MECHANICAL GENERAL NOTES

1. GENERAL NOTES ON THIS DRAWING ARE APPLICABLE TO EACH MECHANICAL DRAWING OF THIS SET. REFER TO EACH DRAWING FOR SPECIFIC NOTES APPLICABLE TO THAT DRAWING.
2. OUTSIDE AIR INTAKE OPENINGS FOR VENTILATION AIR SHALL BE LOCATED 10'-0" MEASURED FORM ANY FLUES, VENTS, CHIMNEYS, GAS METERS.
3. OVERHEAD PIPING IN SPACES WITHOUT HUNG CEILINGS SHALL BE RUN AS CLOSE TO THE ROOF DECK AS PRACTICABLE, AS CLOSE TO PARALLEL JOISTS AS POSSIBLE AND ABOVE LIGHTING FIXTURES TO CONCEAL PIPING.
4. COORDINATE LOCATION OF GRILLES, REGISTERS, DIFFUSERS, THERMOSTATS AND OTHER WALL OR CEILING MOUNTED HVAC ACCESSORIES WITH REFLECTED CEILING PLAN. COORDINATE LIGHTING FIXTURE LAYOUT AND ACCESSORIES INSTALLED THROUGHOUT THE ENTIRE BUILDING. IT IS THE INTENT FOR CEILING MOUNTED GRILLES, REGISTERS AND DIFFUSERS TO BE INSTALLED IN THE CENTER OR CEILING PANELS.
5. ARRANGE DUCTWORK AND PIPING, PARTICULARLY ABOVE CEILINGS, AS REQUIRED TO CLEAR STRUCTURE, DUCTS, CONDUITS, ETC. ALLOWING SPACE FOR PIPING HANGERS, EXPANSION LOOPS AND ACCESS TO VALVES, FILTERS AND MAINTENANCE OF EQUIPMENT.
6. EQUIPMENT WITH FILTERS SHALL BE INSTALLED SO THAT FILTERS CAN BE EASILY REMOVED AND REPLACED.
7. CONTRACTOR SHALL VERIFY REFRIGERANT PIPE SIZES WITH EQUIPMENT MANUFACTURER FOR THE INDICATED INSTALLATION.
8. COORDINATE LOCATION AND INSTALLATION OF EQUIPMENT WITH ALL OTHER TRADES.
9. INSTALL ALL WALL MOUNTED NON-ADJUSTABLE SENSORS AT 5'-0" FROM FINISHED FLOOR TO TOP OF SENSOR. INSTALL ADJUSTABLE DEVICE 4'-0" ABOVE FINISHED FLOOR
10. FURNISH ALL MECHANICAL EQUIPMENT WITH DISCONNECTS.
11. ALL CONDENSATE PIPING SHALL PVC.
12. PROVIDE ALL EXHAUST FANS AND WITH UNIT MOUNTED SPEED CONTROLLER.
13. THERMOSTATS SHALL BE CONTROLLED BY OCCUPANTS.
14. COORDINATE ALL MECHANICAL WORK WITH ELECTRICAL AND FIRE PROTECTION.
15. CONTRACTOR SHALL VISIT JOB SITE TO DETERMINE EXTENT OF WORK INVOLVED PRIOR TO BIDDING PROJECT.
16. THE MECHANICAL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2018 VIRGINIA UNIFORM STATEWIDE BUILDING CODE.

MECHANICAL GENERAL DEMOLITION NOTES

EXISTING HVAC PIPING, DUCTWORK, AND EQUIPMENT SHOWN IS BASED ON EXISTING PLANS AND FIELD OBSERVATION WITHOUT DESTRUCTIVE INVESTIGATION. AFTER DEMOLITION, ANY CLARIFICATION REQUIRED TO DETERMINE SCOPE OF WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS.

DRAWINGS DO NOT SHOW EVERY EXISTING PIPE, CONDUIT, DUCT, ETC. CONTRACTOR SHALL TAKE CARE TO REMOVE ONLY ITEMS REQUIRED TO BE REMOVED AND VERIFY PIPES, DUCTS, ETC. BEFORE REMOVAL.

REMOVE EXISTING EXPOSED DUCTWORK, HANGERS, INSULATION, AND PIPING NOT TO BE REUSED.

LEGEND

(X) XXX	GRILLE, REGISTER OR DIFFUSER TAG (CFM AS NOTED)
(ETR)	BALANCE EXISTING TERMINAL DEVICE TO INDICATED VALUE
	SUPPLY AIR DIFFUSER
	VOLUME DAMPER
BDD	BACKDRAFT DAMPER
(T)	THERMOSTAT, WALL MOUNTED
	POINT OF CONNECTION NEW TO EXISTING
	POINT OF DEMOLITION LIMIT
(?)	SHEET KEYNOTE
——D——	CONDENSATE DRAIN PIPING
——RS/L——	REFRIGERANT LIQUID PIPING, REFRIGERANT SUCTION PIPING
DHP-1	DUCTLESS SPLIT SYSTEM OUTDOOR HEAT PUMP DESIGNATION
EF-1	EXHAUST FAN DESIGNATION
DSS-1	DUCTLESS SPLIT SYSTEM INDOOR UNIT DESIGNATION
RTU-1	PACKAGED ROOFTOP UNIT DESIGNATION
(E)	EXISTING TO REMAIN EQUIPMENT

ABBREVIATIONS

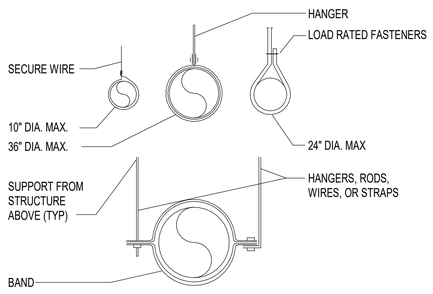
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
APD	AIR PRESSURE DROP	MBH	1000 BRITISH THERMAL UNITS PER HOUR
APPROX	APPROXIMATELY	MCA	MINIMUM CIRCUIT AMPACITY
AFMS	AIR FLOW MEASURING STATION	MIN	MINIMUM
BDD	BACKDRAFT DAMPER	MOCP	MAXIMUM OVER CURRENT PROTECTION
CFM	CUBIC FEET PER MINUTE	N.C.	NORMALLY CLOSED
DB	DRY BULB TEMPERATURE	N.O.	NORMALLY OPEN
dB	DECIBELS	OA	OUTSIDE AIR
DDC	DIRECT DIGITAL CONTROLS	PD	PRESSURE DROP
DN	DOWN	RA	RETURN AIR
EA	EXHAUST AIR	RH	RELATIVE HUMIDITY
EAT	ENTERING AIR TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
EDB	ENTERING DRY BULB TEMPERATURE	RR	RETURN REGISTER
EL	ELEVATION	SA	SUPPLY AIR
ER	EXHAUST REGISTER	SC	SENSIBLE COOLING
ESP	EXTERNAL STATIC PRESSURE	SD	SMOKE DETECTOR
EWB	ENTERING WET BULB TEMPERATURE	SF	SQUARE FEET
FA	FREE AREA	SP	STATIC PRESSURE
FLA	FULL LOAD AMPS	TC	TOTAL COOLING
GPM	GALLONS PER MINUTE	TSP	TOTAL STATIC PRESSURE
HP	HORSEPOWER	TYP	TYPICAL
KW	KILOWATT	UON	UNLESS OTHERWISE NOTED
LAT	LEAVING AIR TEMPERATURE	VRF	VARIABLE REFRIGERANT FLOW
LDB	LEAVING DRY BULB TEMPERATURE	WB	WET BULB TEMPERATURE
LWB	LEAVING WET BULB TEMPERATURE	WC	WATER COLUMN
LWT	LEAVING WATER TEMPERATURE	WG	WATER GAUGE
		Ø	ROUND DUCT/PHASE

DUCTLESS SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE

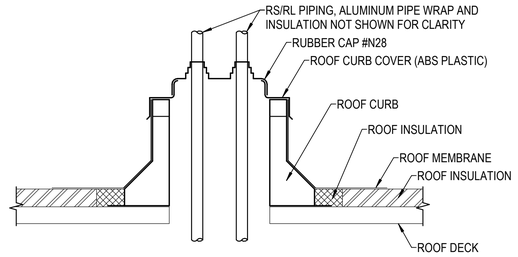
INDOOR UNIT TAG NO.	TOTAL COOLING CAPACITY M.B.H.	SENS. COOLING CAPACITY M.B.H.	FAN DATA			HEATING DATA		ELECTRIC DATA INDOOR UNIT				OUTDOOR UNIT TAG NO.	ELECTRIC DATA OUTDOOR UNIT			
			SUPPLY AIR C.F.M.	E.S.P. (IN. WG.)	MOTOR W	CAPACITY @47°F AMBIENT (MBH)	CAPACITY @17°F AMBIENT (MBH)	M.C.A.	M.O.C.P.	VOLTS	PHASE		M.C.A.	M.O.C.P	VOLTS	PHASE
DSS-1A	12.0	9.3	375	N/A	30	14.0	9.0	FED FROM OUTDOOR UNIT				DHP-1	17.0	25.0	230	1
DSS-1B	12.0	9.3	375	N/A	30	14.0	9.0	FED FROM OUTDOOR UNIT								

NOTES:

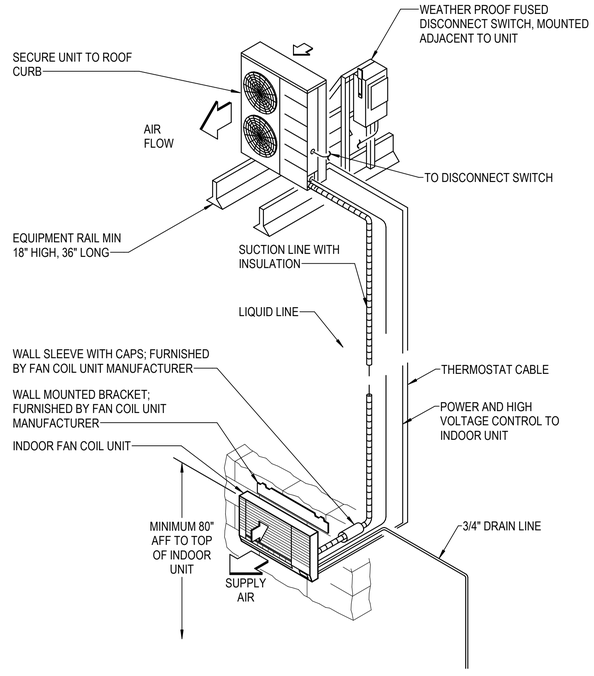
1. PROVIDE WALL MOUNTED DUCTLESS SPLIT SYSTEM INDOOR UNIT.
2. PROVIDE INDOOR UNIT WITH COIL FREEZE PROTECTION, UNIT MOUNTED THERMOSTAT WITH REMOTE CONTROL, AND INTEGRAL ELECTRICAL DISCONNECT.
3. PROVIDE OUTDOOR UNIT WITH LOW AMBIENT CONTROL.
4. PROVIDE ONE OUTDOOR HEAT PUMP CONNECTING TO (2) INDOOR UNITS
5. PROVIDE INDOOR UNITS WITH INTEGRAL CONDENSATE PUMP.



A1 ROUND DUCT SUPPORT DETAILS
NO SCALE



A3 ROOF PIPE PORTAL DETAIL
NO SCALE



A5 DUCTLESS SPLIT SYSTEM PIPING DIAGRAM
NO SCALE

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SEAL

Revisions

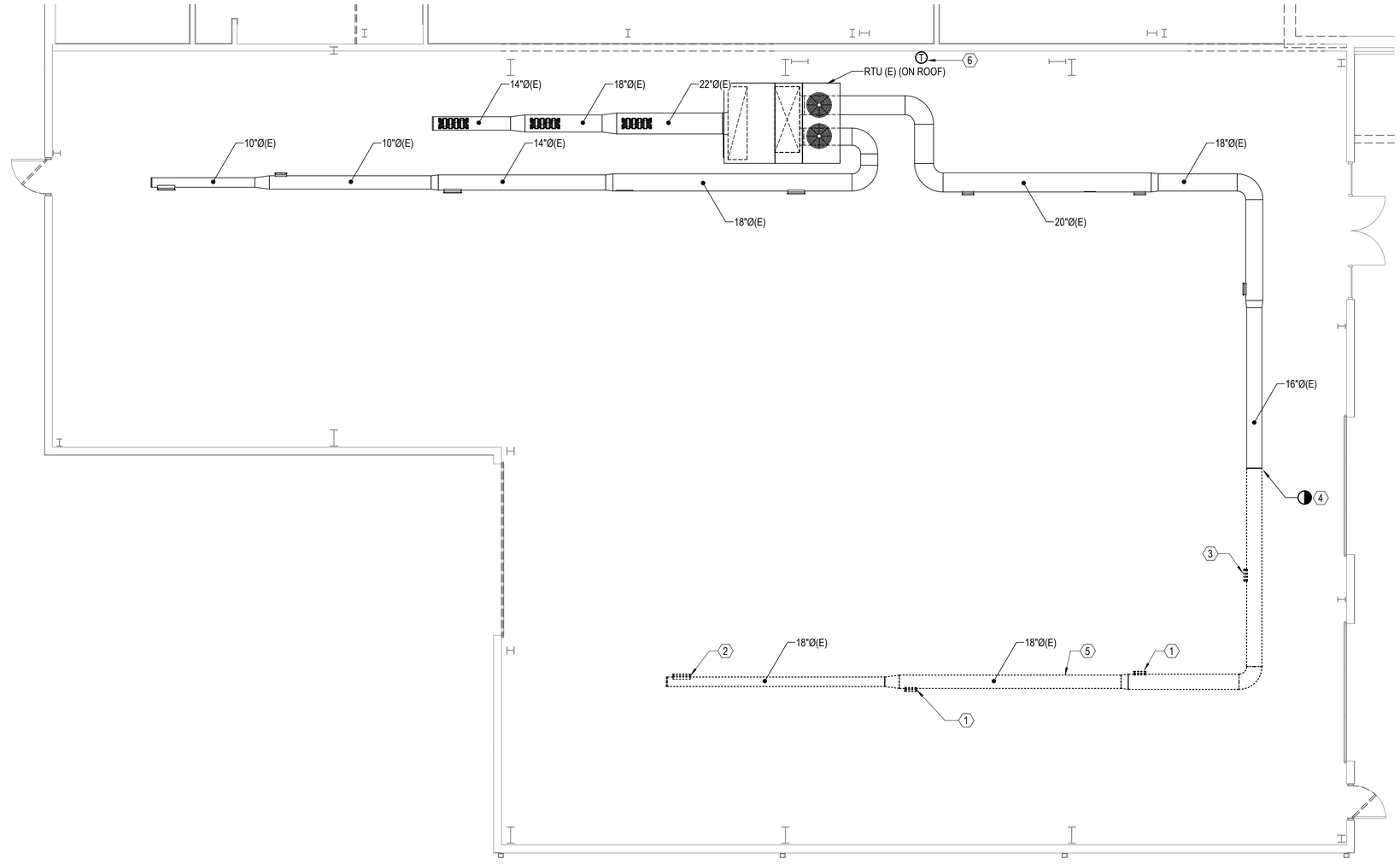
No.	Description	Date

IP CONFIGURE EXPANSION
2330 BOWDENS FERRY ROAD
LEGEND, ABBREVIATIONS, AND GENERAL NOTES

Project #:	23002
Date:	01/20/2023
Project Manager:	WLT
Designed By:	WLT
Drawn By:	BAC
Checked By:	WLT

M-001

SHEET 1 OF 13



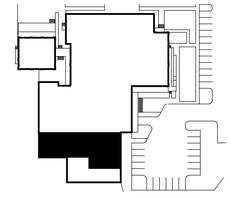
SHEET KEYNOTES

#	
1	REMOVE EXISTING 12x6 REGISTER. CLEAN AND SAFELY STORE FOR LATER USE.
2	REMOVE EXISTING 18x8 REGISTER. CLEAN AND SAFELY STORE FOR LATER USE.
3	DEMOLISH EXISTING REGISTER COMPLETE.
4	PERMANENTLY CAP OPEN END OF DUCTWORK.
5	DEMOLISH EXISTING DUCTWORK BACK TO DEMO LIMIT. REMOVE HANGERS AND APPURTENANCES.
6	REMOVE EXISTING THERMOSTAT SERVING RTU-4. REFER TO SHEET M-101 FOR NEW LOCATION.

B1 MECHANICAL HVAC PLAN - DEMOLITION

SCALE: 3/16" = 1'-0"

3/16" = 1'-0" 0' 5' 10' 20'



KEY PLAN - IPCONFIGURE EXPANSION

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SEAL

Revisions

No.	Description	Date

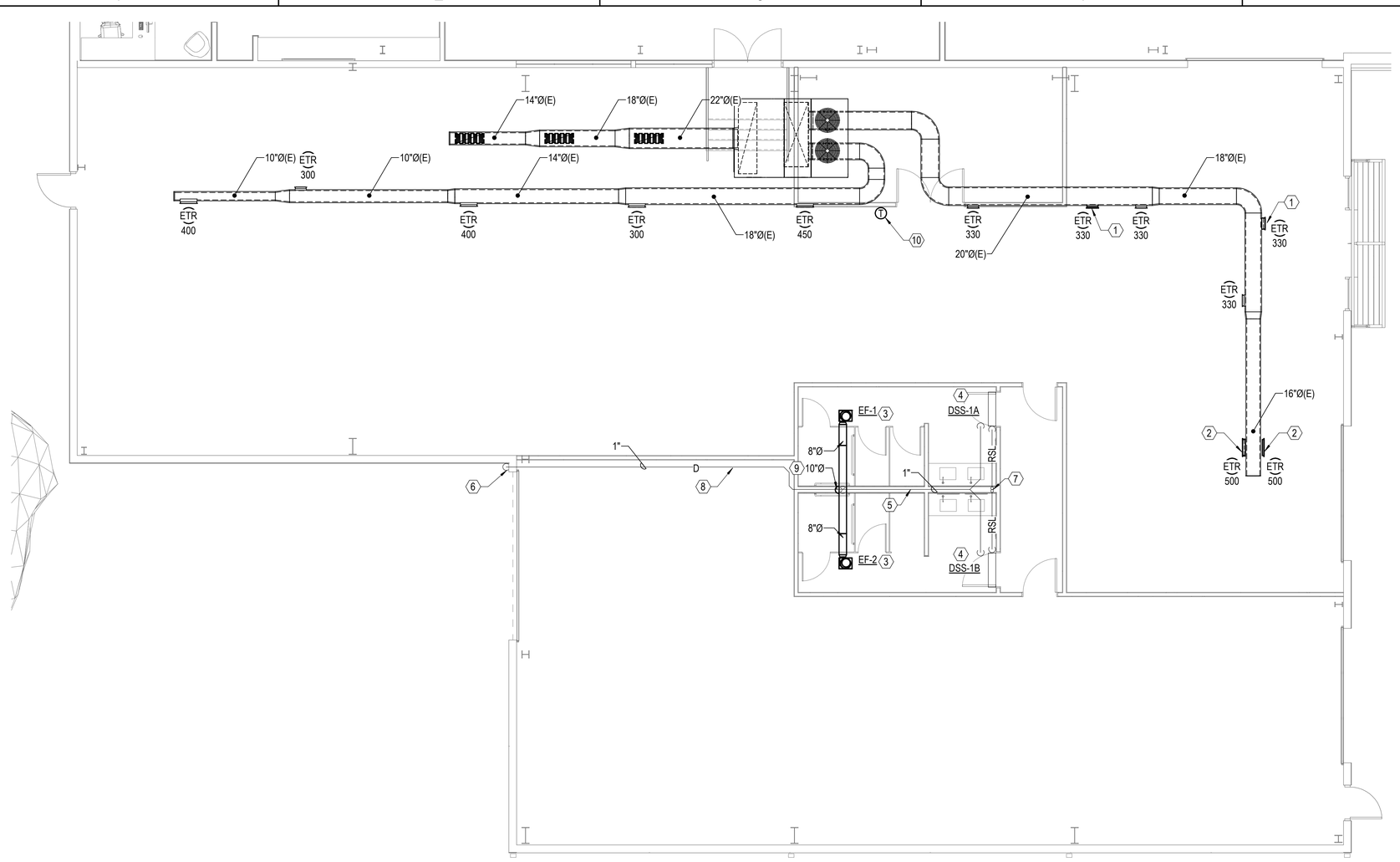
IP CONFIGURE EXPANSION
2330 BOWDENS FERRY ROAD
MECHANICAL HVAC PLAN - DEMOLITION

Project #:	23002
Date:	01/20/2023

Project Manager:	WLT
Designed By:	WLT
Drawn By:	BAC
Checked By:	WLT

MD101

SHEET 2 OF 13



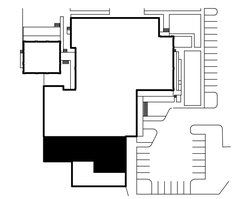
B1 MECHANICAL HVAC PLAN - NEW WORK

SCALE: 3/16" = 1'-0"

3/16" = 1'-0" 0' 5' 10' 20'

SHEET KEYNOTES

#	
1	REUSE EXISTING 12x6 REGISTER AND BALANCE TO INDICATED VALUE.
2	REUSE EXISTING 18x8 REGISTER AND BALANCE TO INDICATED VALUE.
3	PROVIDE CEILING EXHAUST FAN. INTERLOCK WITH LIGHT SWITCH.
4	PROVIDE INDOOR UNIT MOUNTED ABOVE DOOR. PROVIDE WITH CONDENSATE PUMP. PROVIDE UNIT WITH A REMOTE CONTROLLER TO CONTROL THERMOSTAT SETPOINT. REMOTE SHALL BE KEPT IN A LOCATION NOT ACCESSIBLE FOR PUBLIC USE.
5	RUN 1" PVC CONDENSATE DRAIN PIPING ABOVE CEILING. PROVIDE PITCH OF 1/8" PER LINEAR FOOT.
6	PROVIDE SPLASH BLOCK AT TERMINATION OF CONDENSATE PIPING.
7	REFRIGERANT SUCTION AND LIQUID PIPING UP TO OUTDOOR HEAT PUMP ON ROOF. PROVIDE PITCH POCKET AT ROOF PENETRATION.
8	SUPPORT CONDENSATE DRAIN PIPING FROM WALL.
9	PROVIDE 10" EXHAUST DUCTWORK UP TO 10" ROOF CAP. PROVIDE ROOF CAP WITH BIRDSCREEN.
10	RELOCATE THERMOSTAT SERVING EXISTING ROOFTOP UNIT TO INDICATED LOCATION.



KEY PLAN - IPCONFIGURE EXPANSION

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No.	Description	Date

IP CONFIGURE EXPANSION
2330 BOWDENS FERRY ROAD
MECHANICAL HVAC PLAN - NEW WORK

Project #:	23002
Date:	01/20/2023
Project Manager:	WLT
Designed By:	WLT
Drawn By:	BAC
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M-101

SHEET 3 OF 13