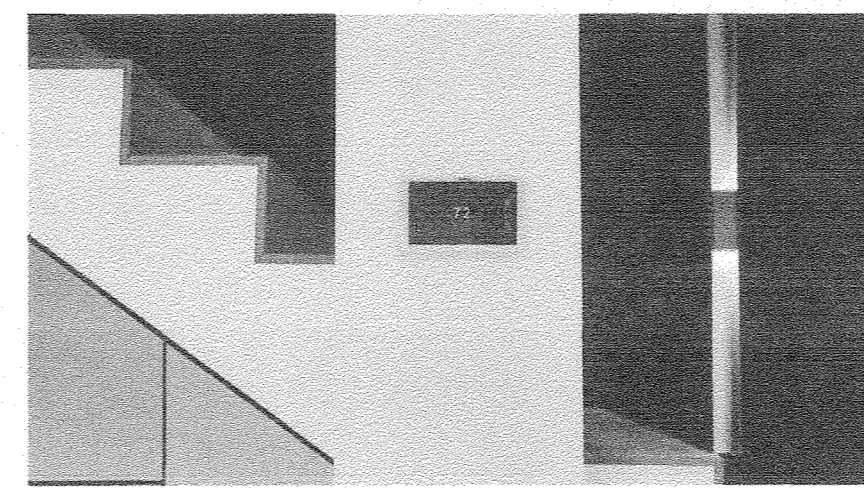


HVAC PLAN
SCALE: 1/4" = 1'-0"

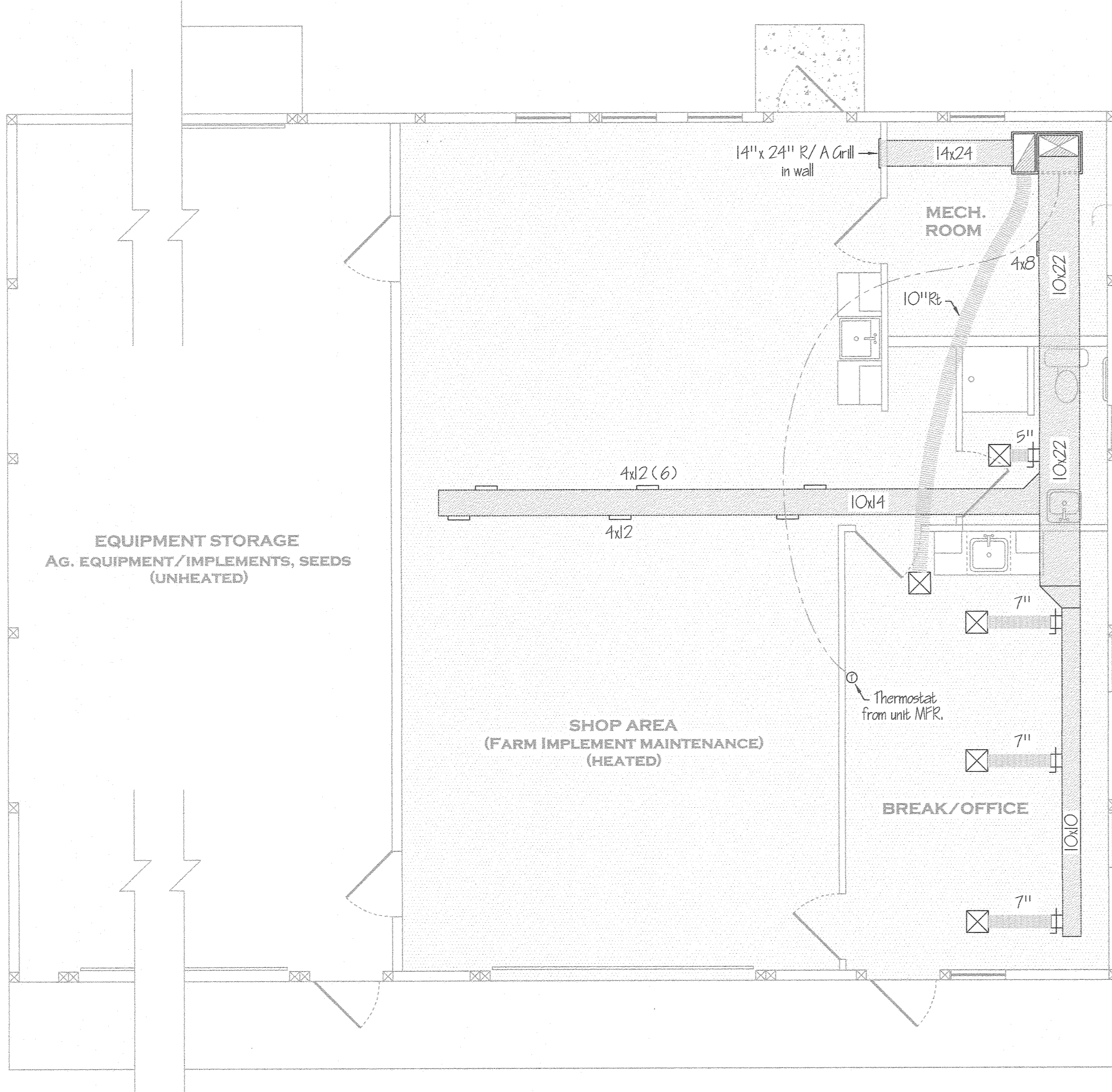
NOTE:
THIS IS TO BE A BOSCH HEAT PUMP. LAYOUT OF DUCTS, DUCT SIZES AND DIFFUSERS ARE MEANT TO BE USED AS A GUIDELINE. ACTUAL RUNS, SIZES AND LOCATIONS TO BE DETERMINED BY MANUFACTURER'S MODEL. THE FOLLOWING STEPS SHOULD BE FOLLOWED IN THE DESIGN AND INSTALLATION OF THE HVAC SYSTEM TO ENSURE EFFICIENCY AND COMFORT.

1. DETERMINE ROOM-BY-ROOM AND AIR-FLOWS USING ACCA MANUAL J CALCULATION PROCEDURES. (OR SUBSTANTIALLY EQUIVALENT)
2. SIZE DUCT SYSTEM ACCORDING TO ACCA MANUAL D CALCULATION PROCEDURES. (OR SUBSTANTIALLY EQUIVALENT)
3. SIZE HVAC EQUIPMENT TO SENSIBLE LOAD USING ACCA MANUAL S CALCULATION PROCEDURES (OR SUBSTANTIALLY EQUIVALENT).
4. INSTALL EQUIPMENT & DUCTS ACCORDING TO DESIGN SPECIFICATIONS USING INSTALLATION PROCEDURES FROM SMACNA / MANUFACTURERS' SPECS.
5. INSTALL 50 STATIC AIR PRESSURE DROP ACROSS THE AIR HANDLER IS WITHIN MANUFACTURER AND DESIGN SPECIFICATIONS.
6. PROVIDE BALANCED AIR FLOWS BETWEEN SUPPLY AND RETURN SYSTEMS TO MAINTAIN NEUTRAL PRESSURE.
7. EQUIPMENT AND ASSOCIATED ITEMS MUST BE APPROVED BY PGC HARRISBURG ENGINEERING DIVISION BEFORE START OF INSTALLATION.

HEAT PUMP TO BE A 5 TON BOSCH BOVA - 060-HDN1 - M18M OUTSIDE CONDENSER W/ BOVA - 048WN1 - M18 AIR HANDLER. UNITS TO ACHIEVE A MINIMUM 18 SEER AND 9.5 HSPF (OR SUBSTANTIALLY EQUIVALENT).



- Product Specifications
- 3 In. Touch Screen 84 x 48 Panel
 - Supports 2 Transformer Systems (VAC and MV)
 - 5 Cables Required for Installation
 - 7 Relay Terminals (G, Y, W, R, W2, W1, A, B, N, N2)
 - 1 On/Off Terminal (control coil) compatible from Bosch Water Source Heat Pumps
 - 1600W/2.11 kVA @ 240V
 - 1 Year Limited Warranty
- Boch Control Panel
BCC130 Thermostat
T 8-733-948-000
- Water Source Heat Pump
WSP Parts, Standard/Service & NIP Anchors, Sensor Cable
P-733-948-084



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

PGC SGL 248
469 Chestnut Ridge Rd.
Penn Run, PA 15765

Approximate Distances from building to property line

North	2,480 ft.
South	100 ft.
East	690 ft.
West	270 ft.

Site located approximately 3 miles west of the intersection of 422 west and Chestnut Ridge Road Exd, south of Penn Run, PA.

3 Product specifications

	016-00001416	016-00001417	016-00001418	016-00001419
Capacity				
Normal Cooling (BTU/h)	24,000	24,000	47,000	57,000
Normal Heating (BTU/h)	24,000	23,000	46,000	56,000
Efficiency				
SEER	10.7	11.1	11.1	11.1
HSPF	8.7	9.5	9.5	9.5
Max. Capacity				
Max. Cooling (BTU/h)	1.0	1.0	1.9	2.9
Max. Heating (BTU/h)	2.9	4.1	6.0	6.0
Refrigerant System				
Refrigerant Line Size				
Liquid Line Size (F.O.D.)	1/2"	1/2"	3/4"	3/4"
Suction Line Size (F.O.D.)	3/8"	3/8"	1/2"	1/2"
Refrigerant Connection Size				
Liquid Line Size (F.O.D.)	1/2"	1/2"	3/4"	3/4"
Suction Line Size (F.O.D.)	3/8"	3/8"	1/2"	1/2"
Expansion Device (TYP. Thermal Expansion Valve)	TXV	TXV	TXV	TXV
Drainage (P/2)				
Drainage	62	65	67	65
% to Flood	59	62	63	64
LowSpeed	55	58	59	60
Technical Data				
Chicago Package	208(230)-140	208(230)-140	208(230)-140	208(230)-140
Minimum Circuit Ampacity *	3.5	5.1	7.5	7.5
Max. Overcurrent Protection *	15	15	15	15
Min. / Max. Voltage	187 / 253	187 / 253	187 / 253	187 / 253
Air Filter				
Air Filter Size	18" x 20"	18" x 20"	20" x 22"	20" x 22"
Weights				
Equipment Weight (lbs)	130	130	160	170
Ship Weight (lbs)	132	138	180	200

Table 1
1 Tended and used in accordance with AHRI Standard 210/240.
2 Wire size should be determined in accordance with National Electrical Code; minimum wire size will require larger wire size.
3 Must use 3-wire-delta phase or WYE-type circuit breaker of the same size as noted.
4 Weight shown includes packaging.

Table 2
1 Tended and used in accordance with AHRI Standard 210/240.
2 Always check the rating plate for electrical & (SEER) Efficiency Ratio. Certified per AHRI 210/240. * The listed data is for reference only. Please (1)HPF * Heating Seasonal Performance Factor. Certified per AHRI 210/240. bochhvac.com for further details.

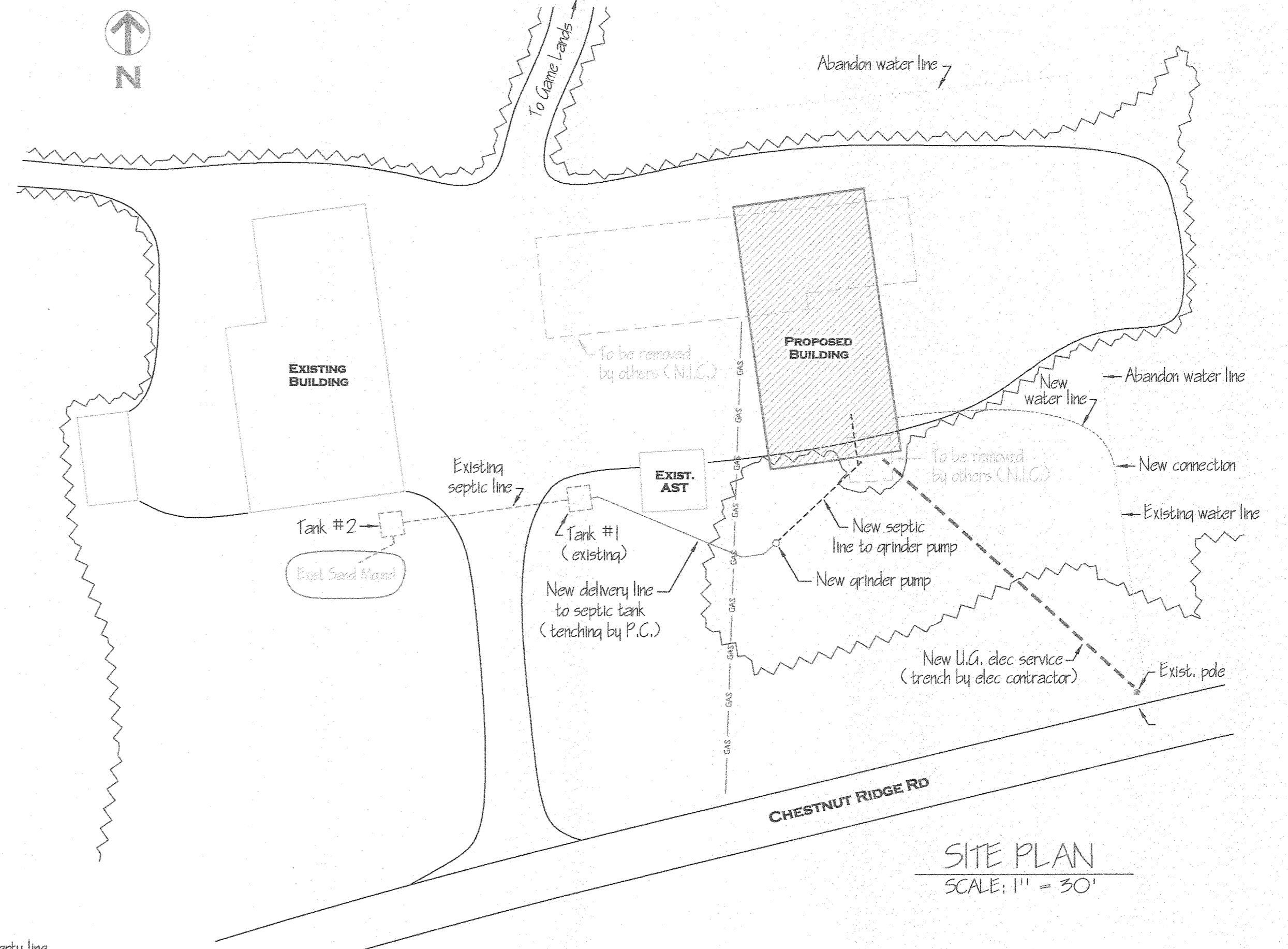
Data subject to change 12.2019.Boch Technology Corp.

MODEL	SEER	HSPF	Capacity (BTU/h)	Capacity (kW)
016-00001416	10.7	8.7	24,000	7.0
016-00001417	11.1	9.5	24,000	7.0
016-00001418	11.1	9.5	47,000	13.7
016-00001419	11.1	9.5	57,000	16.6

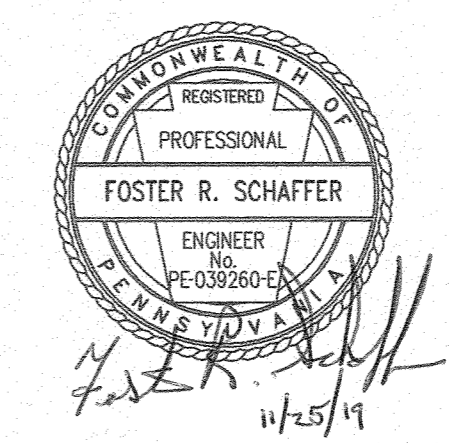
MODEL	SEER	HSPF	Capacity (BTU/h)	Capacity (kW)
016-00001416	10.7	8.7	24,000	7.0
016-00001417	11.1	9.5	24,000	7.0
016-00001418	11.1	9.5	47,000	13.7
016-00001419	11.1	9.5	57,000	16.6

MODEL	SEER	HSPF	Capacity (BTU/h)	Capacity (kW)
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MODEL	SEER	HSPF	Capacity (BTU/h)	Capacity (kW)
016-00001416	10.7	8.7	24,000	7.0
016-00001417	11.1	9.5	24,000	7.0
016-00001418	11.1	9.5	47,000	13.7
016-00001419	11.1	9.5	57,000	16.6



SITE PLAN
SCALE: 1" = 30'



PENNSYLVANIA GAME COMMISSION		
STATE GAME LANDS # 248	CHERRYHILL TWP.	INDIANA CO.
HVAC DETAIL S and SITE PLAN		
REVISIONS	PROJECT NO.	PCC-248-19-2
	DRAWING NO.	248-HVAC-5
	DRAWN BY:	JBM
	DATE:	11-25-19
	SHEET NO.	5 OF 5