

### COMBUSTION AIR FAN SCHEDULE

DESIGNATION	CAF-1
LOCATION	BOILER ROOM
AREA SERVED	BOILER ROOM
MODEL	ISAF12
CFM	1,050
HP	1/2
FLA (AMPS)	4.2
RPM	2,200
SP (IN H <sub>2</sub> O)	0.5"
VOLTS/Ø/Hz	120/1/60
STARTER	-
INTERLOCK	B-1/B-2

NOTES:  
 1. CAF-1 BASED ON US DRAFT CO.  
 2. PROVIDE FAN PRESSURE CONTROLLER U.S. DRAFT CO. MODEL V250.  
 3. PROVIDE INTEGRAL BACK DRAFT DAMPER.

### HEAT EXCHANGER SCHEDULE

DESIGNATION	HX-2A, 2B	HX-3
LOCATION	BOILER ROOM	DHW STORAGE TANK ROOM
SERVICE	POOL WATER	DOMESTIC HOT WATER
HX TYPE	GASKETED PLATE	BRAZED PLATE
PLATE MATERIAL	TITANIUM	316 STAINLESS STEEL
WALL TYPE	SINGLE-WALL	DOUBLE-WALL
MODEL	AP14	BPDW415-50
CAPACITY (MBH)	360.0	250.0
COLD SIDE:		
GPM	24.2	5.0
E.W.T./L.W.T. (°F)	75°/104°	40°/140°
WATER P.D. (FT. H <sub>2</sub> O)	19.3	0.55
HOT SIDE:		
GPM	17.7	12.6
E.W.T./L.W.T. (°F)	145°/105°	145°/105°
WATER P.D. (FT. H <sub>2</sub> O)	10.7	4.0

NOTES:  
 1. HEAT EXCHANGERS BASED ON BELL & GOSSETT.  
 2. REFER TO SPECIFICATION 235700.

### PUMP SCHEDULE

DESIGNATION	HWP-1, 2, 3	DHWP-2	DHWP-3	P-4
LOCATION	BOILER ROOM	DHW STORAGE TANK ROOM	POOL FILTER ROOM	BOILER ROOM
SYSTEM SERVED	HOT WATER	DOMESTIC HOT WATER	DOMESTIC HOT WATER	POOL WATER
MODEL	e-1535 1.25AAC	110S	110S	e-90 1.5AB
TYPE	BASE MOUNTED	INLINE	INLINE	INLINE
GPM	70	5	0.5	60
FLUID	WATER	DOMESTIC WATER	DOMESTIC WATER	POOL WATER
FLUID TEMP. (°F)	180°	140°	140°	105°
TOTAL DYNAMIC HEAD (FT H <sub>2</sub> O)	55	5	5	50
RPM	3,600	1,725	1,725	1,800

MOTOR:  
 BHP/HP 1.31 / 3 0.08 0.08 1.19 / 2  
 VOLTAGE/Ø/Hz 208/3/60 120/1/60 120/1/60 208/3/60  
 STARTER:  
 TYPE VFD - - -  
 LOCATION BOILER ROOM DHW STORAGE TANK ROOM POOL FILTER ROOM BOILER ROOM  
 NOTES:  
 1. PUMPS BASED ON BELL AND GOSSETT AND TACO.  
 2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY.

### HOT WATER CONDENSING BOILERS

DESIGNATION	B-1, B-2, B-3
LOCATION	BOILER ROOM
QTY	3
MODEL	BMK-1000
INPUT (MBH)	1,000
GROSS OUTPUT (MBH)	960
MIN. GAS PRESSURE (W.C.)	4"
MAX. GAS PRESSURE (W.C.)	14"
MAX. ALLOWED WORKING PRESSURE (PSIG)	160
MIN. FLOW RATE (GPM)	12
WATER CONNECTIONS	3"
EWTLWT (°F)	140°/180°
DIMENSIONS (L x W x H)	25"x28"x78"

GAS BURNER:  
 GAS INPUT (MBH) 1,000  
 THERMAL EFFICIENCY (%) 87%  
 ELECTRICAL DATA:  
 VOLTS/Ø/Hz 120/1/60  
 FLA 13.0

NOTES:  
 1. BOILERS BASED ON AERCO.  
 2. PROVIDE ASME CSD-1 COMPLIANT CONTROLS.  
 3. PROVIDE BOILERS WITH 80 PSI ASME RELIEF VALVES, 3-1/4" PRESSURE AND TEMPERATURE GAUGES, MANUAL RESET HIGH LIMIT AQUASTAT, LOW WATER CUT OFF.  
 4. PROVIDE MANUFACTURER'S CONDENSATE NEUTRALIZING KIT.  
 5. PROVIDE WITH FM COMPLIANT OR FACTORY INSTALLED DBB (IRI), VALVE PROVING SYSTEM GAS TRAIN OPERATION.

### AIR SEPARATOR SCHEDULE

DESIGNATION	AS-1
SERVICE	HW
MODEL	RL-4F
FLANGED TANGENTIAL OPENING (IN)	4"
OPERATING WEIGHT (LB)	263
DIAMETER/HEIGHT (IN)	16
CAPACITY (GAL)	13
MAX. TEMP. (°F)	350
MAX. PRESS. (PSI)	125

NOTES:  
 1. AIR SEPARATORS SHALL BE BASED ON BELL AND GOSSETT.  
 2. SHALL HAVE FLANGED TANGENTIAL OPENINGS.  
 3. THE AIR SEPARATOR SHALL BE DESIGNED, CONSTRUCTED AND STAMPED FOR 125 PSIG AT 350°F IN ACCORDANCE WITH THE ASME BOILER AND PRESSURE VESSEL CODE.

### EXPANSION TANK SCHEDULE

DESIGNATION	ET-1
SERVICE	HW
MODEL	D-40
OPERATING WEIGHT (LBS)	263
DIAMETER/HEIGHT (IN)	16.25/29
TANK AND ACCEPTANCE VOLUME (GAL)	21.7/11.3
MIN. TEMP. (°F)	60°
MAX. TEMP. (°F)	200°
MIN. PRESSURE (PSI)	28
MAX. PRESSURE (PSI)	125

NOTES:  
 1. TANKS BASED ON BELL AND GOSSETT AND SHALL BE ASME RATED AND STAMPED FOR 125 PSIG.

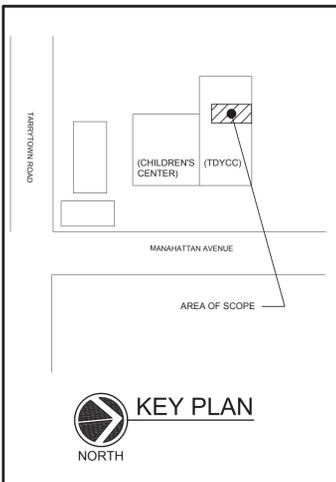
### EQUIPMENT NOTES

1.) TEMPORARY DHWH-1: AO SMITH MODEL #DSE-10A. 28" HEIGHT, 18" TOTAL DIAMETER, 3/4" COLD WATER/HOT WATER PIPING CONNECTIONS. 10 GALLON STORAGE TANK CAPACITY AT 160 PSI WORKING PRESSURE. HEAT RECOVERY: 27 GPH @ 90°F RISE. 6 KW, 208 V, 1 PH, 60HZ. WEIGHT 116LBS.

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**TOWN OF GREENBURGH**  
 177 HILLSIDE AVE  
 GREENBURGH, NY 10607



No.	ISSUE OR REVISION	DATE
3	ADDENDUM #3	7/21/21
3	ISSUED FOR BID	7/2/21
2	ISSUE FOR PROGRESS	5/14/21
1	ISSUED FOR PROGRESS	3/26/21

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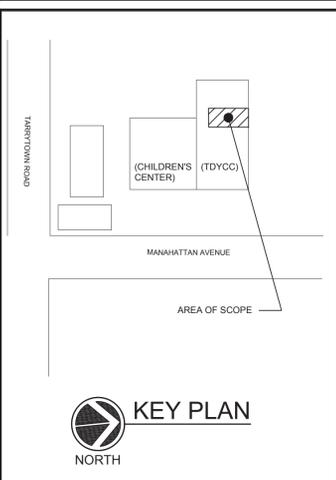
PROJECT TITLE  
**TOWN OF GREENBURGH  
 THEODORE D. YOUNG  
 COMMUNITY CENTER  
 BOILER PLANT REPLACEMENT**  
 32 MANHATTAN AVENUE  
 WHITE PLAINS, NY 10607

DRAWING TITLE  
**MECHANICAL AND PLUMBING  
 SCHEDULES**

SCALE	PROJECT NO.
AS NOTED	NTOG0011.00
DRAWN BY TO / AC	DRAWING NO.
CHECKED BY JK	MP6.1
DATE 3/26/21	

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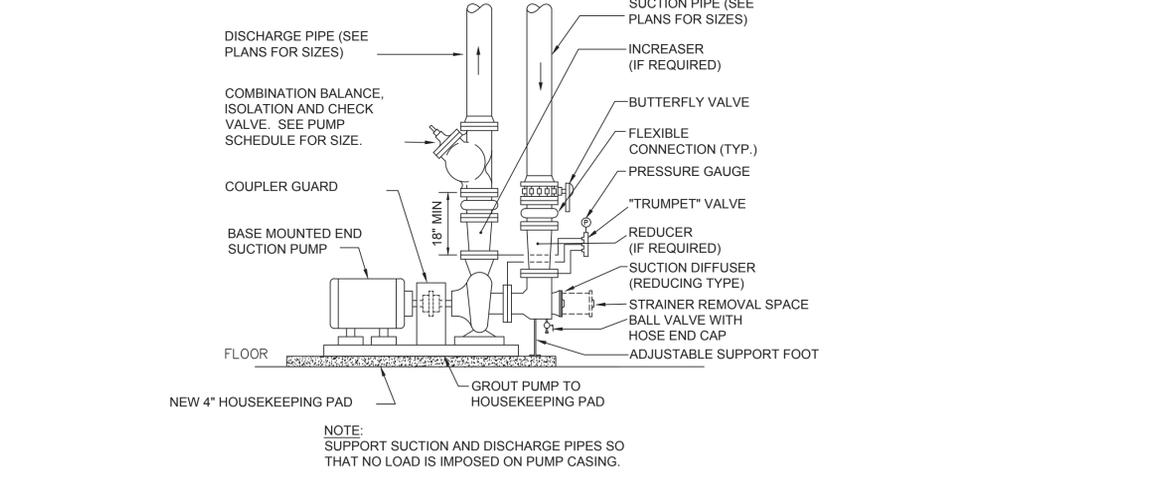
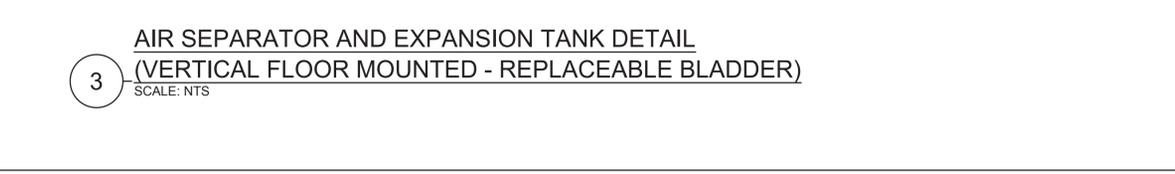
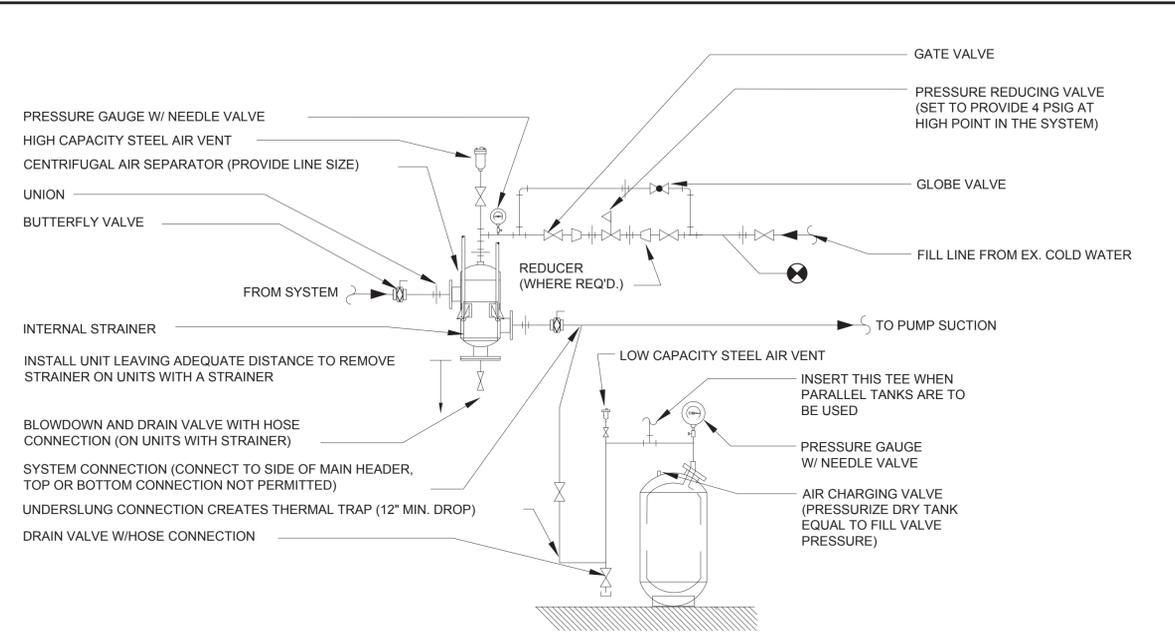
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DRAWING TITLE

**MECHANICAL**  
**DETAILS**

SCALE	AS NOTED	PROJECT NO.	NTOG0011.00
DRAWN BY	TO / AC	DRAWING NO.	
CHECKED BY	JK		M7.2
DATE	3/26/21		



Application: Pressure Air System Diagram

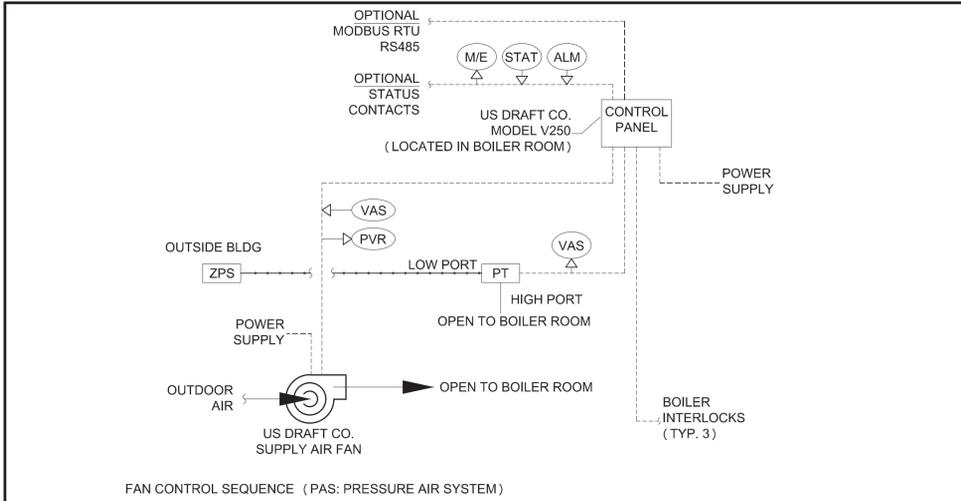
Control System: V250-P

Date: Version: 1.0 DWG Rev: 0 Page #: 1 of 1

US Draft Co.  
 Phone: (817) 393-4029 www.usdraftco.com

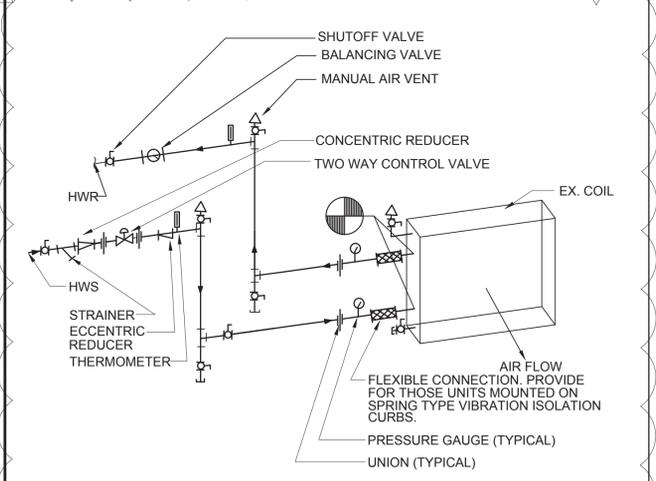
Controller Output (circle with downward arrow)  
 Controller Input (circle with upward arrow)

Field Wiring: Refer to specifications for voltage, amperage, and wiring type  
 Pneumatic Tubing for pressure reference  
 Vent or Duct  
 Alarm output  
 Master Enable: input of controller  
 Pressure Transducer -1 to 1 in. WC  
 Supply Fan Proving Device Output CS75 Current Switch or GFS Differential Pressure Switch  
 System run status  
 Variable Analog Signal 0-10VDC  
 Outdoor Air Static Pressure Pickup Port



FAN CONTROL SEQUENCE (PAS: PRESSURE AIR SYSTEM)

- EACH HEATING APPLIANCE SHALL BE INTERLOCKED WITH THE CONTROL PANEL. UPON A CALL FOR HEAT, THE CONTROL PANEL SHALL ACTIVATE THE SUPPLY AIR FAN TO PROVIDE COMBUSTION AIR. THE SUPPLY AIR FAN SHALL START TO ESTABLISH THE REQUIRED PRESSURE IN THE BOILER ROOM. ALL EXTERNAL MECHANICAL LIMITS ARE MONITORED FOR STATUS. ONCE ALL THESE CONDITIONS ARE MET THE CONTROL SYSTEM WILL RELEASE THE FLAME PROGRAMMER OR GAS VALVE OF THE APPLIANCE CALLING FOR HEAT. THE SEQUENCE IS REPEATED EVERY TIME AN INITIAL APPLIANCE CALLS FOR HEAT. EACH ADDITIONAL CALL FOR HEAT THE CONTROL WILL NOT DELAY THE SEQUENCING OF THE ADDITIONAL HEATING APPLIANCES.
- WHEN APPLIANCES SHUT DOWN THE SUPPLY AIR FAN WILL CONTINUE TO RUN IN POST-PURGE MODE FOR A SET PERIOD OF TIME.
- ONCE THE POST-PURGE CYCLE IS COMPLETED THE SYSTEM SECURES AND THE CONTROL PANEL ENTERS STAND-BY MODE.
- IF PROPER COMBUSTION AIR CANNOT BE MAINTAINED BECAUSE OF MECHANICAL OR ELECTRICAL FAILURE, THE CONTROL WILL GO IN ALARM MODE AND THE INTEGRATED MONITORING FUNCTION WILL SHUT DOWN ALL THE APPLIANCES WITHIN 15 SECONDS. WHILE IN ALARM MODE, THE CONTROL CONSTANTLY MONITORS THE SYSTEM CONDITIONS. IF THE FAILURE CORRECTS ITSELF OR IS CORRECTED VIA INTERVENTION, THE SYSTEM WILL RESTART AUTOMATICALLY. IF THE FAILURE IS NOT CORRECTED BEFORE THE ADJUSTABLE SYSTEM RELEASE FAULT TIMER EXPIRES, THE CONTROL WILL DISABLE AND LOCKOUT THE SYSTEM FOR FREEZE PROTECTION.



MAX. GPM	1	3.5	7	20	43	75
PIPE SIZE	1/2	3/4	1	1-1/2	2	2-1/2

