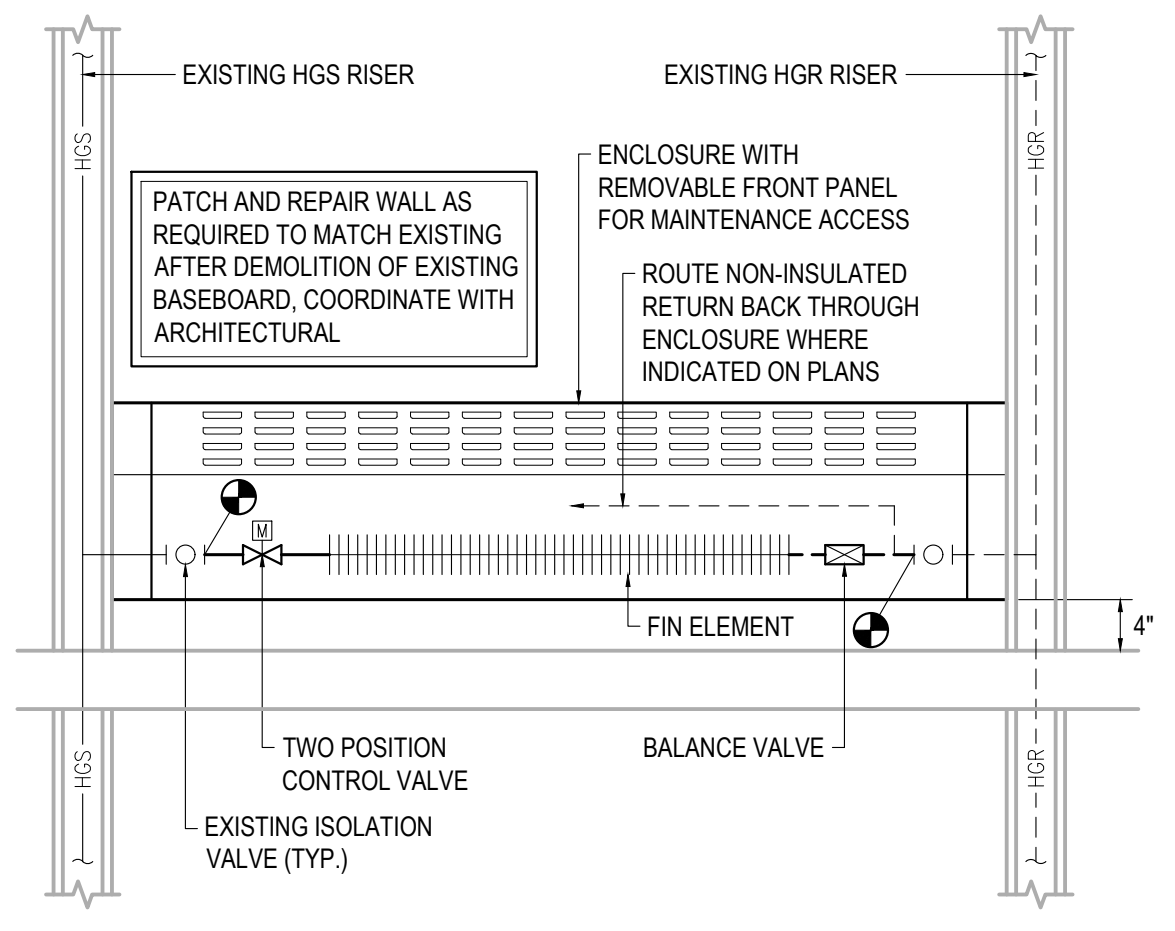
JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	MDP
REVIEWED	ACT

SHEET NAME
MECHANICAL DIAGRAMS

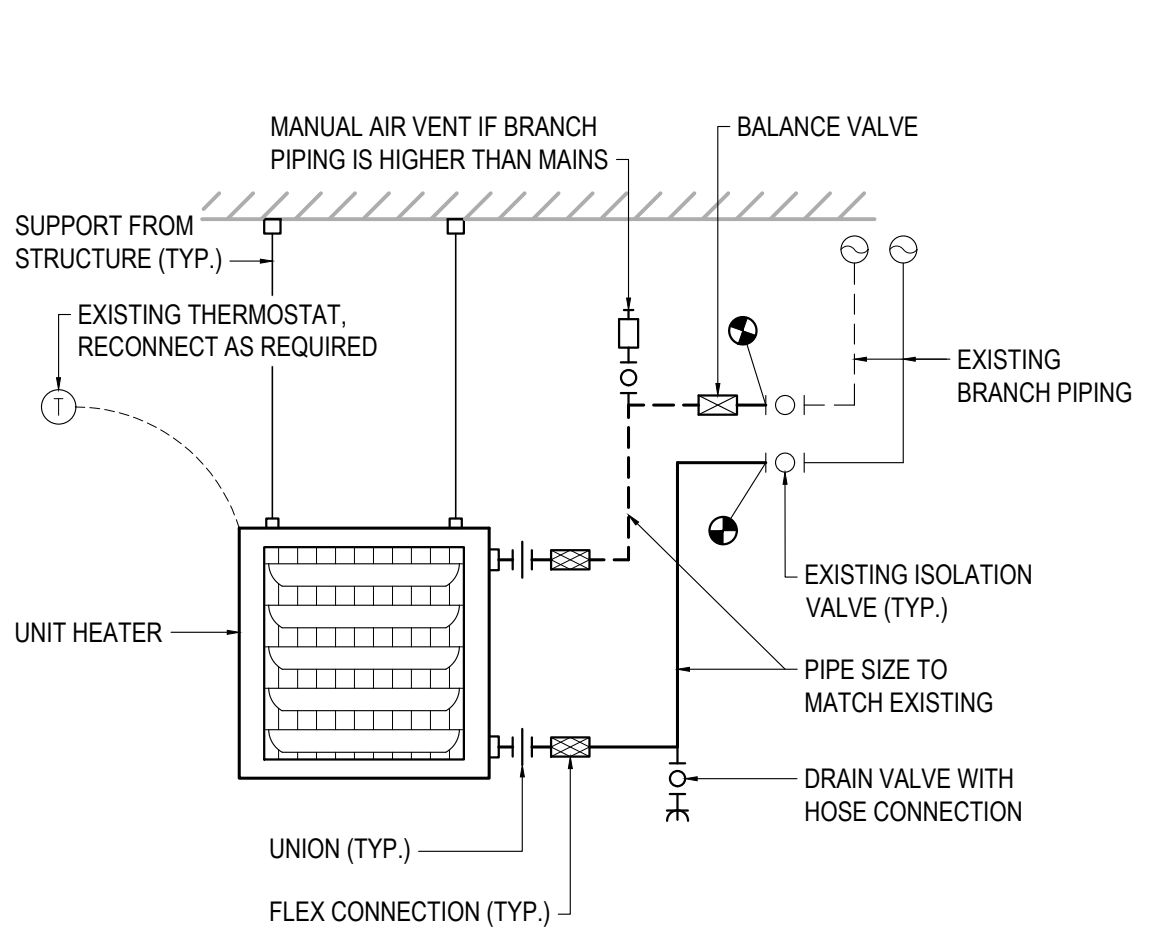
SHEET NO.
M5.02



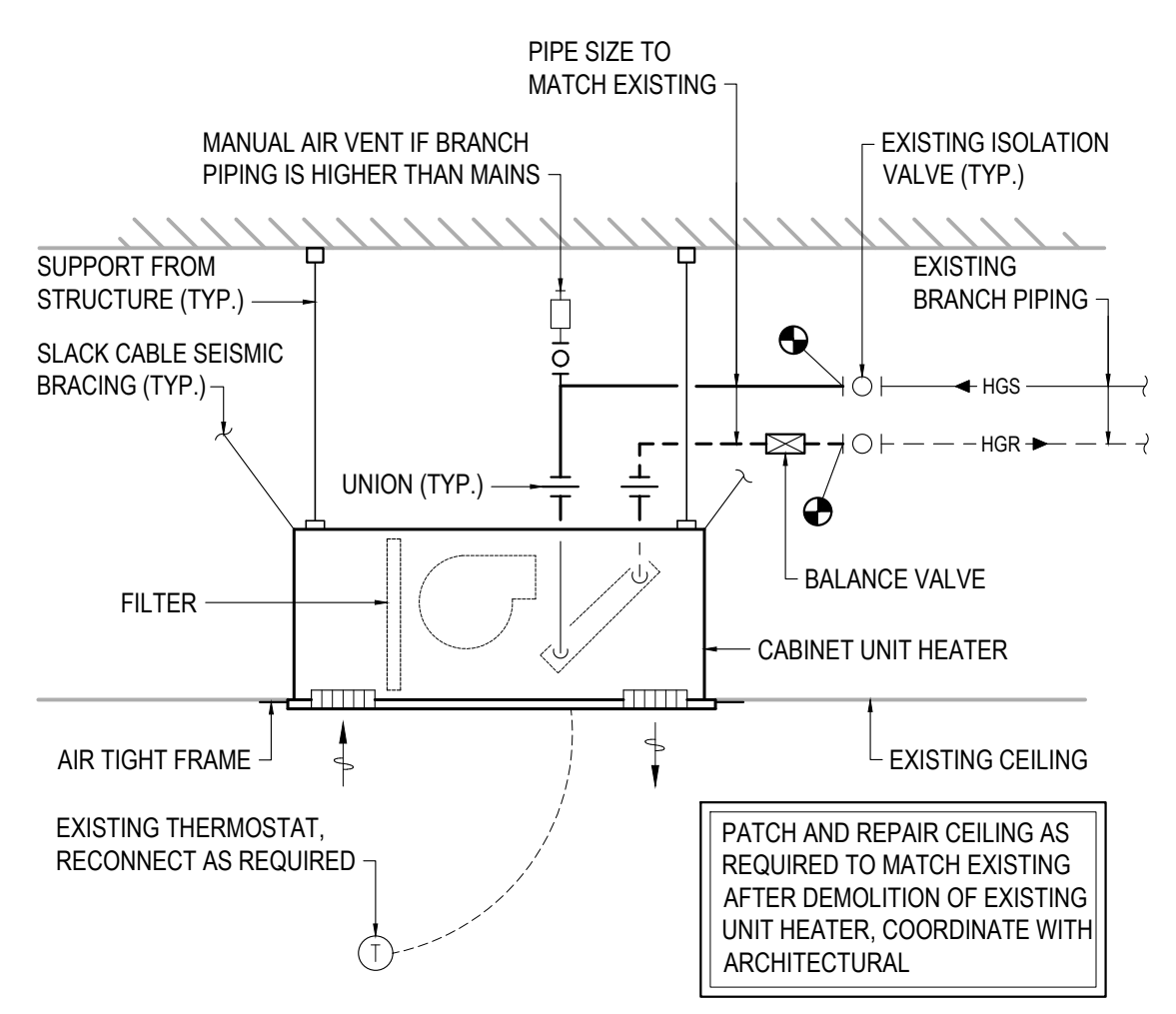
1 RESIDENTIAL BASEBOARD DETAIL
SCALE: NONE



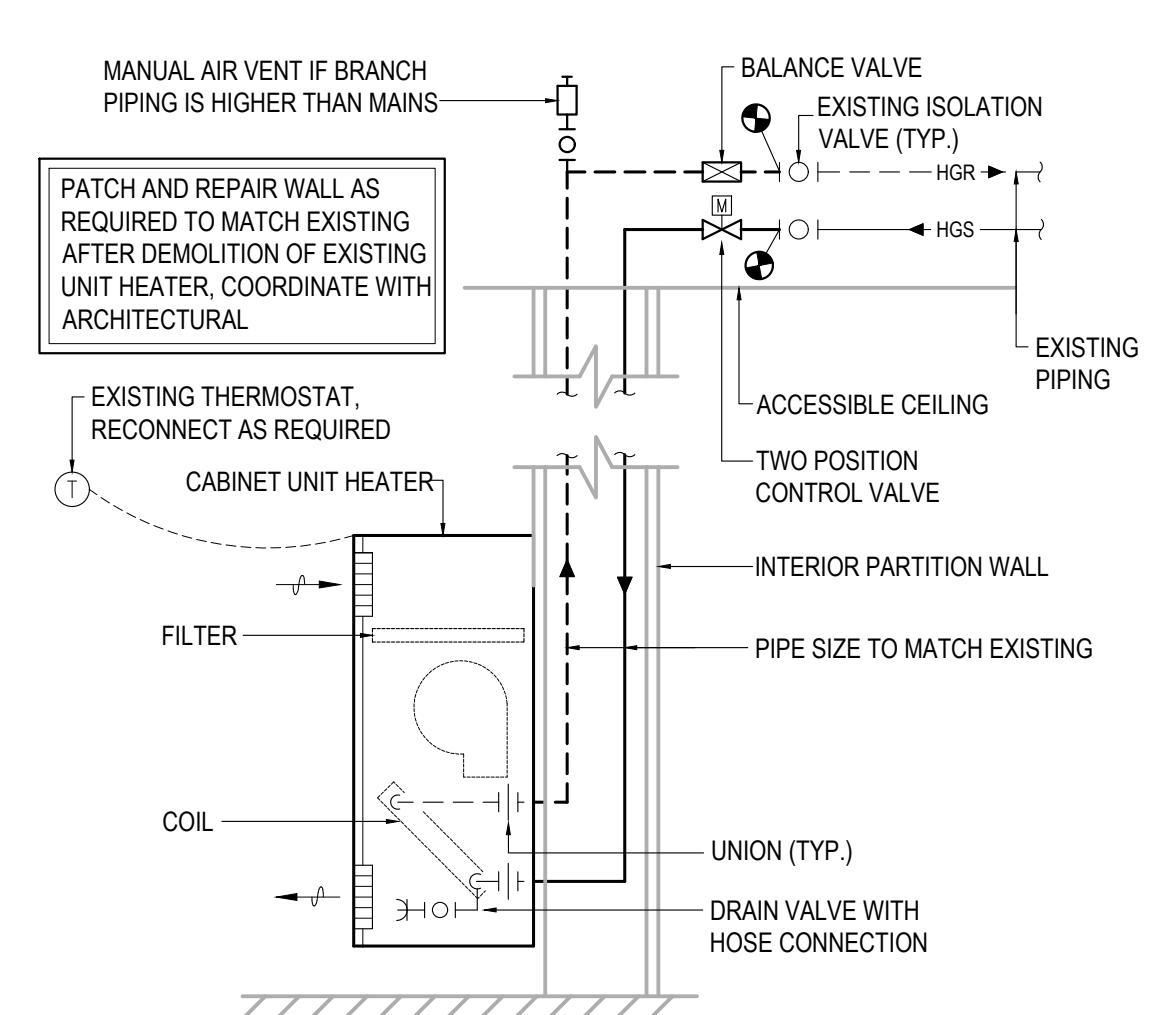
2 COMMERCIAL BASEBOARD DETAIL
SCALE: NONE



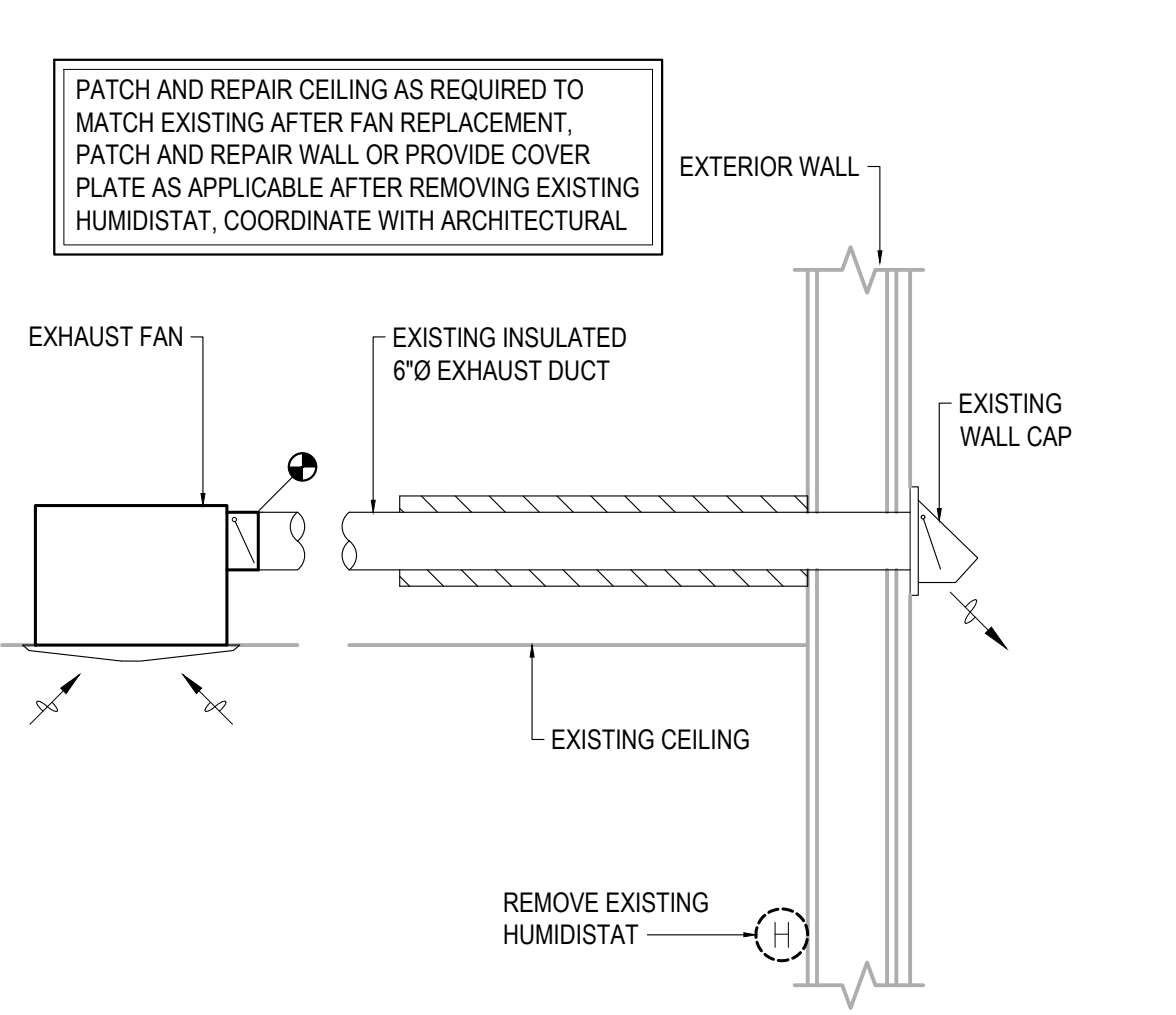
3 UNIT HEATER DETAIL
SCALE: NONE



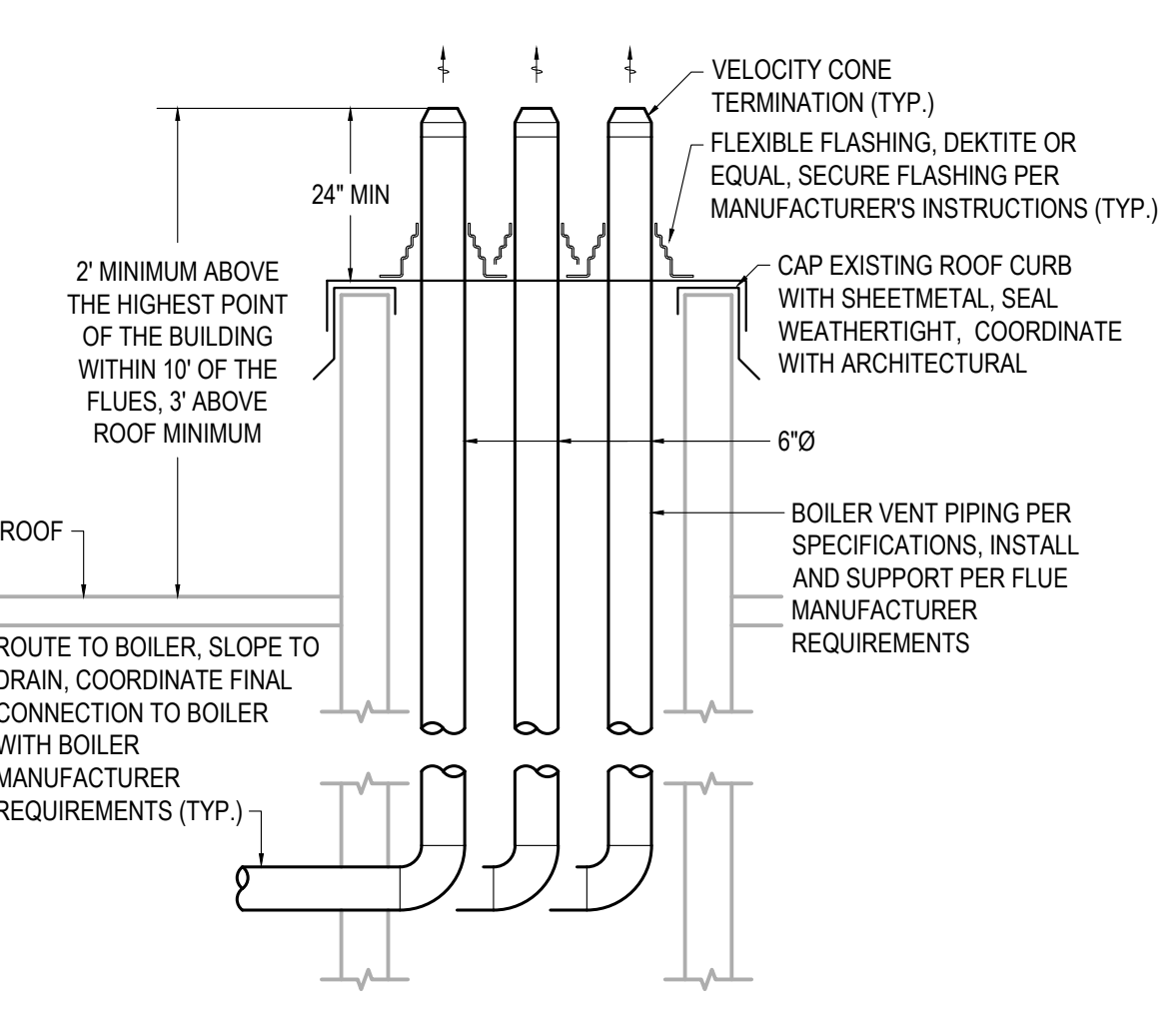
4 CABINET UNIT HEATER DETAIL
SCALE: NONE



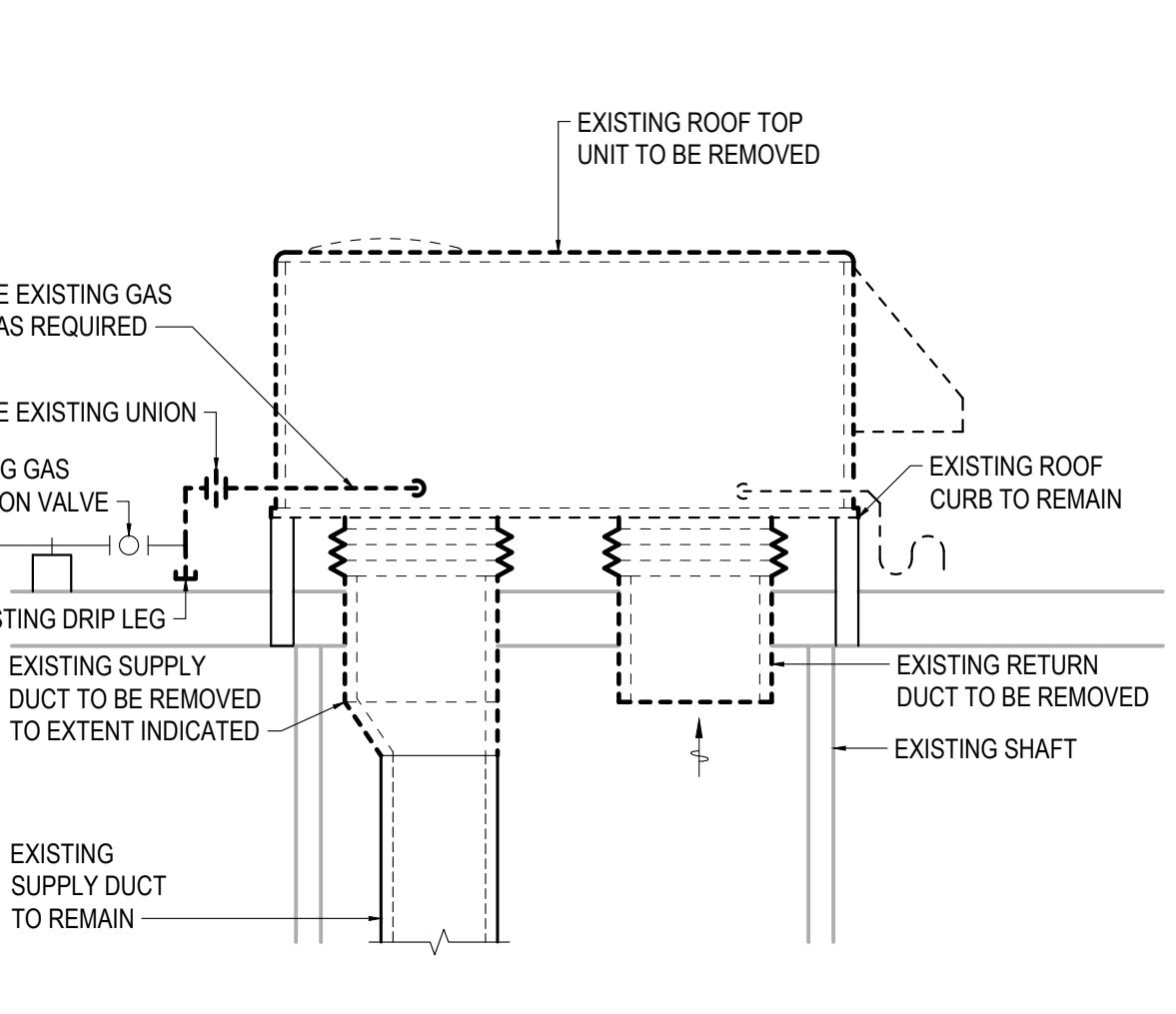
5 CABINET UNIT HEATER DETAIL
SCALE: NONE



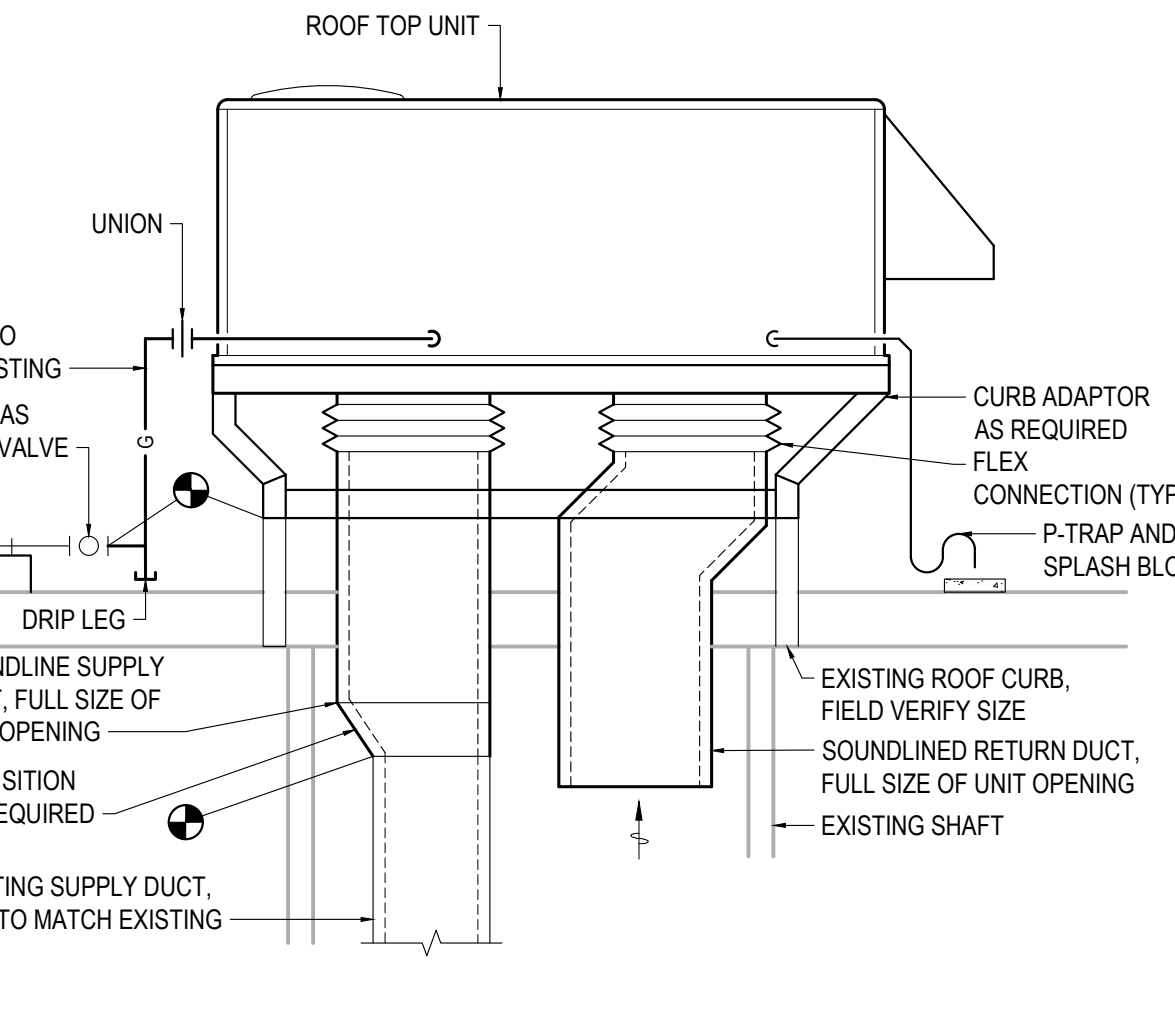
6 EXHAUST FAN DETAIL
SCALE: NONE



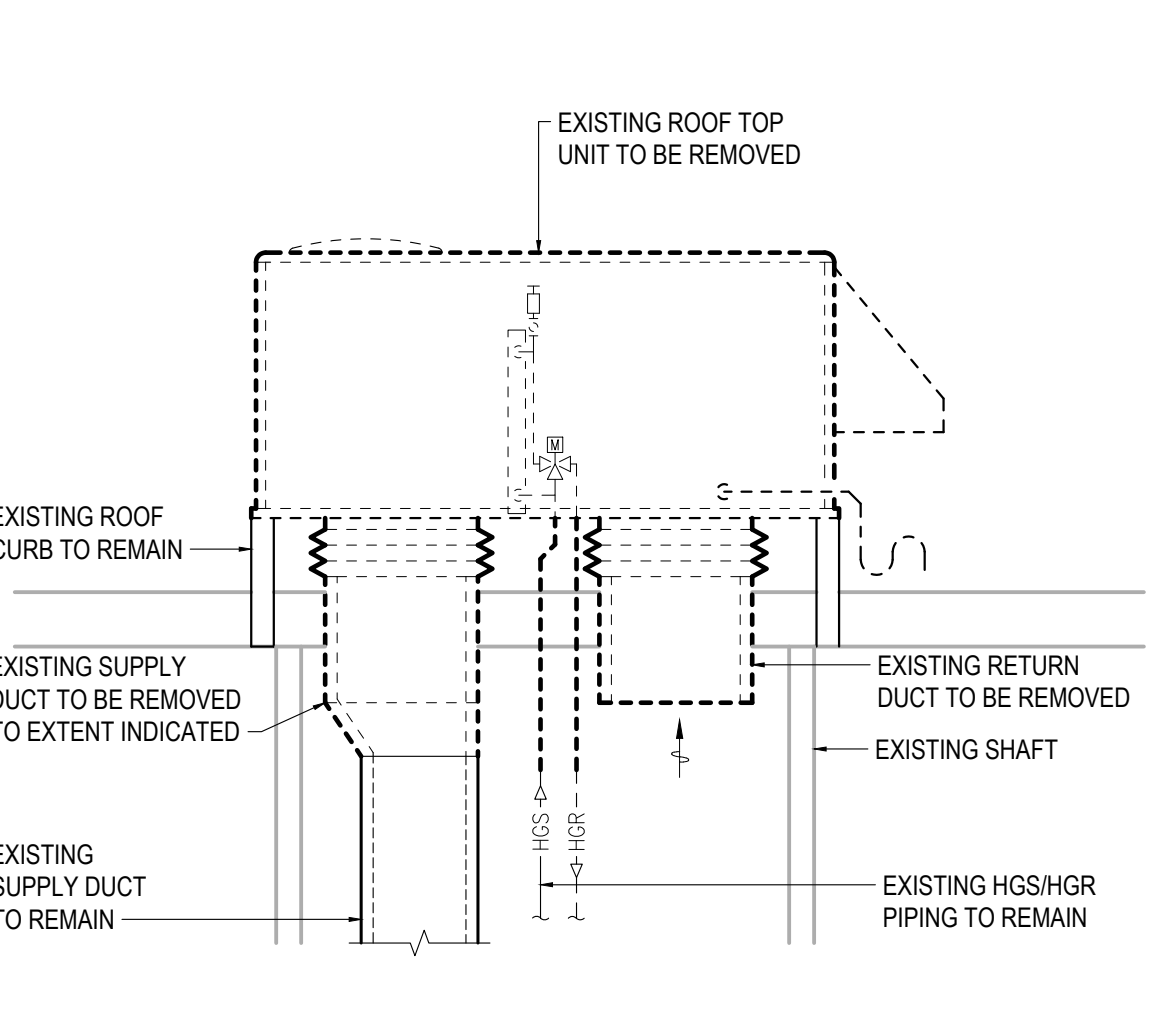
7 FLUE TERMINATION DETAIL
SCALE: NONE



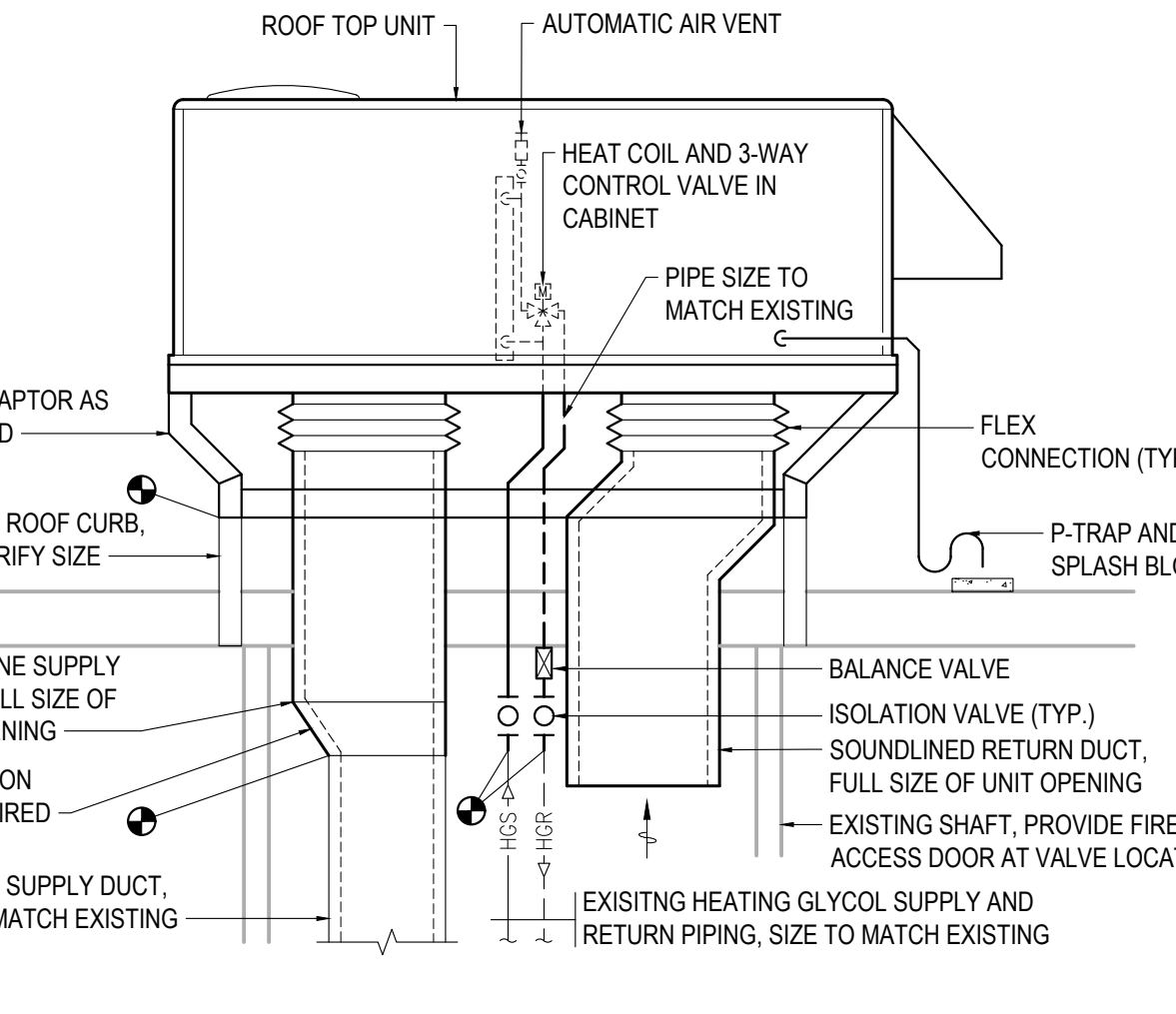
8 RTU-1 & RTU-3 DEMOLITION DETAIL
SCALE: NONE



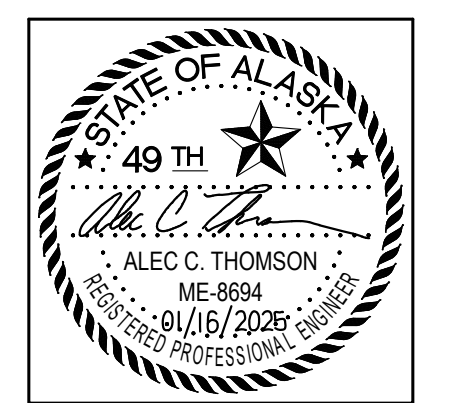
9 RTU-1 & RTU-3 REMODEL DETAIL
SCALE: NONE



10 RTU-2 DEMOLITION DETAIL
SCALE: NONE



11 RTU-2 REMODEL DETAIL
SCALE: NONE



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COOK INLET HOUSING AUTHORITY
KENAITZE RENOVATIONS
ANCHORAGE, ALASKA

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO. 2025.119.0
DATE 2026.01.16
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SHEET NAME
MECHANICAL DETAILS

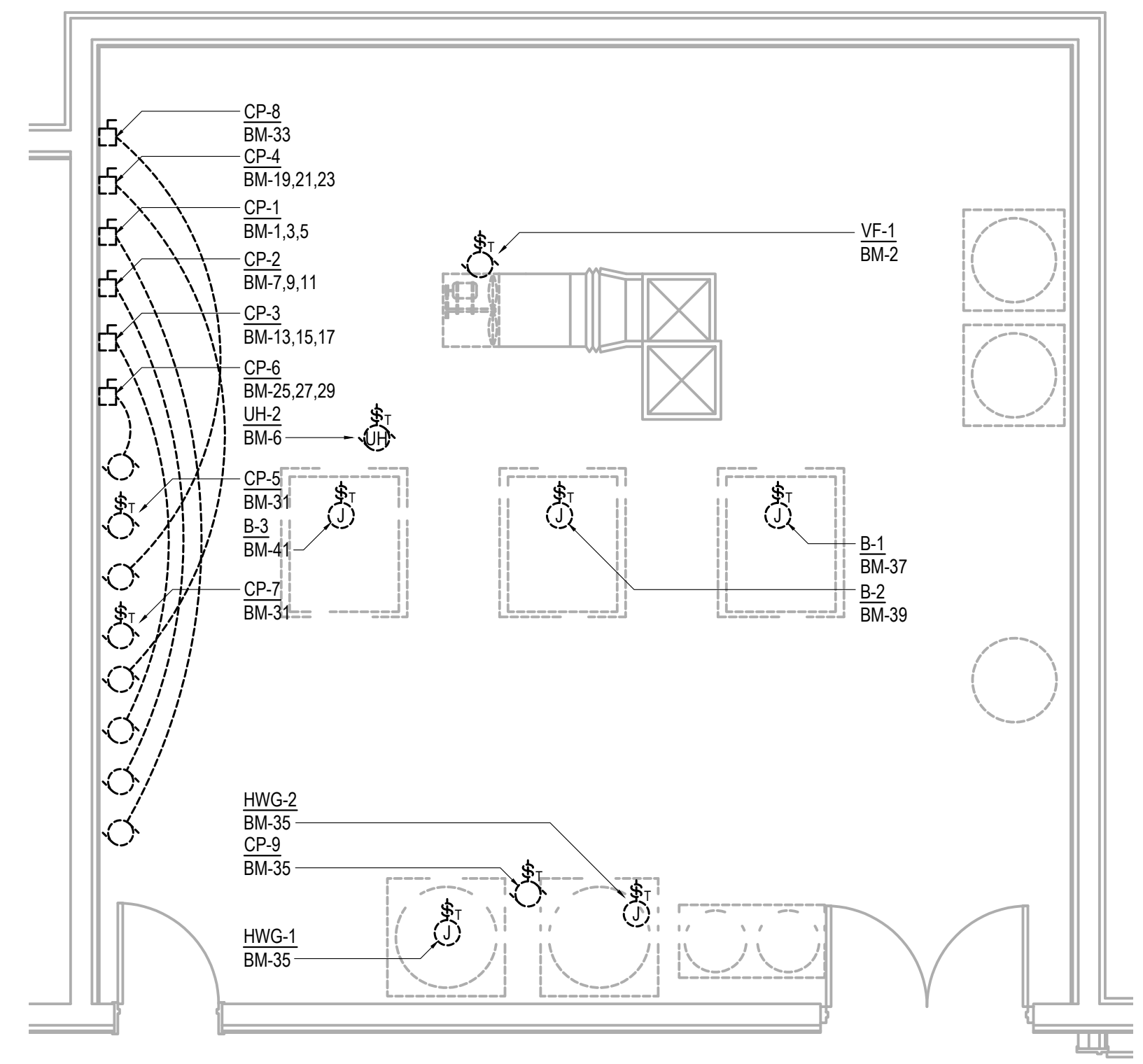
SHEET NO.
M6.01



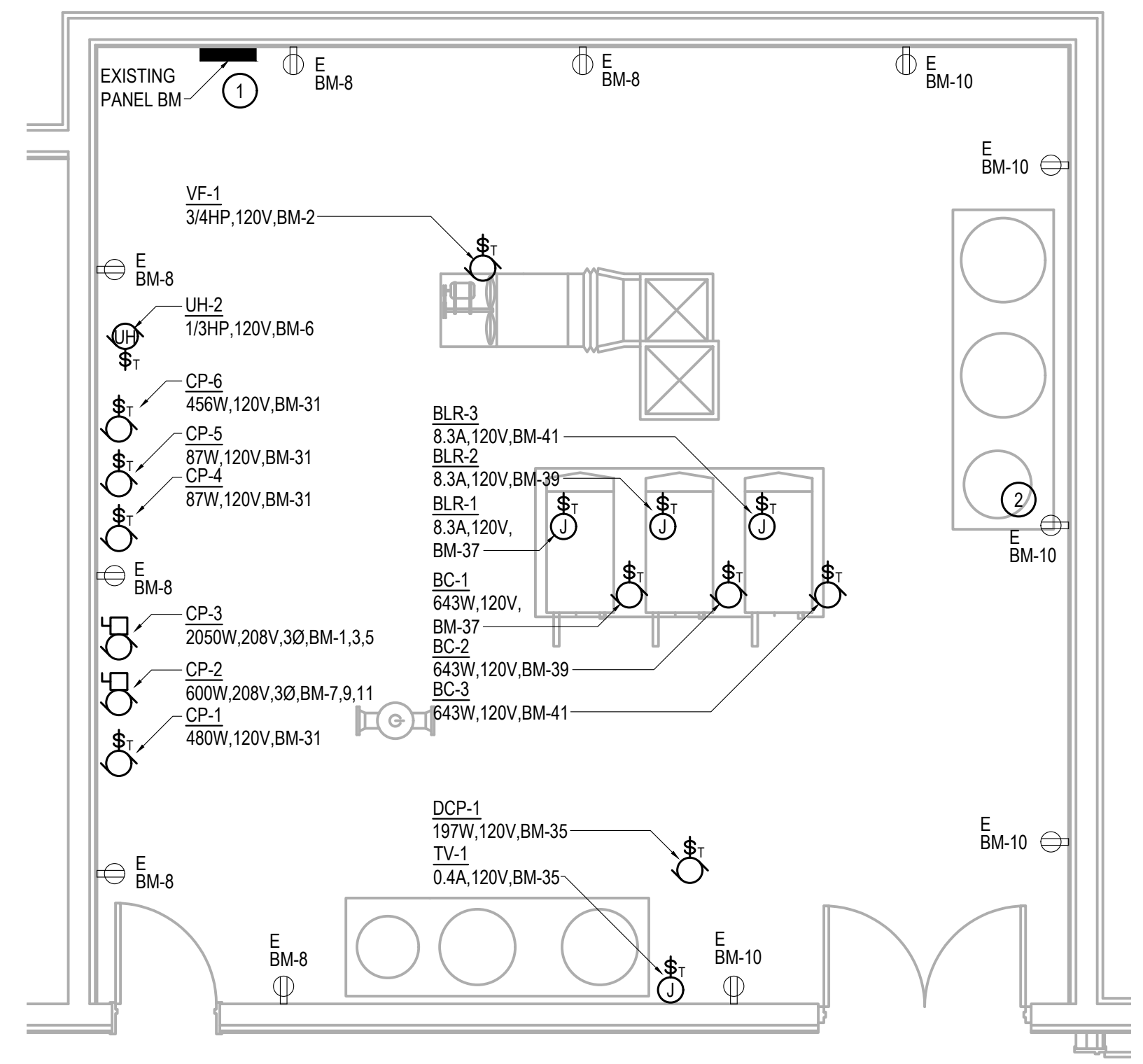
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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**



1 ENLARGED MECHANICAL ROOM POWER DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"



2 ENLARGED MECHANICAL ROOM POWER REMODEL PLAN
 SCALE: 1/4" = 1'-0"

GENERAL NOTES

- DASHED SYMBOLS INDICATE DEVICES AND EQUIPMENT TO BE REMOVED. REMOVE ASSOCIATED BRANCH CIRCUIT WIRING BACK TO SOURCE PANEL OR EXISTING UPSTREAM DEVICE TO REMAIN.
- EXISTING ELECTRICAL INFORMATION AND CIRCUITRY IS BASED ON RECORD DRAWINGS, PANEL SCHEDULES, AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS PRIOR TO THE START OF WORK.
- DEVICES NOTED 'E' ARE EXISTING TO REMAIN AND ARE SHOWN FOR CLARITY ONLY. MAINTAIN EXISTING LOCATION AND CIRCUITRY UNLESS NOTED OTHERWISE.
- UPDATE PANEL SCHEDULES TO IDENTIFY REVISED LOADS, NEW LOADS, AND NEW SPARES AS A RESULT OF THIS PROJECT.
- WHERE CODE COMPLIANT AND SUITABLE FOR INSTALLATION OF NEW DEVICES AND EQUIPMENT, THE CONTRACTOR MAY REUSE EXISTING BRANCH CIRCUITRY. PROVIDE EQUIPMENT GROUNDING CONDUCTOR IN EACH REUSED CONDUIT SYSTEM WHERE ONE IS NOT CURRENTLY PROVIDED. WHERE EXISTING CIRCUITRY IS UNSUITABLE TO PROVIDE SUPPLY AND CONTROL INDICATED, PROVIDE NEW CIRCUIT AND CONTROL WIRING IN RACEWAY PER SPECIFICATIONS AND AS REQUIRED.

SHEET NOTES INDICATED BY: (#)

- PROVIDE NEW COVER/DOOR FOR EXISTING PANELBOARD NOTED.
- UTILIZE EXISTING RECEPTACLE FOR NEW MECHANICAL EQUIPMENT GMT-1: 0.7A, 120V.

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	SVR
REVIEWED	TCA

SHEET NAME
 ENLARGED MECHANICAL ROOM POWER PLANS

SHEET NO.
E4.02



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**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	SVR
REVIEWED	TCA

SHEET NAME
PANEL SCHEDULES

SHEET NO.
E5.01

FAULT CURRENT CALCULATION SUMMARY				
EQUIPMENT			ASSUMED UTILITY CONFIGURATION	
			UTILITY CONTRIBUTION:	INFINITE
			TRANSFORMER RATING:	300KVA
			TRANSFORMER IMPEDENCE:	2.52%Z
EQUIPMENT	SUPPLY FEEDER RATING AND LENGTH	FAULT CURRENT L-L	FAULT CURRENT L-N	BUS RATING
(E) UTILITY TRANS SECONDARY	N/A	14,320 A	N/A	N/A
(E) CT ENCLOSURE	6 EA. #300 AL PER PHASE 10'	14,237 A	14,186 A	(E) 42,000 A
(E) MDP	5 EA. #600 CU PER PHASE 40'	13,987 A	13,676 A	(E) 42,000 A
WEST ELEVATOR *	1 EA. #1 CU PER PHASE 115'	7,789 A	4,523 A	10,000 A

CONTRACTOR TO CONFIRM UTILITY ASSUMPTIONS UTILIZED FOR THIS CALCULATION AS WELL AS INSTALLED CONDUCTOR CONFIGURATIONS AND LENGTHS DURING CONSTRUCTION. REPORT ANY DECREASE IN TRANSFORMER IMPEDENCE AND INSTALLED CABLE LENGTHS AS WELL AS ANY INCREASE IN TRANSFORMER KVA RATING AND CONDUCTOR RATINGS TO ENGINEER FOR RE-EVALUATION PRIOR TO DISTRIBUTION EQUIPMENT PROCUREMENT.
 * - CONFIRM ELEVATOR ELECTRICAL CONNECTION SIZE AND RATINGS WITH FINAL EQUIPMENT SUPPLIED PRIOR TO ROUGH IN.

EXISTING PANEL BC										
		VOLTAGE :			120/208V,3PH,4W			AMPERE RATING:		225 A
		MOUNTING:			SURFACE			MAIN CIRCUIT BREAKER RATING:		MLO
		SUPPLIED FROM:			PANEL SDP			SHORT CIRCUIT CURRENT RATING (SCCR):		22,000 A
CKT	AMP	POLE	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION	POLE	AMP	CKT	
N,GF	1	30	2,500	256		LTG - CORRIDOR	1	20	2	
	3	2				LTG - CORRIDOR	1	20	4	
N,GF	5	30	2,500	1,500	2,500	539	1	20	6	
	7	2				539	1	20	8	
N,GF	9	20		1,500	1,500		1	20	10	
N,GF	11	20			1,500	800	1	20	12	
	13	20	70				1	20	14	
	15	20		865			1	20	16	
	17	20			500	1,500	1	20	18	
	19	20	720				1	20	20	
	21	20		900			1	20	22	
	23	20			900	200	1	20	24	
	25	20	540				1	20	26	
	27	20		200			1	-	28	
	29	20			1,180		1	-	30	
	31	20	200				1	-	32	
	33	20					1	-	34	
	35	20			300		1	-	36	
	37	-					1	-	38	
	39	-					1	-	40	
	41	-					1	-	42	
CONNECTED LOAD (VA)			8,286	7,769	9,919			25,974 VA		
CONNECTED LOAD (AMPERES)			69	65	83			72 A		
DEMAND LOAD (VA) *			8,725	8,220	10,429			27,374 VA		
DEMAND LOAD (AMPERES) *			73	69	87			76 A		

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

EXISTING PANEL BM										
		VOLTAGE :			120/208V,3PH,4W			AMPERE RATING:		225 A
		MOUNTING:			SURFACE			MAIN CIRCUIT BREAKER RATING:		MLO
		SUPPLIED FROM:			PANEL SDP			SHORT CIRCUIT CURRENT RATING (SCCR):		22,000 A
CKT	AMP	POLE	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION	POLE	AMP	CKT	
R	1	15	683	1,656		VF-1	1	20	2	
	3	2					1	20	4	
	5	30					1	20	6	
	7	15					1	20	8	
R	9	20	200	1,080		REC - MECH ROOM	1	20	10	
	11	20			200	900	1	20	12	
	13	20					1	20	14	
S	15	30				170	1	20	16	
	17	30					1	20	18	
	19	15			500		1	20	20	
	21	30					1	20	22	
	23	30					1	20	24	
	25	35					1	20	26	
S	27	30					1	20	28	
	29	30					1	20	30	
R	31	20	1,110			CP-1, CP-4, CP-5, CP-6	1	20	32	
	33	25					1	20	34	
R	35	20			245		1	20	36	
R	37	25	1,639			BOILER 1, BOILER PUMP 1	1	20	38	
R	39	25		1,639		BOILER 2, BOILER PUMP 2	1	20	40	
R	41	25			1,639	BOILER 3, BOILER PUMP 3	1	20	42	
CONNECTED LOAD (VA)			6,868	3,792	3,631			14,292 VA		
CONNECTED LOAD (AMPERES)			57	32	30			40 A		
DEMAND LOAD (VA) *			7,039	4,006	3,802			14,847 VA		
DEMAND LOAD (AMPERES) *			59	33	32			41 A		

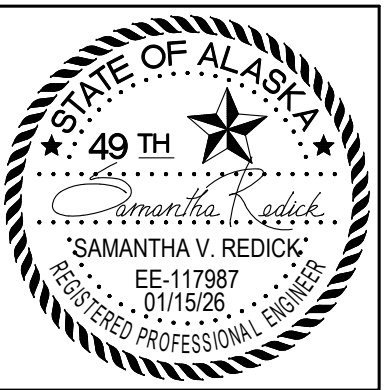
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 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

EXISTING PANEL BG										
		VOLTAGE :			120/208V,3PH,4W			AMPERE RATING:		225 A
		MOUNTING:			SURFACE			MAIN CIRCUIT BREAKER RATING:		MLO
		SUPPLIED FROM:			MDP			SHORT CIRCUIT CURRENT RATING (SCCR):		22,000 A
CKT	AMP	POLE	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION	POLE	AMP	CKT	
N,GF	1	30	2,500	336		LTG - CORRIDOR	1	20	2	
	3	2				143	1	20	4	
N,GF	5	30	2,500		2,500	360	1	20	6	
	7	2					1	20	8	
N,GF	9	30			2,500	100	1	20	10	
	11	2					1	20	12	
N,GF	13	20	1,500	400			1	20	14	
N,GF	15	20		1,500	702		1	20	16	
N,GF	17	20			1,500	330	1	20	18	
	19	20	330	360			1	20	20	
	21	20		865	360		1	20	22	
	23	20			1,200	360	1	20	24	
N,A	25	20	1,080	540			1	20	26	
N,A	27	20		1,360	540		1	20	28	
	29	20			1,080	540	1	20	30	
	31	20	900	540			1	20	32	
	33	20		720	540		1	20	34	
	35	20			720	540	1	20	36	
	37	20	200	540			1	20	38	
	39	20		400	360		1	20	40	
	41	20			300	500	1	20	42	
CONNECTED LOAD (VA)			11,922	12,735	12,530			37,187 VA		
CONNECTED LOAD (AMPERES)			99	106	104			103 A		
DEMAND LOAD (VA) *			12,055	13,224	12,703			37,961 VA		
DEMAND LOAD (AMPERES) *			100	110	106			106 A		

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

EXISTING PANEL 1C										
		VOLTAGE :			120/208V,3PH,4W			AMPERE RATING:		225 A
		MOUNTING:			SURFACE			MAIN CIRCUIT BREAKER RATING:		MLO
		SUPPLIED FROM:			PANEL SDP			SHORT CIRCUIT CURRENT RATING (SCCR):		10,000 A
CKT	AMP	POLE	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION	POLE	AMP	CKT	
N,GF	1	30	2,500	224		LTG - CORRIDOR	1	20	2	
	3	2				224	1	20	4	
N,GF	5	30	2,500		2,500	506	1	20	6	
	7	2					1	20	8	
N,GF	9	20		1,500	448		1	20	10	
N,GF	11	20			1,500	419	1	20	12	
	13	20	1,080	180			1	20	14	
	15	20		1,080	50		1	20	16	
	17	20			1,080		1	20	18	
	19	20	1,080	150			1	20	20	
	21	20		1,080	80		1	20	22	
R	23	20			730	165	1	20	24	
	25	20	720	300			1	20	26	
	27	20		720	200		1	20	28	
	29	20			1,200	1,200	1	20	30	
N,GF	31	50	4,050	35			1	20	32	
	33	2			4,050	272	1	20	34	
	35	20			1,500		1	20	36	
	37	20	1,500				1	20	38	
	39	20		200			1	-	40	
	41	20					1	-	42	
CONNECTED LOAD (VA)			14,463	12,404	10,800			37,667 VA		
CONNECTED LOAD (AMPERES)			121	103	90			105 A		
DEMAND LOAD (VA) *			14,676	12,660	11,073			38,409 VA		
DEMAND LOAD (AMPERES) *			122	106	92			107 A		

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%



CERTIFICATE OF AUTHORIZATION NO: T3 ALASKA, LLC AECL # 1625

spark design, llc
T3 ALASKA LLC
 Mechanical & Electrical Engineering
 301 Calista Court, Suite 100
 Anchorage, AK 99516
 PH: 907-665-7900 FAX: 907-665-7975

**COOK INLET HOUSING AUTHORITY
 KENAITZE RENOVATIONS
 ANCHORAGE, ALASKA**

REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	2025.119.0
DATE	2026.01.16
DRAWN	SVR
REVIEWED	TCA

SHEET NAME
 PANEL SCHEDULES

SHEET NO.
E5.02

TYPICAL UNIT PANEL				VOLTAGE : 120/240V, 1PH, 3W		AMPERE RATING: 60 A	
				MOUNTING: SURFACE		MAIN CIRCUIT BREAKER RATING: MLO	
				SUPPLIED FROM: VARIES		SHORT CIRCUIT CURRENT RATING (SCCR): 10,000 A	
CKT	AMP	POLE	LOAD DESCRIPTION	PHASE A VA	PHASE B VA	LOAD DESCRIPTION	POLE AMP CKT
1	50	2	RANGE	3,000	900	REC.LTG/SMOKE - BEDROOM	1 20 2
3	3	2				REC - KITCHEN & ISLAND	1 20 4
5	20	1	REC - DISHWASHER	1,000	1,500	REC - KITCHEN & RANGE HOOD	1 20 6
7	20	1	REC - UNDER SINK		180	900 REC - LIVING ROOM	1 20 8
9	20	1	UNIT LIGHTING	380	180	REC - BATHROOM	1 20 10
11	-	1	SPACE			SPACE	1 - 12
13	-	1	SPACE			SPACE	1 - 14
15	-	1	SPACE			SPACE	1 - 16
17	-	1	SPACE			SPACE	1 - 18
19	-	1	SPACE			SPACE	1 - 20
CONNECTED LOAD (VA)				6,960	5,580		12,540 VA
CONNECTED LOAD (AMPERES)				58	47		60 A
DEMAND LOAD (VA) *				6,960	5,580		12,540 VA
DEMAND LOAD (AMPERES) *				58	47		60 A

E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER, N - NEW CIRCUIT BREAKER & LOAD, S - NEW SPARE AS A RESULT OF THIS PROJECT
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - THERE WILL BE A REDUCTION IN UNIT LOAD AS A RESULT OF THIS PROJECT.

EXISTING PANEL 1G				VOLTAGE : 120/208V, 3PH, 4W		AMPERE RATING: 225 A	
				MOUNTING: SURFACE		MAIN CIRCUIT BREAKER RATING: MLO	
				SUPPLIED FROM: MDP		SHORT CIRCUIT CURRENT RATING (SCCR): 10,000 A	
CKT	AMP	POLE	LOAD DESCRIPTION	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION POLE AMP CKT
1	30	2	DRYER	2,500	336		LTG - CORRIDOR & EMERGENCY 1 20 2
3	3	2					LTG - CORRIDOR 1 20 4
5	30	2	DRYER		2,500	143	LTG - CORRIDOR & EMERGENCY 1 20 6
7	3	2		2,500		360	SPARE 1 20 8
9	30	2	DRYER		2,500	500	TRASH INTERLOCK DOORS 1 20 10
11	3	2				200	HEAT TRACE 1 20 12
13	20	1	WASHER	1,500			SPARE 1 20 14
15	20	1	WASHER		1,500		SPARE 1 20 16
17	20	1	WASHER			1,500	50 DOOR MAGS 1 20 18
19	20	1	REC - CORRIDOR, HEAT TRANSFORMERS	1,080			SPARE 1 20 20
21	20	1	REC - CORRIDOR, HEAT TRANSFORMERS		1,260		SPARE 1 20 22
23	20	1	UH-1			100	SPARE 1 20 24
25	20	1	FIRE SMOKE DAMPER	200			SPARE 1 20 26
27	20	1	SPARE		450		SPARE 1 20 28
29	20	1	SPARE				SPARE 1 20 30
31	20	1	SPARE				SPARE 1 20 32
33	20	1	SPACE				SPACE 1 - 34
35	-	1	SPACE				SPACE 1 - 36
37	-	1	SPACE				SPACE 1 - 38
39	-	1	SPACE				SPACE 1 - 40
41	-	1	SPACE				SPACE 1 - 42
CONNECTED LOAD (VA)				8,116	8,853	7,210	24,179 VA
CONNECTED LOAD (AMPERES)				68	74	60	67 A
DEMAND LOAD (VA) *				8,200	8,889	7,675	24,764 VA
DEMAND LOAD (AMPERES) *				68	74	64	69 A

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

EXISTING PANEL 2C				VOLTAGE : 120/208V, 3PH, 4W		AMPERE RATING: 225 A	
				MOUNTING: SURFACE		MAIN CIRCUIT BREAKER RATING: MLO	
				SUPPLIED FROM: PANEL SDP		SHORT CIRCUIT CURRENT RATING (SCCR): 10,000 A	
CKT	AMP	POLE	LOAD DESCRIPTION	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION POLE AMP CKT
1	30	2	DRYER	2,500	157		LTG - CORRIDOR 1 20 2
3	3	2			2,500	157	LTG - CORRIDOR 1 20 4
5	30	2	DRYER			2,500	310 LTG - STOR. LAUNDRY ROOMS 1 20 6
7	3	2		2,500		100	EF-2 1 20 8
9	20	1	WASHER		1,500	3,720	
11	20	1	WASHER			1,500	3,720 RTU-1 1 20 12
13	20	1	REC - CORRIDOR	1,260	3,720		
15	20	1	REC - CORRIDOR		1,260	6,240	
17	20	1	REC - ROOFTOP			360	6,240 RTU-2 1 20 18
19	20	1	SPARE		6,240		
21	20	1	FIRE SMOKE DAMPER		200	530	
23	20	1	SPARE			272	LTG - CORRIDOR 1 20 24
25	20	1	SPARE				SPARE 1 20 26
27	20	1	SPARE				SPARE 1 20 28
29	20	1	SPARE				SPARE 1 20 30
31	20	1	SPARE				SPARE 1 20 32
33	20	1	SPACE				SPACE 1 20 34
35	20	1	SPACE				SPACE 1 20 36
37	20	1	SPACE				SPACE 1 - 38
39	-	1	SPACE				SPACE 1 - 40
41	-	1	SPACE				SPACE 1 - 42
CONNECTED LOAD (VA)				16,477	16,107	14,902	47,486 VA
CONNECTED LOAD (AMPERES)				137	134	124	132 A
DEMAND LOAD (VA) *				18,076	17,706	16,540	52,322 VA
DEMAND LOAD (AMPERES) *				151	148	138	145 A

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

EXISTING PANEL 2G				VOLTAGE : 120/208V, 3PH, 4W		AMPERE RATING: 225 A	
				MOUNTING: SURFACE		MAIN CIRCUIT BREAKER RATING: MLO	
				SUPPLIED FROM: MDP		SHORT CIRCUIT CURRENT RATING (SCCR): 10,000 A	
CKT	AMP	POLE	LOAD DESCRIPTION	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION POLE AMP CKT
1	30	2	DRYER	2,500	336		LTG - CORRIDOR 1 20 2
3	3	2					LTG - CORRIDOR 1 20 4
5	30	2	DRYER		2,500	143	LTG - CORRIDOR & EMERGENCY 1 20 6
7	3	2		2,500		360	SPARE 1 20 8
9	30	2	DRYER		2,500		TRASH INTERLOCK DOORS 1 20 10
11	3	2				200	HEAT TRACE 1 20 12
13	20	1	WASHER	1,500			SPARE 1 20 14
15	20	1	WASHER		1,500		SPARE 1 20 16
17	20	1	WASHER			1,500	50 DOOR MAGS 1 20 18
19	20	1	REC - CORRIDOR	920			SPARE 1 20 20
21	20	1	REC - CORRIDOR		900		SPARE 1 20 22
23	20	1	REC - CORRIDOR			1,080	SPARE 1 20 24
25	20	1	EF-2	100			SPARE 1 20 26
27	20	1	UH-1		100		SPARE 1 20 28
29	20	1	FIRE SMOKE DAMPER			200	SPACE 1 20 30
31	20	1	SPACE				SPACE 1 20 32
33	20	1	SPACE				SPACE 1 20 34
35	20	1	SPACE				SPACE 1 20 36
37	-	1	SPACE				SPACE 1 20 38
39	-	1	SPACE				SPACE 1 20 40
41	-	1	SPACE				SPACE 1 20 42
CONNECTED LOAD (VA)				8,216	7,643	7,780	23,639 VA
CONNECTED LOAD (AMPERES)				68	64	65	66 A
DEMAND LOAD (VA) *				8,390	8,054	7,780	24,224 VA
DEMAND LOAD (AMPERES) *				70	67	65	67 A

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

EXISTING PANEL 3D				VOLTAGE : 120/208V, 3PH, 4W		AMPERE RATING: 225 A		
				MOUNTING: SURFACE		MAIN CIRCUIT BREAKER RATING: MLO		
				SUPPLIED FROM: MDP		SHORT CIRCUIT CURRENT RATING (SCCR): 10,000 A		
CKT	AMP	POLE	LOAD DESCRIPTION	PHASE A VA	PHASE B VA	PHASE C VA	LOAD DESCRIPTION POLE AMP CKT	
1	30	2	DRYER	2,500	432		LTG - CORRIDOR 1 20 2	
3	3	2			2,500	432	LTG - CORRIDOR 1 20 4	
5	30	2	DRYER			2,500	432 LTG - CORRIDOR & EMERGENCY 1 20 6	
7	3	2		2,500		9,480	SPARE 1 20 8	
9	30	2	DRYER		2,500	9,480	RTU - 3 1 20 10	
11	3	2				2,500	9,480	
13	20	1	WASHER	1,500	530		EF-4 (ON ROOF) 1 20 14	
15	20	1	WASHER		1,500		SPARE 1 20 16	
17	20	1	WASHER			1,500	SPARE 1 20 18	
19	20	1	REC - CORRIDOR	1,080			SPARE 1 20 20	
21	20	1	REC - CORRIDOR		1,080		SPARE 1 20 22	
23	20	1	REC - CORRIDOR			720	SPARE 1 20 24	
25	20	1	EF-2	100			SPARE 1 20 26	
27	20	1	REC - ROOFTOP		360		REC - ROOFTOP 1 20 28	
29	20	1	UH-1			100	SPARE 1 20 30	
31	20	1	FIRE SMOKE DAMPER	200			SPACE 1 20 32	
33	20	1	SPACE				SPACE 1 20 34	
35	20	1	SPACE				SPACE 1 20 36	
37	20	1	SPACE				SPACE 1 20 38	
39	20	1	SPACE				SPACE 1 - 40	
41	20	1	SPACE				SPACE 1 - 42	
CONNECTED LOAD (VA)				18,322	17,852	17,232	53,406 VA	
CONNECTED LOAD (AMPERES)				153	149	144	148 A	
DEMAND LOAD (VA) *				20,800	20,330	19,710	60,840 VA	
DEMAND LOAD (AMPERES) *				173	169	164	169 A	

N - NEW CIRCUIT BREAKER, A - PROVIDE ARC FAULT TYPE CIRCUIT BREAKER, E - EXISTING CIRCUIT BREAKER & LOAD TO REMAIN, R - RECONFIGURED LOAD ON EXISTING CIRCUIT BREAKER
 GF - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), GP - PROVIDE CLASS B EPD TYPE CIRCUIT BREAKER (30mA), SH - PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER
 * - DEMAND LOAD CALCULATED WITH LIGHTING & LARGEST MOTOR LOAD AT 125%

GENERAL STRUCTURAL NOTES
(APPLY UNLESS NOTED OTHERWISE)

DESIGN CRITERIA

CODES:
BUILDING CODE: IBC/IEBC 2018
ASCE/SEI 7-16: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
NDS-2018: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

LOADS:
DEAD:
DL = 20 PSF (ROOF)
SNOW:
SL = 40 PSF (PLUS SNOW DRIFT)
WIND:
V_{ult} = 145 MPH, EXPOSURE B
SEISMIC:
SEISMIC DESIGN CATEGORY D
SITE CLASS D (DEFAULT)
S_s = 1.5g, S₁ = 0.68g, S_{0.5s} = 1.2G
EQUIPMENT RESTRAINT CRITERIA:
a_r = 2.5, R_e = 6.0, I_p = 1.0

FALL ARREST SYSTEM IS DESIGNED IN ACCORDANCE WITH OSHA 1910.
MINIMUM LOAD CAPACITY OF ALL COMPONENTS IN SYSTEM = 5,000 LBS.
ALL OSHA STANDARDS MUST BE FOLLOWED IN THE USE OF THIS WALL ARREST ANCHOR.

MATERIAL CRITERIA

WOOD FRAMING:
ALL SAWN LUMBER SHALL BE DF#2
LVL SHALL BE VERSA-LAM 2.1E 2800 MANUFACTURED BY BOISE CASCADE OR APPROVED EQUIVALENT
PLYWOOD SHALL BE 19/32", 40/20 (SPAN RATING), C-D (GRADE), EXPOSURE 1

STEEL FRAMING:
STEEL PLATE SHALL BE ASTM A 36
STEEL PIPE SHALL BE ASTM A53, GRADE B

GENERAL

THE STRUCTURAL ENGINEER AND/OR ARCHITECT HAVE NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM HIS WORK. THE UNDERTAKING OF PERIODIC SITE VISITS BY THE ENGINEER SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION NOR MAKE THEM RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR, SUBCONTRACTORS, SUPPLIERS OR THEIR EMPLOYEES, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL OR OCCUPANCY BY ANY PERSON.

DRAWINGS INDICATE STRUCTURE IN FINAL FORM CAPABLE OF SUPPORTING DESIGN LOADS. PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION AS REQUIRED, UNTIL STRUCTURAL ELEMENTS ARE PERMANENTLY INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES AND SEQUENCES OF PROCEDURES REQUIRED TO PERFORM THE WORK.

THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER IN WRITING OF ANY CONDITION WHICH IN THEIR OPINION MAY ENDANGER THE STABILITY OF THE STRUCTURE OR DISTRESS THE STRUCTURE.

CONSTRUCTION MATERIALS SHALL BE DISTRIBUTED APPROPRIATELY IF PLACED ON FRAMED CONSTRUCTION. LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

DO NOT SCALE DRAWINGS.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IN WRITING OF ANY DISCREPANCIES.

COORDINATE DIMENSIONS, OPENINGS, EMBEDDED ITEMS AND CONDITIONS WITH ARCHITECTURAL, CIVIL, MECHANICAL AND ELECTRICAL CONTRACT DOCUMENTS AND TRADES PRIOR TO CONSTRUCTION. NOT ALL ITEMS ARE INDICATED ON STRUCTURAL CONTRACT DOCUMENTS. NOTIFY STRUCTURAL ENGINEER IN WRITING OF ANY AND ALL DISCREPANCIES.

ALL DETAILS ARE TYPICAL. INCORPORATE INTO PROJECT AT APPROPRIATE LOCATIONS WHETHER SPECIFICALLY INDICATED OR NOT.

SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE THE NOTES, DRAWINGS, AND/OR SPECIFICATIONS DIFFER, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

NOTIFY STRUCTURAL ENGINEER OF ALL FIELD CHANGES PRIOR TO INSTALLATION.

THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF RED-LINE DRAWINGS ON SITE REFLECTING ALL DESIGN CHANGES TO THE ORIGINAL CONTRACT DOCUMENTS.

EXISTING STRUCTURES

THESE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED BASED ON LIMITED VISUAL OBSERVATIONS AND/OR LIMITED AS-BUILT DOCUMENTS. CHANGES MAY BE REQUIRED DUE TO POSSIBLE AMBIGUITIES OR INCONSISTENCIES IN RECORD DRAWINGS.

VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.

IF FIELD CONDITIONS DIFFER FROM THOSE DEPICTED OR EXISTING MATERIALS ARE OF QUESTIONABLE OR SUBSTANDARD QUALITY, NOTIFY THE STRUCTURAL ENGINEER IN WRITING BEFORE COMMENCING ANY WORK. THE CONTRACTOR SHALL REPORT ALL DIFFERENCES AND DEFECTS PROMPTLY.

ROUGH CARPENTRY AND PLYWOOD

ALL FRAMING SHALL BE PROVIDED IN ACCORDANCE WITH IBC CHAPTER 23. FRAMING LUMBER SHALL COMPLY WITH THE APPLICABLE NDS CODE.

MAXIMUM MOISTURE CONTENT OF LUMBER SHALL NOT EXCEED 19 PERCENT.

ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY.

ALL PLYWOOD SHALL CONFORM TO PS-1 OR APA PRP-108, SHALL HAVE AN EXTERIOR OR EXPOSURE 1 CLASSIFICATION AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY.

PLYWOOD SHALL BE INSTALLED WITH FACE GRAIN ORIENTED PERPENDICULAR TO SUPPORTS, STAGGER JOINTS. PLYWOOD NAILING SHALL BE PROVIDED ON ALL BOUNDARIES, EDGES AND INTERMEDIATE SUPPORTS.

METAL FRAMING CONNECTORS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INCORPORATED, OR OTHER APPROVED EQUIVALENT MANUFACTURER. ALL NAIL/SCREW HOLES IN CONNECTORS SHALL BE FILLED WITH NAILS/SCREWS OF THE LARGEST SIZE INDICATED IN THE MANUFACTURER'S CATALOG UNO.

NAILING SHALL CONFORM TO TABLE 2304.10.2 OF THE IBC. ALL NAILS SHALL BE COMMON SIZE IN ACCORDANCE WITH ASTM F1667.

ENGINEERED LUMBER PRODUCTS

LAMINATED VENEER LUMBER (LVL) PRODUCTS SHALL CONFORM TO APA/EWS PRL-501 AND ICC ESR-1387. LVL MEMBERS SHALL BE "VERSA-LAM" 2.0E AS MANUFACTURED BY BOISE ENGINEERED WOOD PRODUCTS, OR APPROVED EQUIVALENT BY OTHER MANUFACTURER WITH CURRENT AND EQUIVALENT ICC APPROVAL.

STRUCTURAL STEEL

ALL STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM WITH APPLICABLE AISC HANDBOOK.

ALL STRUCTURAL STEEL SHALL BE SURFACE PREPARED AND SHOP PAINTED AS NOTED. SURFACE PREPARATION SHALL CONFORM TO SSPC SP-3 POWER TOOL CLEANING TO REMOVE ALL SCALE AND RUST. SHOP PRIME AND PAINT AS FOLLOWS:

- A. ONE COAT (TOP COAT COMPATIBLE) RUST RESISTING ALKYLID RESIN PRIMER, SHERWIN WILLIAMS "B50", OR APPROVED EQUIVALENT.
- B. TWO COATS ACRYLIC CORROSION RESISTANT ENAMEL, SEMI-GLOSS, [COLOR], SHERWIN WILLIAMS "DTM B66", OR APPROVED EQUIVALENT.

ALL STRUCTURAL WELDING SHALL BE PRE-QUALIFIED AND CONFORM TO AISC AND AWS SPECIFICATIONS.

ALL WELDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AWS CODE. USE E70 SERIES LOW HYDROGEN ELECTRODES STORED AND MAINTAINED IN DRY CONDITION.

ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS HAVING CURRENT CERTIFICATES AND EXPERIENCE IN THE TYPE OF WELD BEING PERFORMED. WELDING CERTIFICATES SHALL BE THOSE ISSUED BY AN ACCEPTED TEST AGENCY.

POST-INSTALLED ANCHORS

POST-INSTALLED ANCHOR EMBEDMENT SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS. ALL POST-INSTALLED ANCHORS AND DOWELS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS INCLUDING DRILL BIT SIZE, HOLE DEPTH AND CLEANING, MINIMUM EMBEDMENT, EDGE DISTANCES, MATERIAL PLACEMENT, TEMPERATURE AND MOISTURE CONTROL AND FINAL TORQUING REQUIREMENTS.

CONTRACTOR MAY NOT USE SUBSTITUTES FOR POST-INSTALLED ANCHORS WITHOUT PRIOR WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

NO REINFORCING BARS SHALL BE CUT TO INSTALL ANCHORS. ALL DEFECTIVE ANCHOR HOLES SHALL BE GROUTED WITH EPOXY ADHESIVE AND A NEW HOLE DRILLED A MINIMUM OF (3) BOLT DIAMETERS AWAY.

PERIODIC SPECIAL INSPECTION OF POST-INSTALLED ANCHORS IS REQUIRED.

SPECIAL STRUCTURAL INSPECTIONS AND TESTING

THE OWNER (OR REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT) SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTION AND TESTING DURING CONSTRUCTION OF THE TYPES OF WORK REQUIRING SPECIAL INSPECTION AS INDICATED ON THE DRAWINGS.

EACH SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL AND STRUCTURAL ENGINEER OF RECORD, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE ENGINEER OR ARCHITECT OF RECORD. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN IF UNCORRECTED, TO THE ENGINEER OR ARCHITECT OF RECORD AND THE BUILDING OFFICIAL.

UPON COMPLETION OF THE ASSIGNED WORK, THE SPECIAL INSPECTOR SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT, TO THE BEST OF THEIR KNOWLEDGE, THE WORK IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

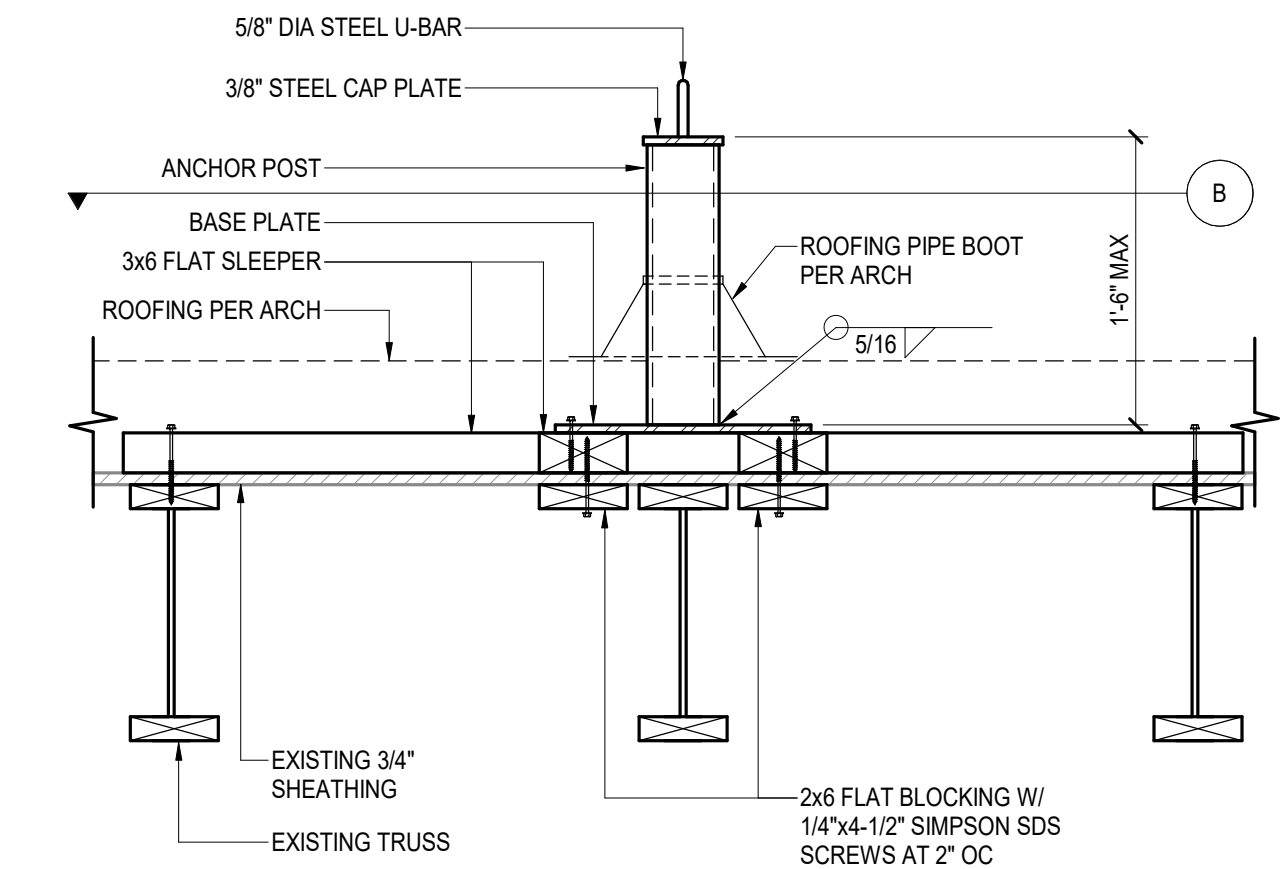
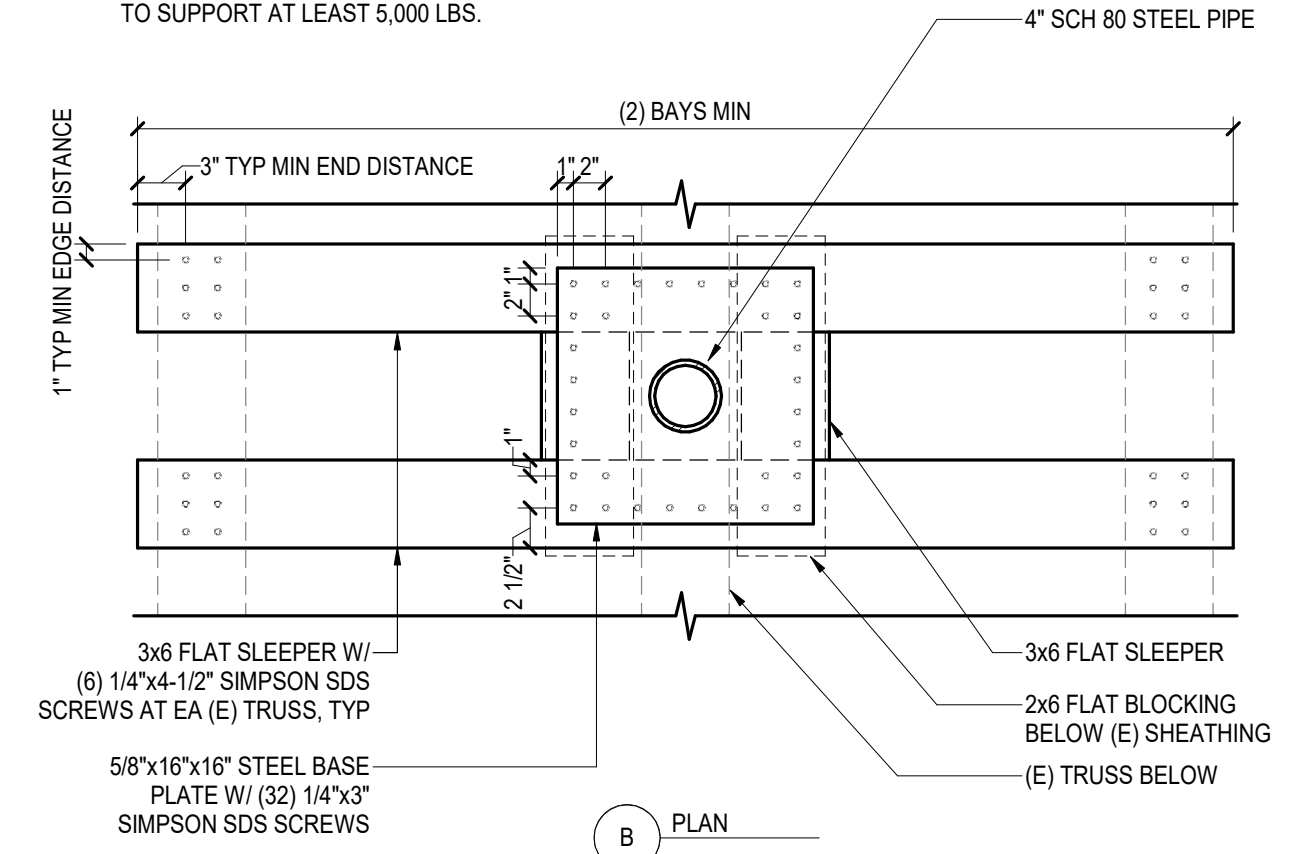
DEFINITIONS

CONTINUOUS SPECIAL INSPECTION: CONTINUOUS SPECIAL INSPECTION IS THE FULL TIME OBSERVATION OF THE WORK BY THE SPECIAL INSPECTOR PRESENT IN THE WORK AREA WHENEVER WORK IS BEING PERFORMED. PERFORM CONTINUOUS SPECIAL INSPECTION WHERE SPECIFIED AS INDICATED IN THE SPECIAL INSPECTION TABLES.

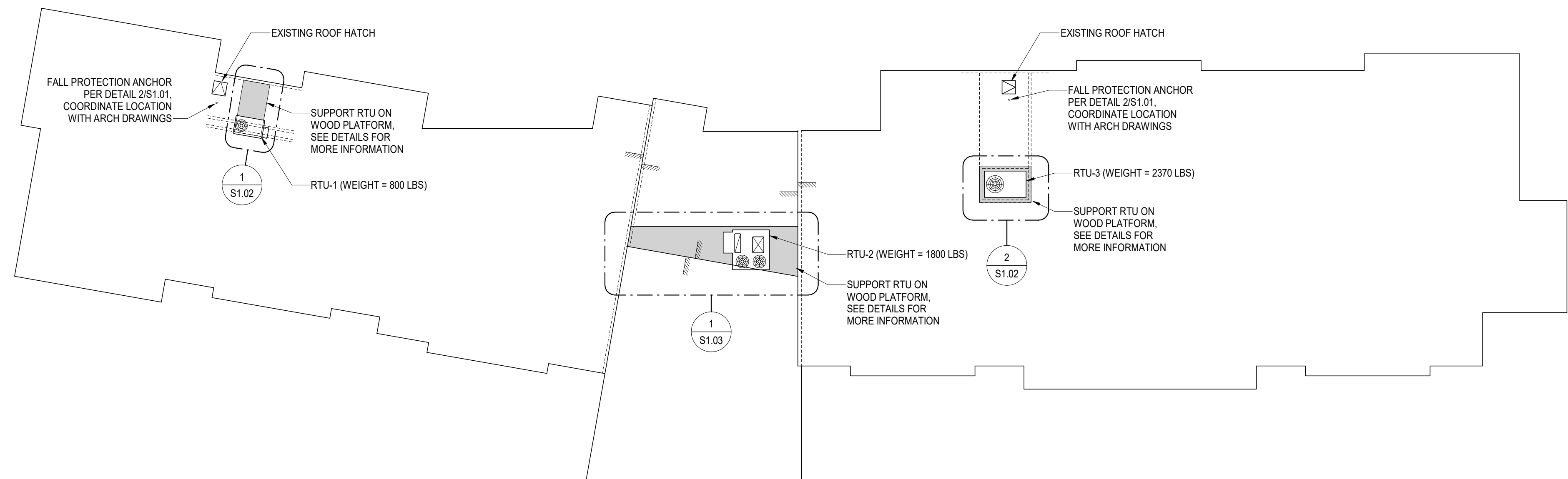
PERIODIC SPECIAL INSPECTION: PERIODIC SPECIAL INSPECTION IS THE INTERMITTENT OBSERVATION OF THE WORK BY A SPECIAL INSPECTOR PRESENT IN THE WORK AREA WHILE WORK IS BEING PERFORMED. THE INTERMITTENT OBSERVATION PERIODS SHALL BE AT TIME OF SIGNIFICANT WORK, RECURRENT OVER THE COMPLETE WORK PERIOD AND TOTAL AT LEAST 25 PERCENT OF THE TOTAL WORK TIME FOR A GIVEN TASK. PERFORM PERIODIC SPECIAL INSPECTION WHERE SPECIFIED FOR ITEMS AS INDICATED IN THE SPECIAL INSPECTION TABLES.

GENERAL NOTE:

A. CONTRACTORS OPTION TO USE PROPRIETARY ANCHOR DESIGNED TO SUPPORT AT LEAST 5,000 LBS.



2 ANCHOR AT EXISTING WOOD TRUSS
SCALE: NTS



1 ROOF PLAN OVERALL
SCALE: 1/16" = 1'-0"

CERTIFICATE OF AUTHORIZATION NO. SPARK DESIGN, LLC #AECL1394

spark design, llc
architecture • interiors • design-build
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COOK INLET HOUSING AUTHORITY
KENAITZE RENOVATIONS
ANCHORAGE, ALASKA

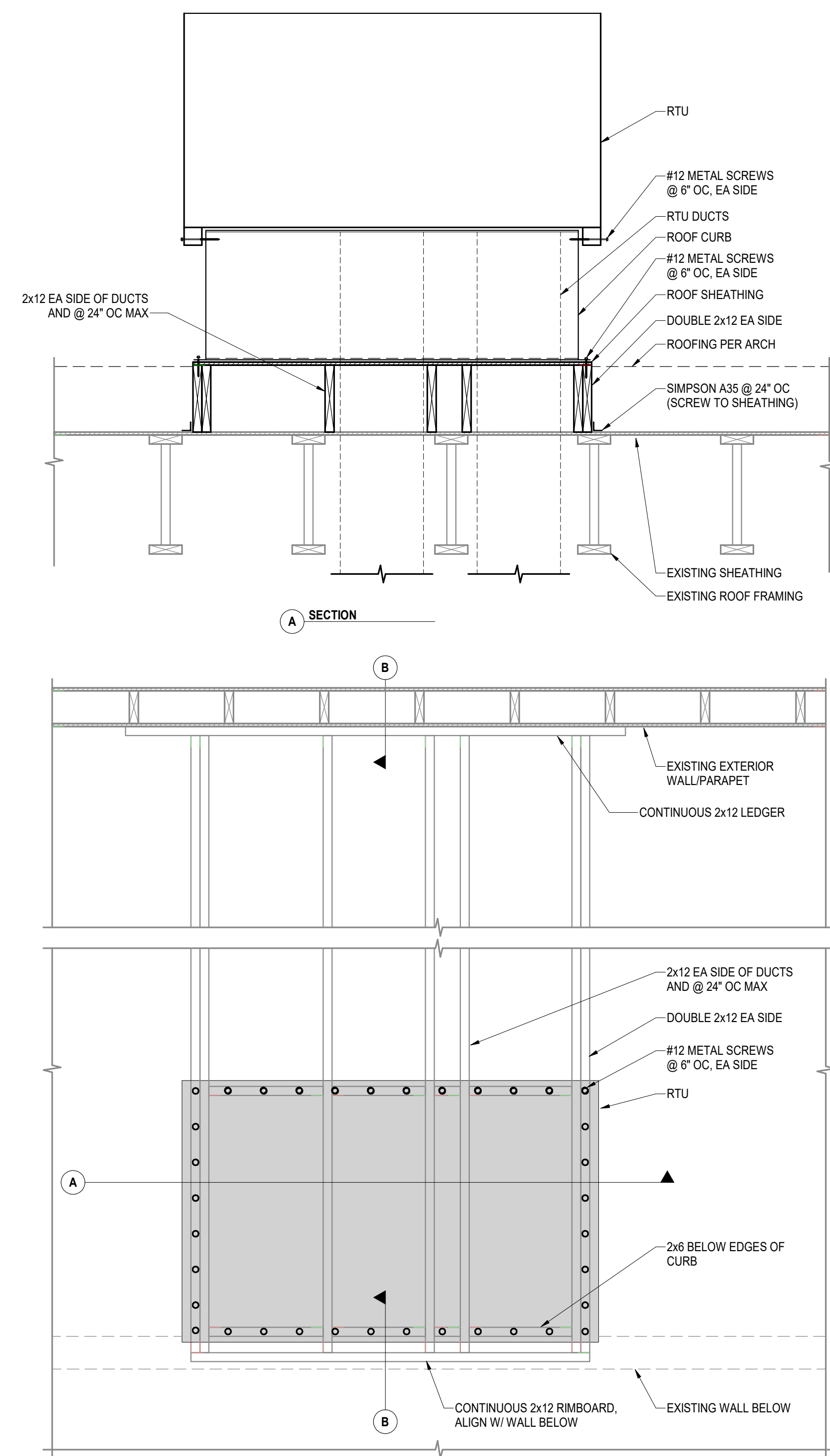
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#	DESCRIPTION	DATE

JOB NO.	25.358
DATE	01.26.2026
DRAWN	JO
REVIEWED	NC

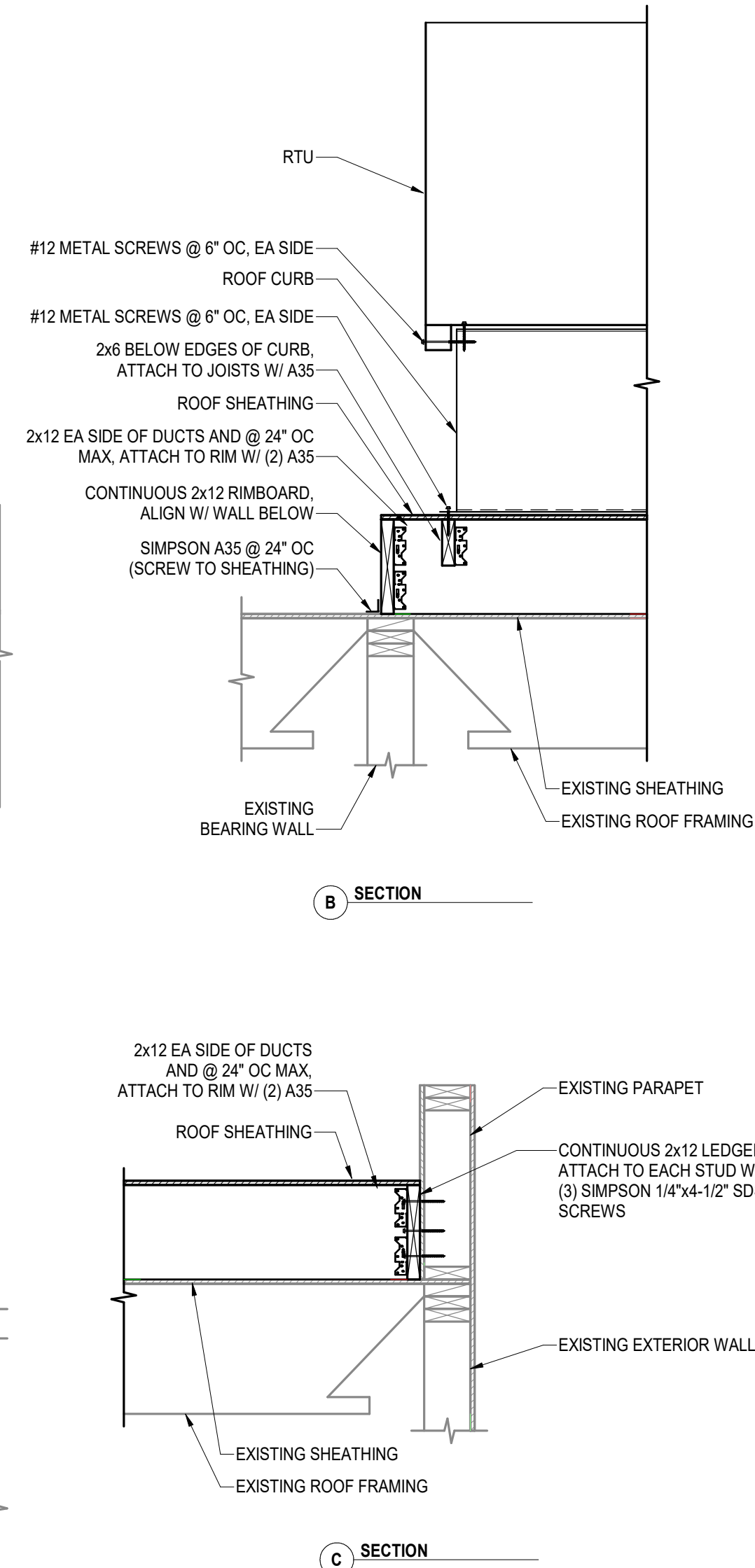
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GENERAL STRUCTURAL
INFORMATION, PLANS & DETAILS

SHEET NO.
S1.01

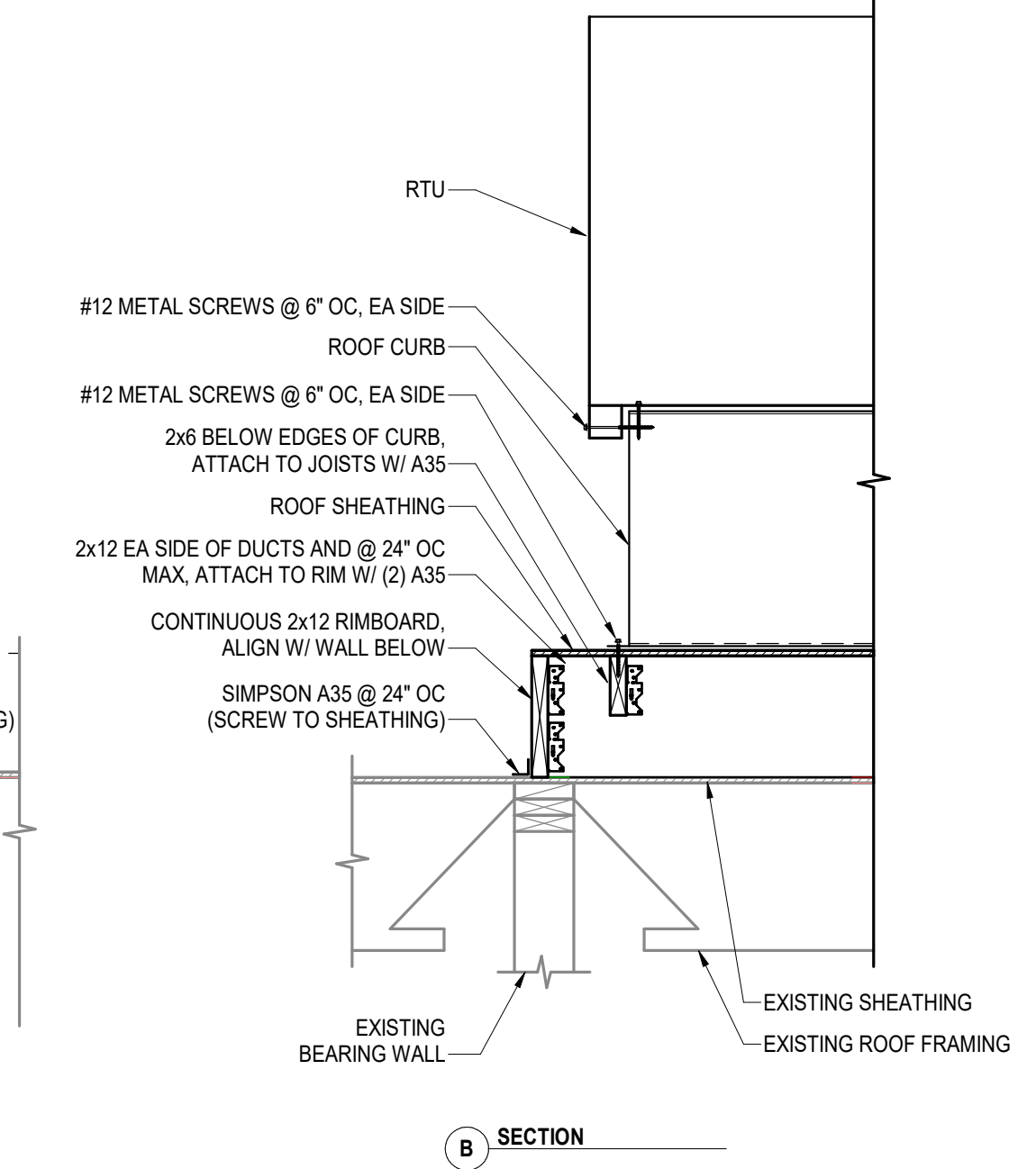
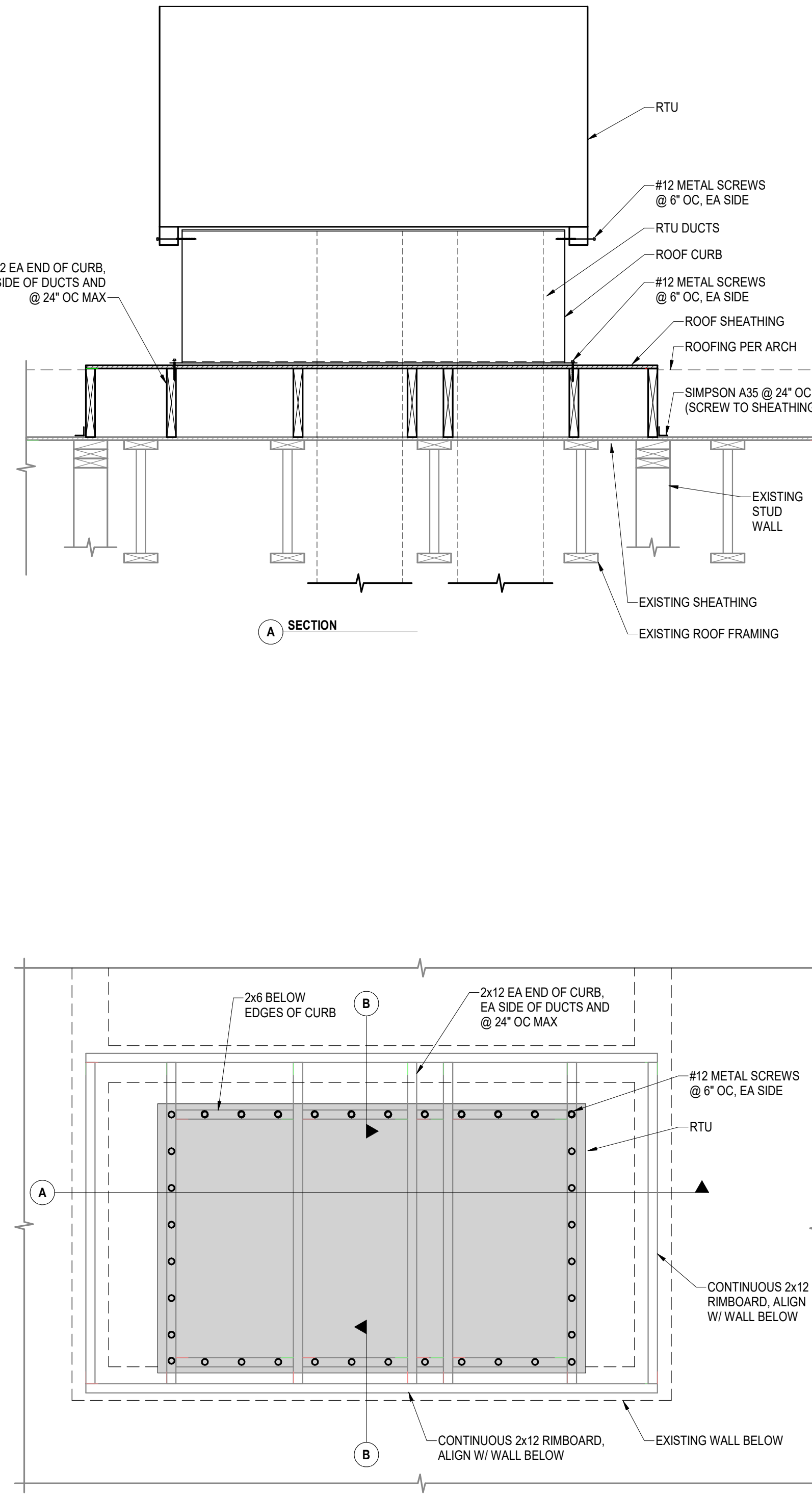




1 RTU-1 ATTACHMENT AND SUPPORT PLATFORM
SCALE: NTS



2 RTU-3 ATTACHMENT AND SUPPORT PLATFORM
SCALE: NTS



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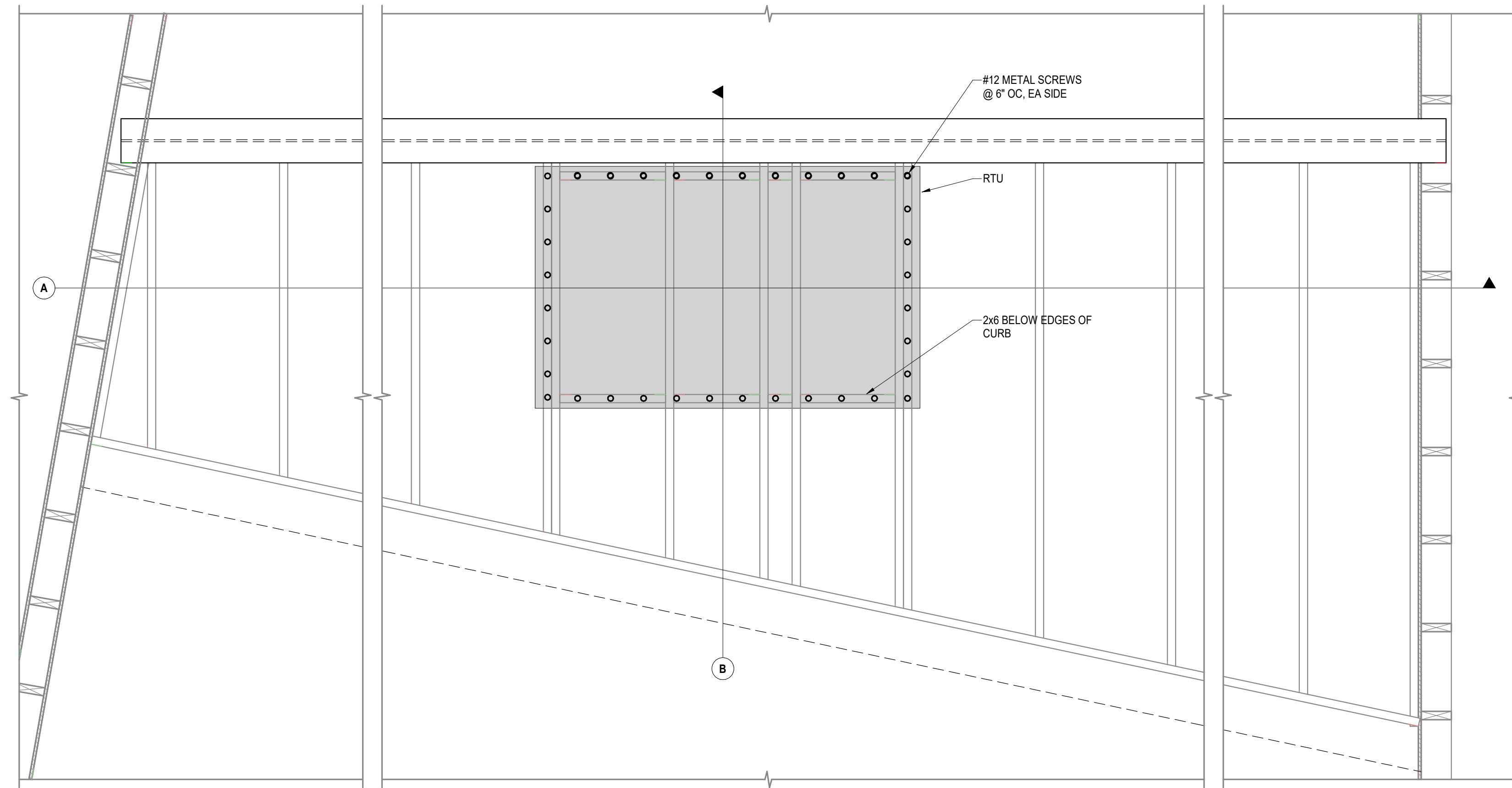
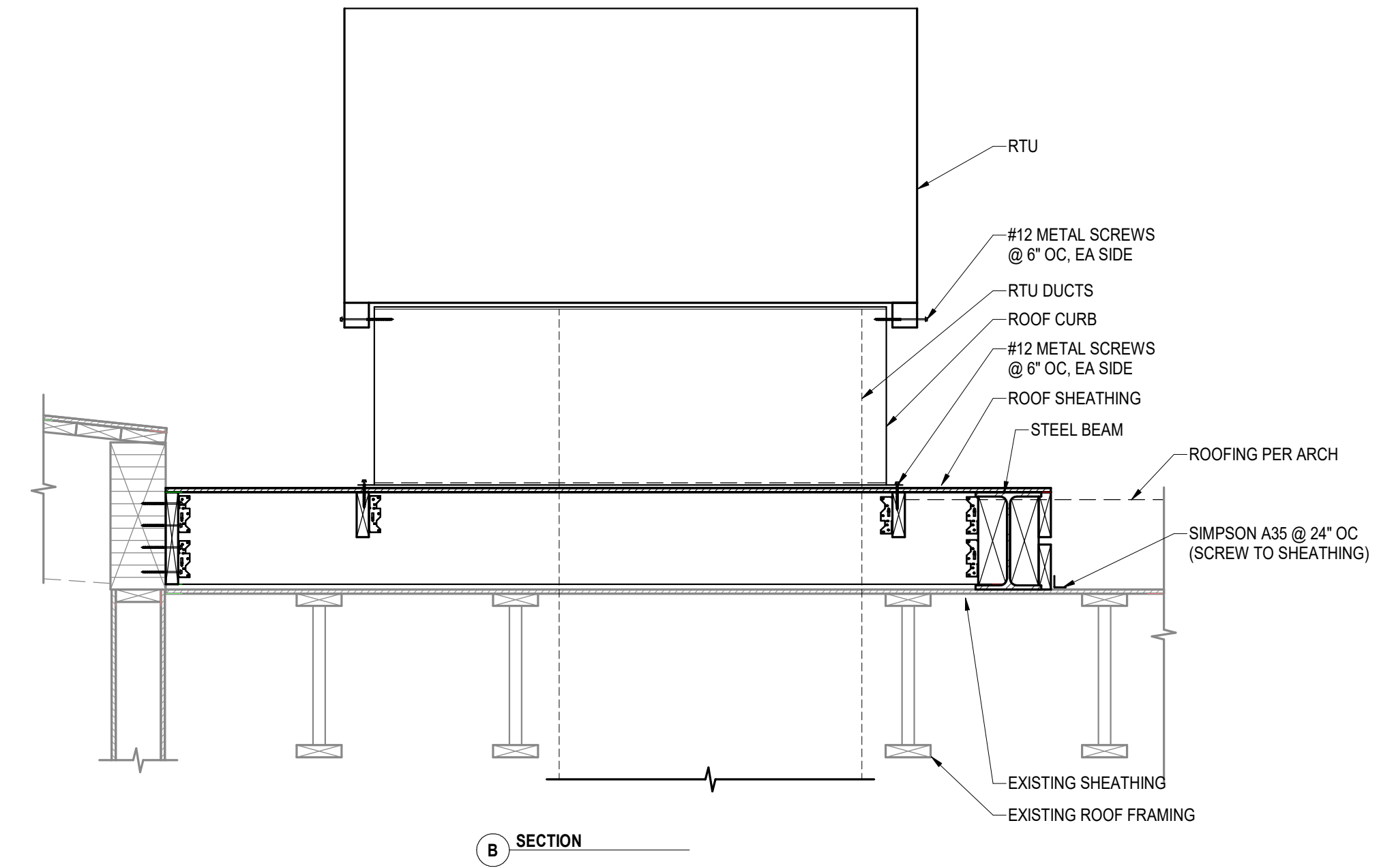
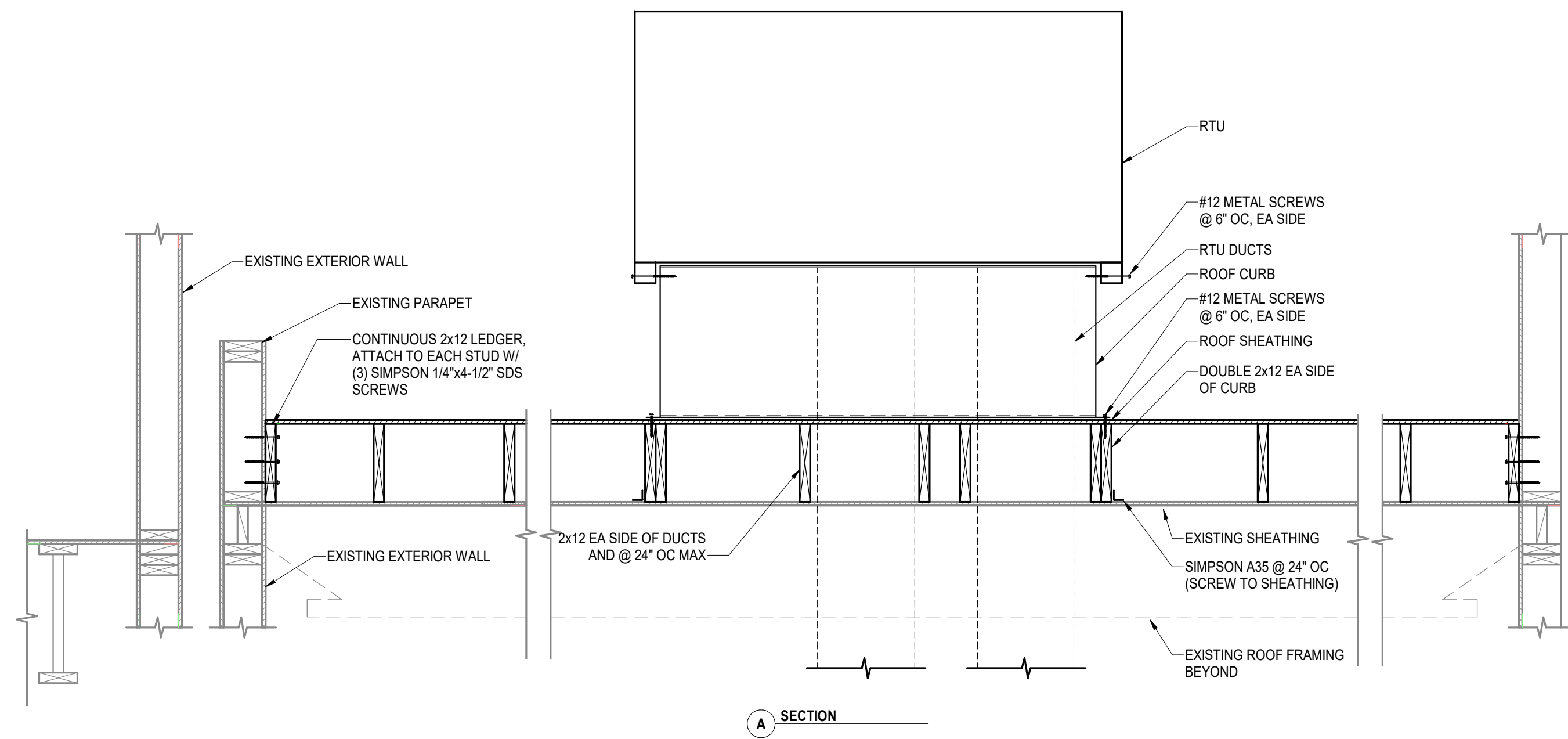
REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	25.358
DATE	01.26.2026
DRAWN	JO
REVIEWED	NC

SHEET NAME
DETAILS

SHEET NO.
S1.02





1 RTU-2 ATTACHMENT AND SUPPORT PLATFORM
SCALE: NTS

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REVISION SCHEDULE		
#	DESCRIPTION	DATE

JOB NO.	25.358
DATE	01.26.2026
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REVIEWED	NC

SHEET NAME
DETAILS

SHEET NO.
S1.03

