

# Addendum #1



## Project Information

**Project Name:** Highland Hills Pump Station Control Panel Procurement

**Bid Number:** F24-01-011

**Date:** March 25, 2024

**Project Manager:** Ryan Duve

## Change Description

**Change #1** Add Exhibit 6 " HIGHLAND HILLS GOLF COURSE IRRIGATION PUMP STATION IMPROVEMENTS PROJECT" plans.

**Explanation** This is For Your Information only: Exhibit 6 shows the current location of the control panel and also the proposed location of the replacement control panel.

**Change #2** Add Exhibit 7 " Flowtronex PSI Ltd Automatic Vertical Turbine Variable Speed Prefabricated Pump Station Technical Specification"

**Explanation** This is For Your Information only: Exhibit 7 provides information on the existing pumps that the replacement control panel will control.

**Change #3** Change the RFP's Schedule of Events Proposal Due Date from "April 2, 2024, by 12:00" PM to "April 3, 2024, by 12:00 PM"

**Explanation** Change provides Vendors an additional day to prepare and submit proposals.

**Change #4** Change the RFP's Section I. Background, Overview, and Goals, Paragraph B. Minimum Mandatory Qualifications of Offeror by deleting the paragraph in its entirety and replacing with the following, "Qualified vendors shall be limited to manufacturers that can meet requirements within Exhibit 5."

**Explanation** Change allows other Vendors to submit a proposal to this RFP.

**Change #5** Change Exhibit 5, 2.3 B. by inserting the following, "4. Or approved equal."

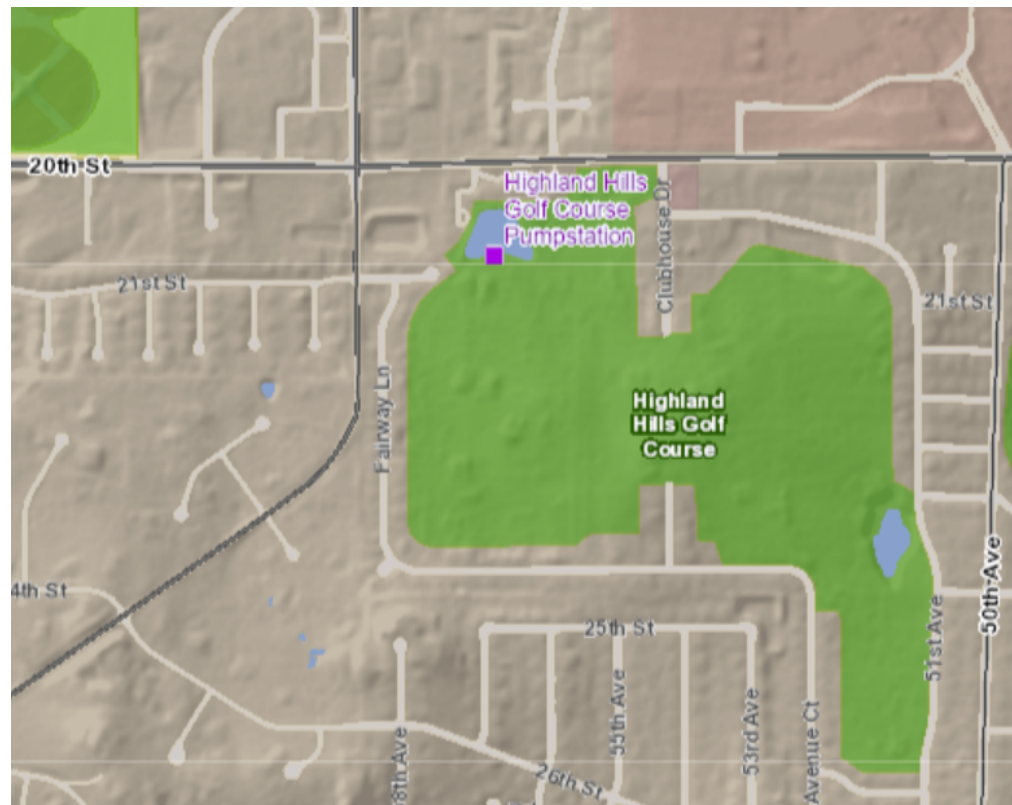
**Explanation** Change allows other Vendors to submit a proposal to this RFP.

<b>Additional Information</b>	<ol style="list-style-type: none"><li>1. There are two Amiad filter controls mounted onto the existing control panel. We will want the NEW filter controls integrated into the panel.</li><li>2. There is an existing RTU for SCADA. We want NEW SCADA communication integrated into the panel.</li><li>3. Panel manufacturers supply the 10" mag meter.</li><li>4. Control panel shall have a minimum 2-year warranty.</li><li>5. The new control panel should be equipped with legs. The height of the building is 7'-6". The clear height of the double doors is 6'-7". Assume that the panel will need to fit through the door, not while the roof is being replaced as part of pump station improvements project.</li></ol>
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## EXHIBIT 6

# RFQ # F23-04-034, WORK ORDER NO. 1 NON-POTABLE IRRIGATION INFRASTRUCTURE ON-CALL PRIME CONTRACTORS

## CITY OF GREELEY HIGHLAND HILLS GOLF COURSE IRRIGATION PUMP STATION IMPROVEMENTS PROJECT



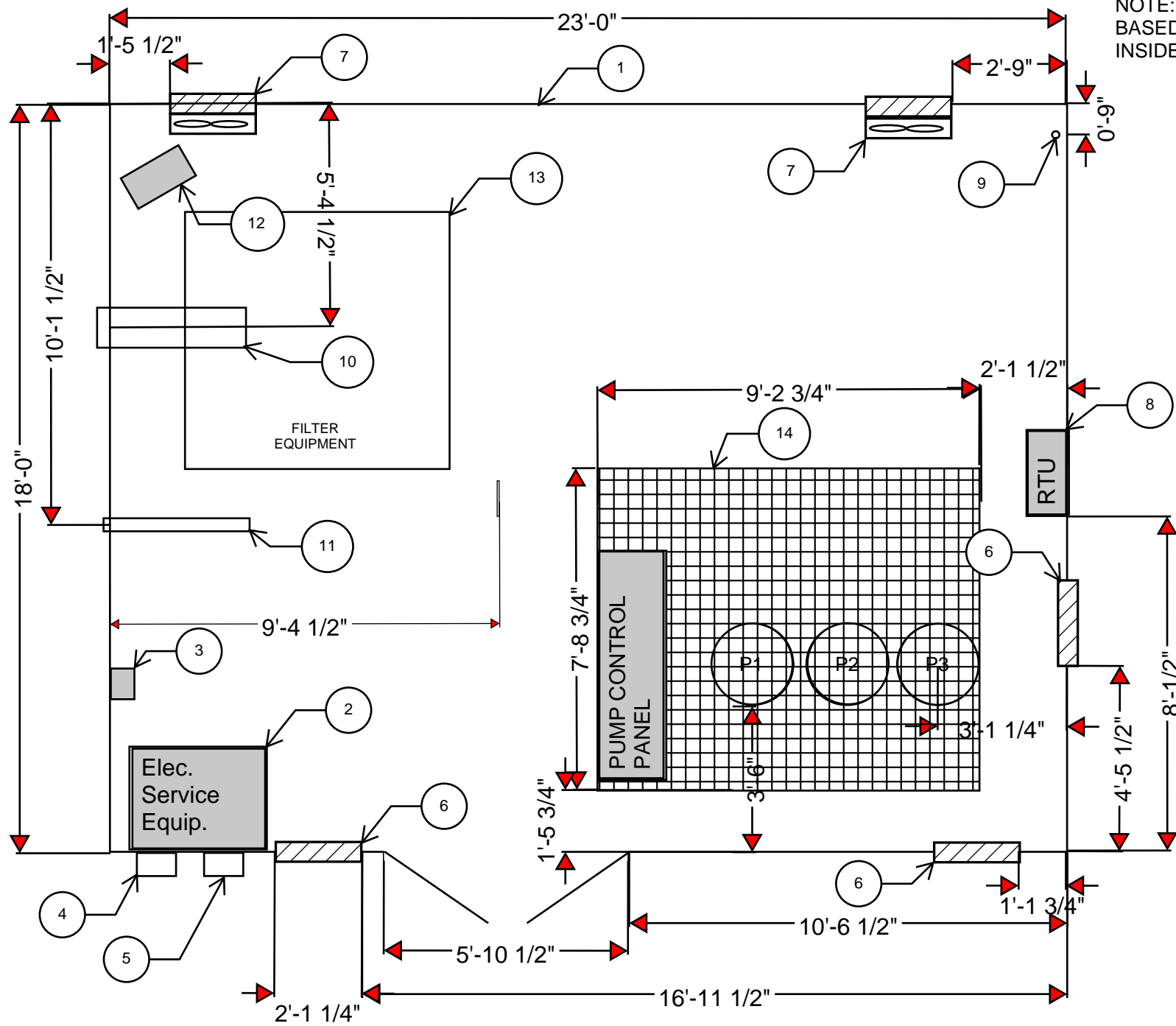
PROJECT LOCATION



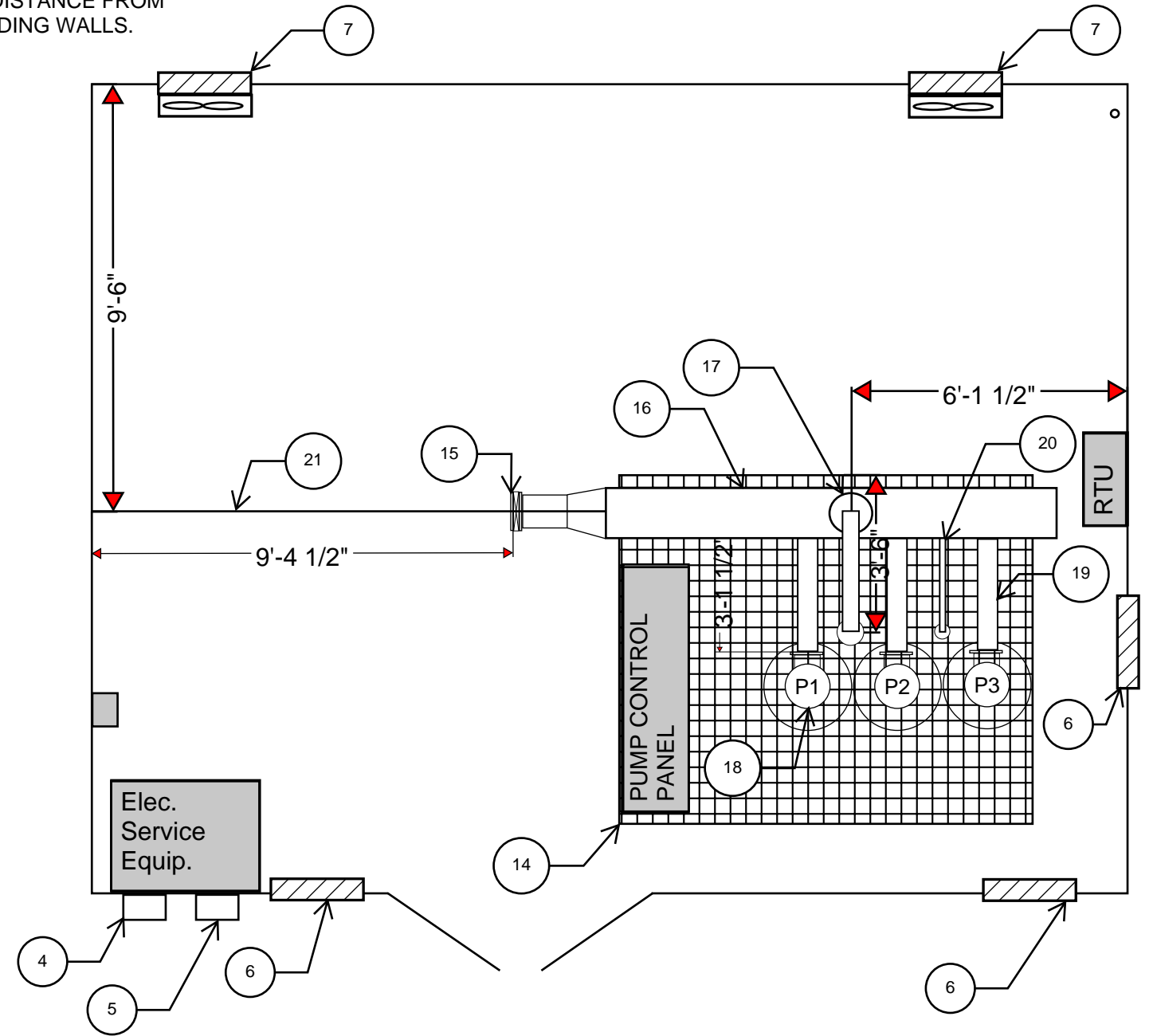
## SHEET INDEX

- TITLE SHEET
- SHEET 1 - EXISTING CONDITIONS (PLAN VIEWS)
- SHEET 2 - EXISTING CONDITIONS (PROFILE VIEWS)
- SHEET 3 - DEMOLITION
- SHEET 4 - PROPOSED IMPROVEMENTS
- SHEET 5 - DETAILS

NOTE: ALL DIMENSIONS ARE BASED ON DISTANCE FROM INSIDE BUILDING WALLS.

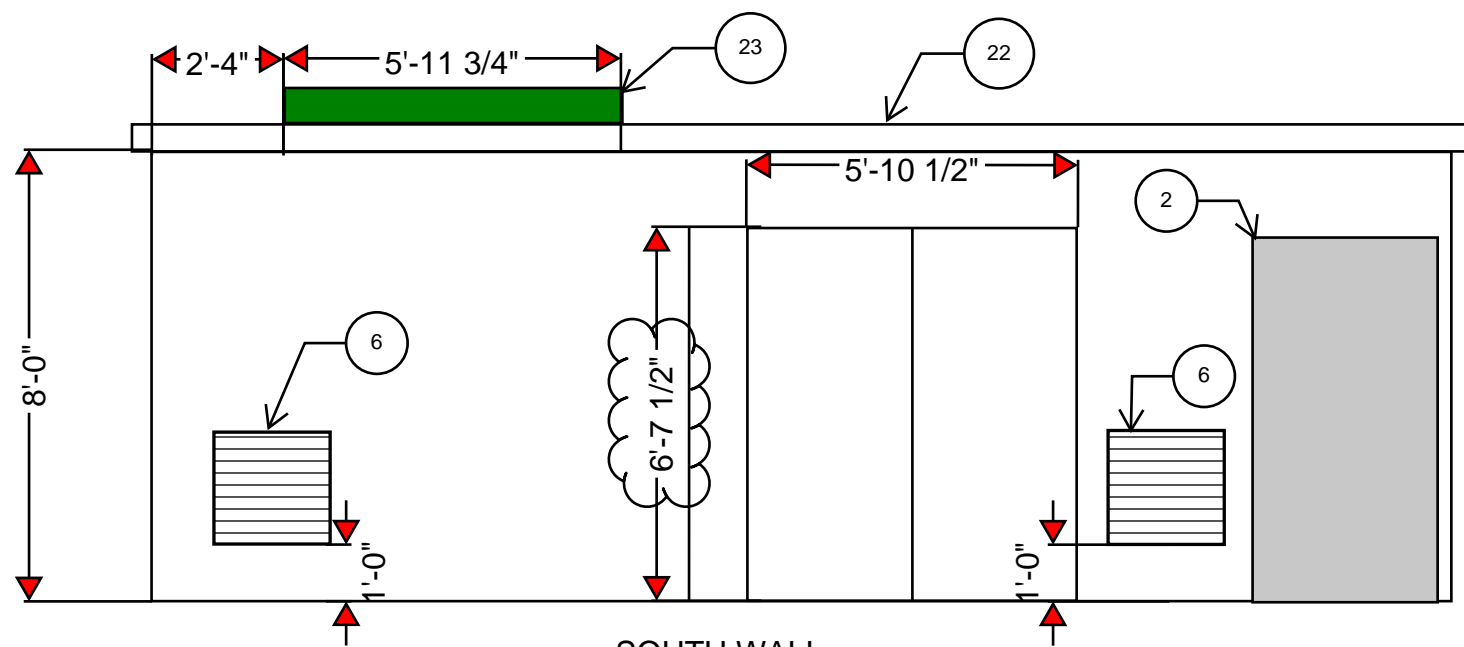


PLAN VIEW WITHOUT PIPING  
INSIDE DIMENSIONS



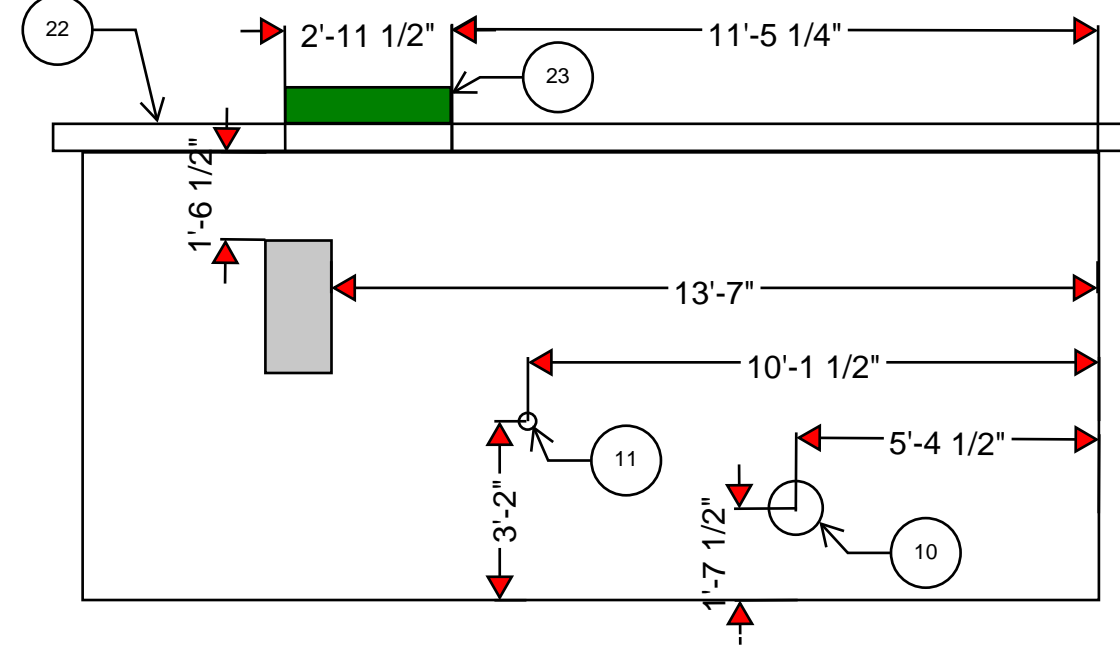
PLAN VIEW WITH  
SKID PIPING DETAIL

ITEM NO.	ITEM DESCRIPTION	NOTES	ITEM NO.	ITEM DESCRIPTION	NOTES	ITEM NO.	ITEM DESCRIPTION	NOTES
1	PRECAST CONCRETE BUILDING W/CONCRETE ROOF	ROOF HAS TWO SECTIONS. SEAM LEAKS.	9	RTU ANTENNA		17	PRESSURE RELIEF VALVE (PRV)	
2	ELECTRICAL SERVICE EQUIPMENT		10	12" DISCHARGE PIPE		18	75 HP PUMP MOTOR (TYP OF 3)	
3	120 V LIGHTING PANEL		11	4" FILTER WASTE PIPE		19	6" PUMP DISCHARGE PIPING, ISOLATION VALVE, AND CHECK VALVE	
4	XCEL'S CT PANEL		12	UNIT HEATER		20	2" PRESSURE MAINTENANCE PUMP PIING, ISOLATION VALVE, AND CHECK VALVE	
5	ELECTRICAL DISCONNECT		13	AMIAD FILTRATION SYSTEM AND PIPING		21	10" DISCHARGE PIPING TO FILTER EQUIPMENT	CENTER LINE ONLY SHOWN
6	VENTILATION LOOVER		14	PUMP SKID	CONTROL PANEL MOUNTED ON TOP OF SKID	22	PRECAST CONCRETE ROOF	ROOF HAS TWO SECTIONS. SEAM LEAKS.
7	EXHAUST FAN		15	10" BUTTERFLY VALVE WITH HANDWHEEL/ACTUATOR				
8	REMOTE TELEMETRY UNIT (RTU)		16	14" PUMP DISCHARGE HEADER	WELDED STEEL AND FITTINGS			

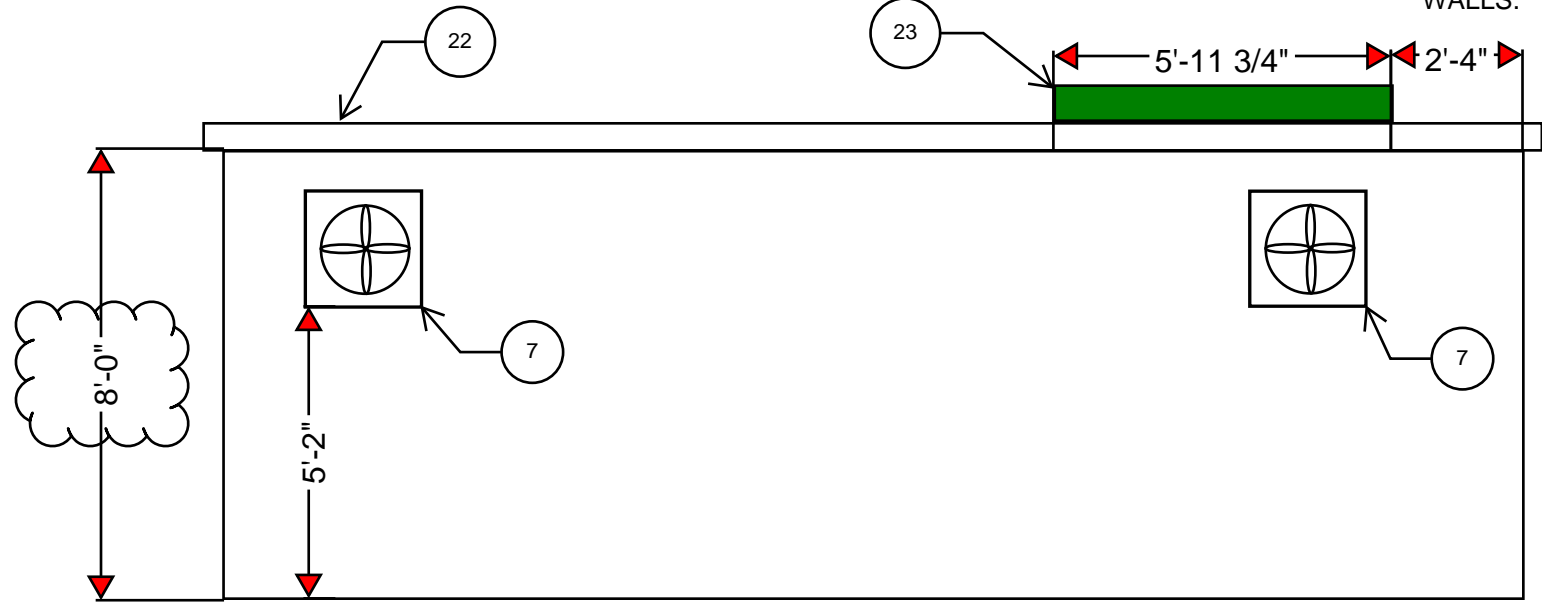


SOUTH WALL  
(INSIDE VIEW)

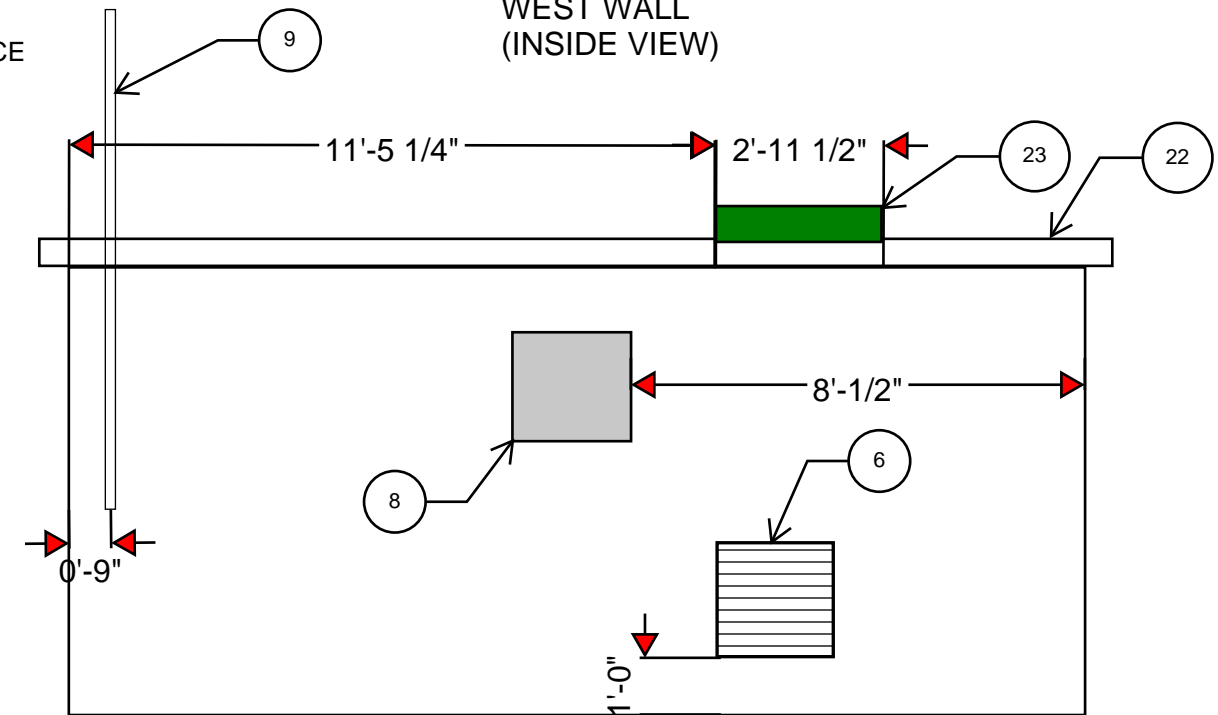
NOTE: ALL DIMENSIONS  
ARE BASED ON DISTANCE  
FROM INSIDE BUILDING  
WALLS.



WEST WALL  
(INSIDE VIEW)

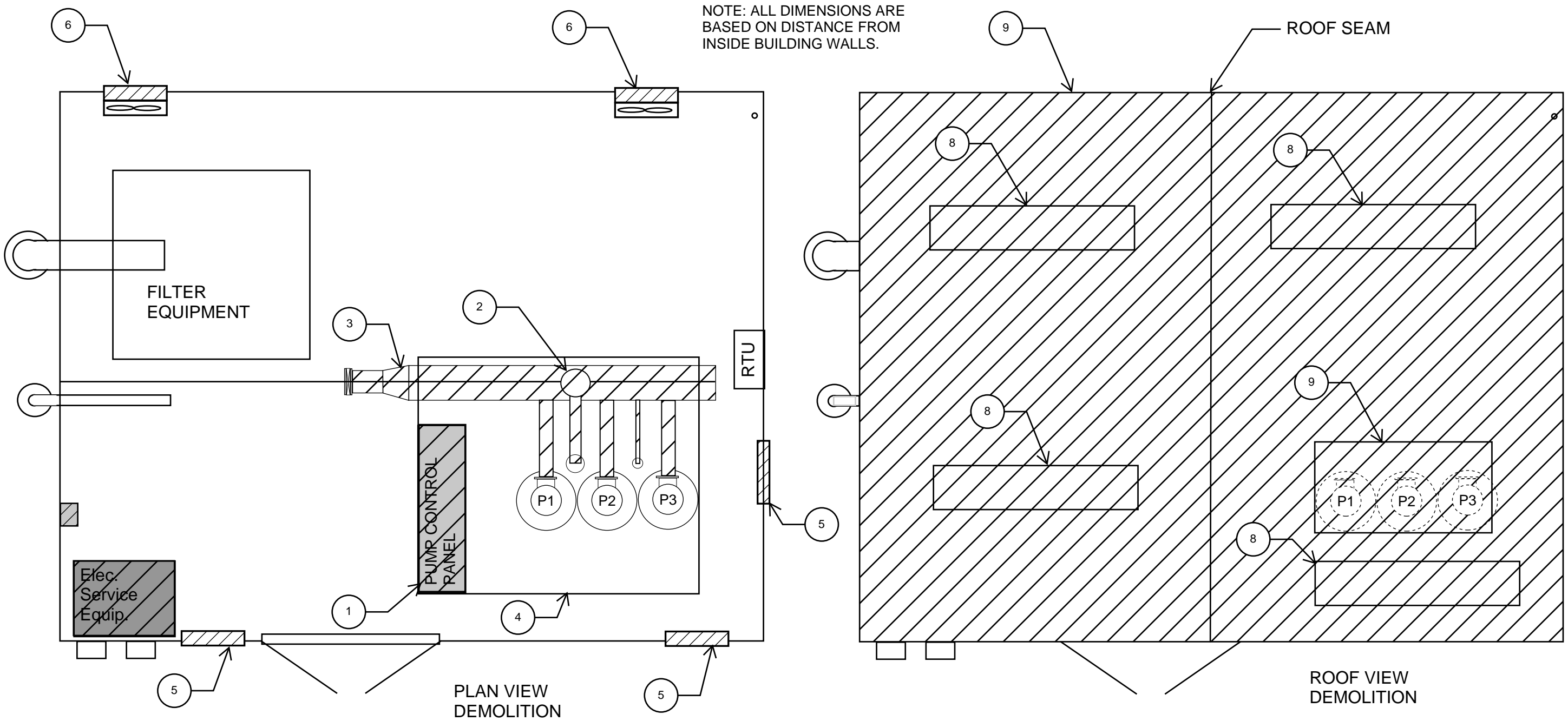


NORTH WALL  
(INSIDE VIEW)

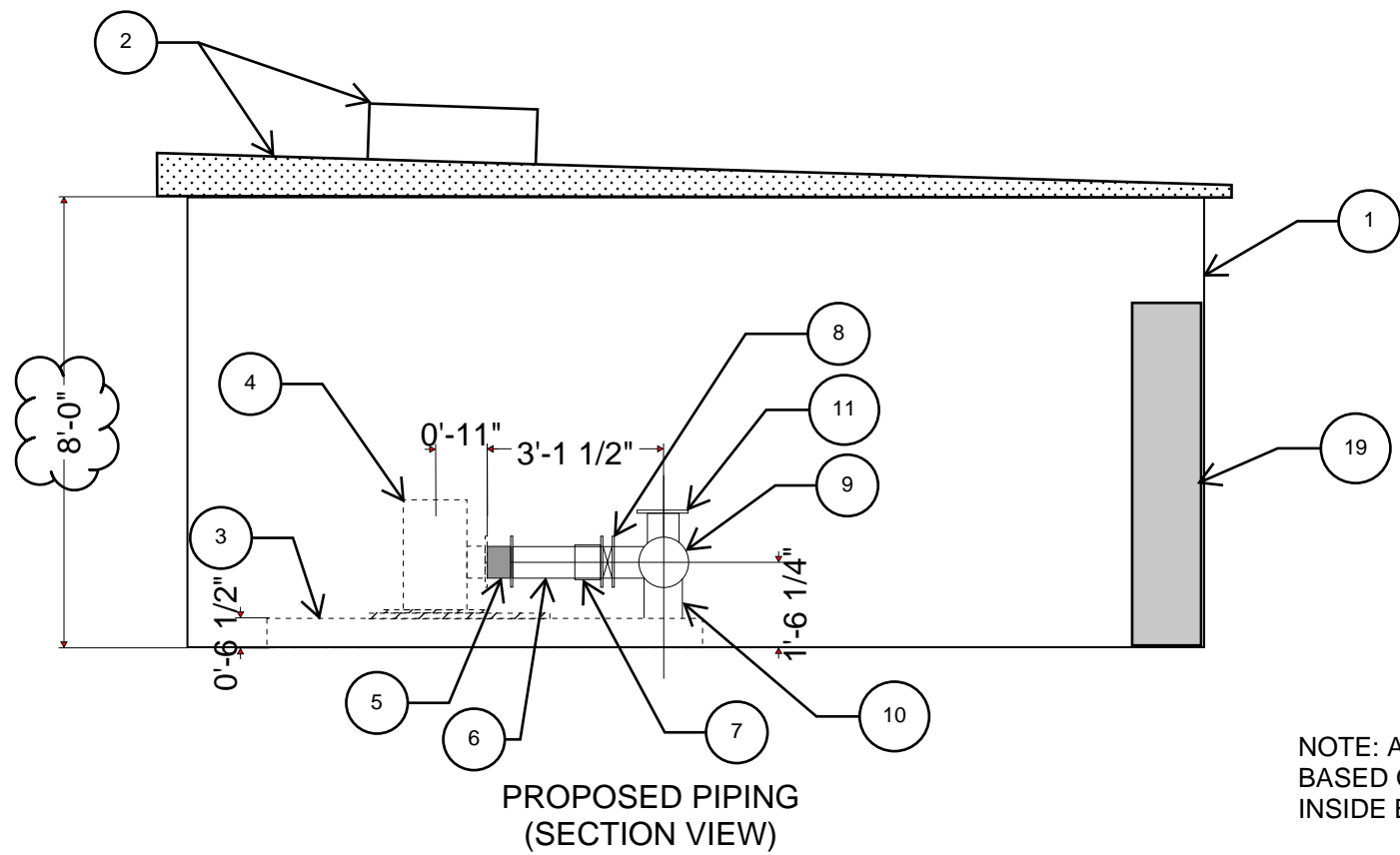


EAST WALL  
(INSIDE VIEW)

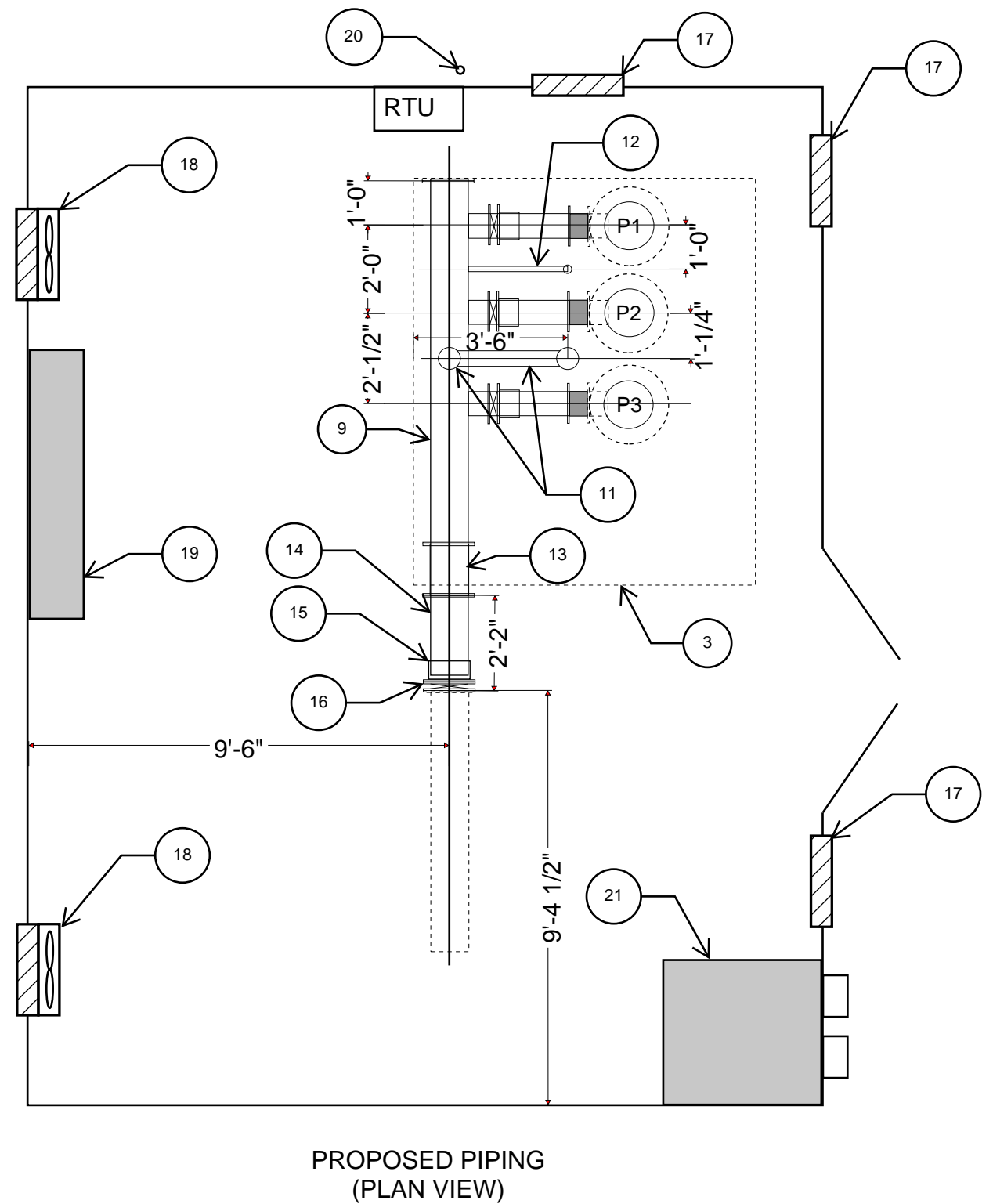
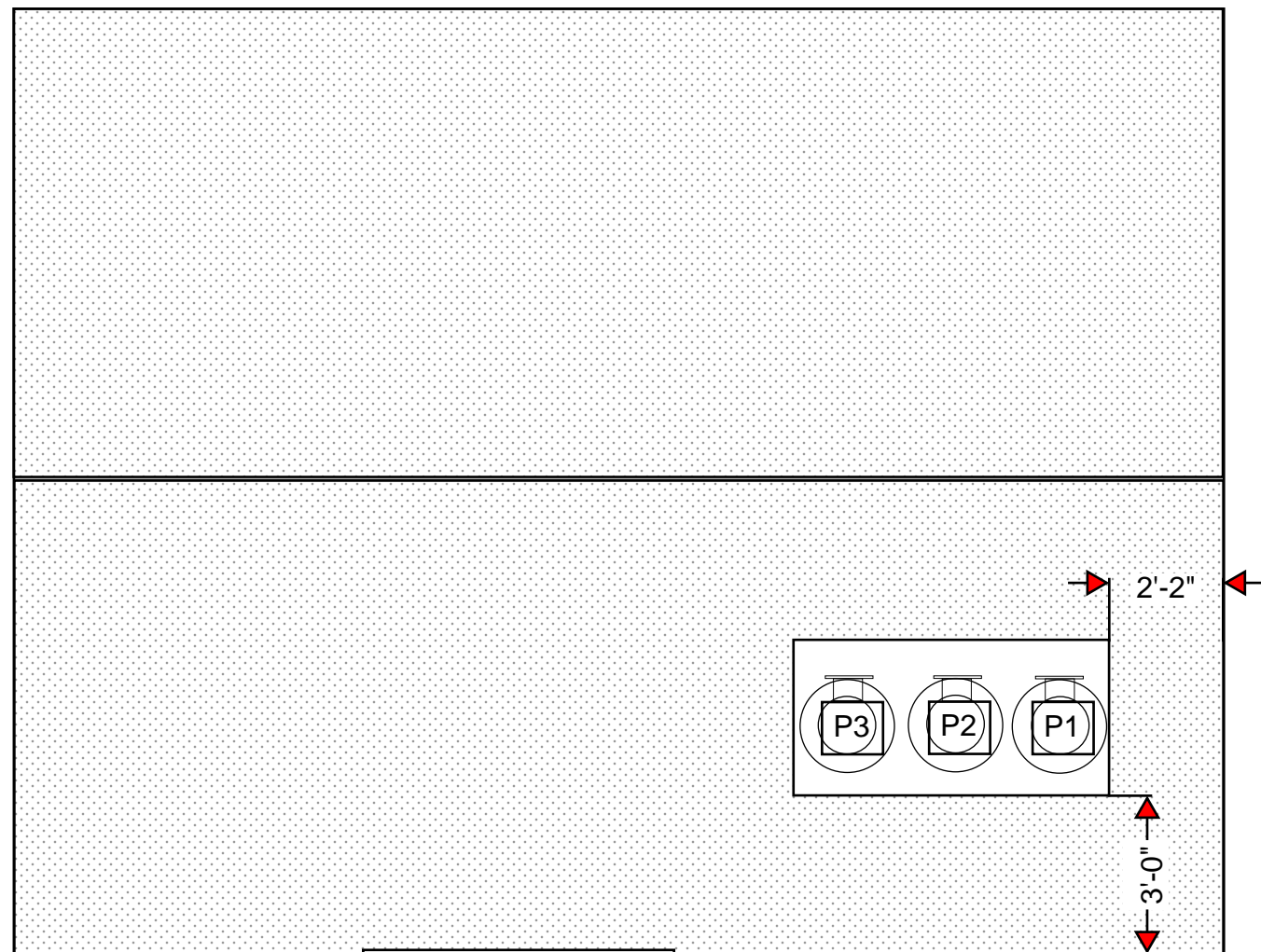
ITEM NO.	ITEM DESCRIPTION	NOTES	ITEM NO.	ITEM DESCRIPTION	NOTES	ITEM NO.	ITEM DESCRIPTION	NOTES
1	PRECAST CONCRETE BUILDING W/CONCRETE ROOF	ROOF HAS TWO SECTIONS. SEAM LEAKS.	9	RTU ANTENNA		17	PRESSURE RELIEF VALVE (PRV)	
2	ELECTRICAL SERVICE EQUIPMENT		10	12" DISCHARGE PIPE		18	75 HP PUMP MOTOR (TYP OF 3)	
3	120 V LIGHTING PANEL		11	4" FILTER WASTE PIPE		19	6" PUMP DISCHARGE PIPING, ISOLATION VALVE, AND CHECK VALVE	
4	XCEL'S CT PANEL		12	UNIT HEATER		20	2" PRESSURE MAINTENANCE PUMP PIING, ISOLATION VALVE, AND CHECK VALVE	
5	ELECTRICAL DISCONNECT		13	AMIAD FILTRATION SYSTEM AND PIPING		21	10" DISCHARGE PIPING TO FILTER EQUIPMENT	CENTER LINE ONLY SHOWN
6	VENTILATION LOOVER		14	PUMP SKID	CONTROL PANEL MOUNTED ON TOP OF SKID	22	PRECAST CONCRETE ROOF	ROOF HAS TWO SECTIONS. SEAM LEAKS.
7	EXHAUST FAN		15	10" BUTTERFLY VALVE WITH HANDWHEEL/ACTUATOR		23	PUMP EQUIPMENT HATCH	CLEAR OPENING DIMENSIONS
8	REMOTE TELEMETRY UNIT (RTU)		16	14" PUMP DISCHARGE HEADER	WELDED STEEL AND FITTINGS			



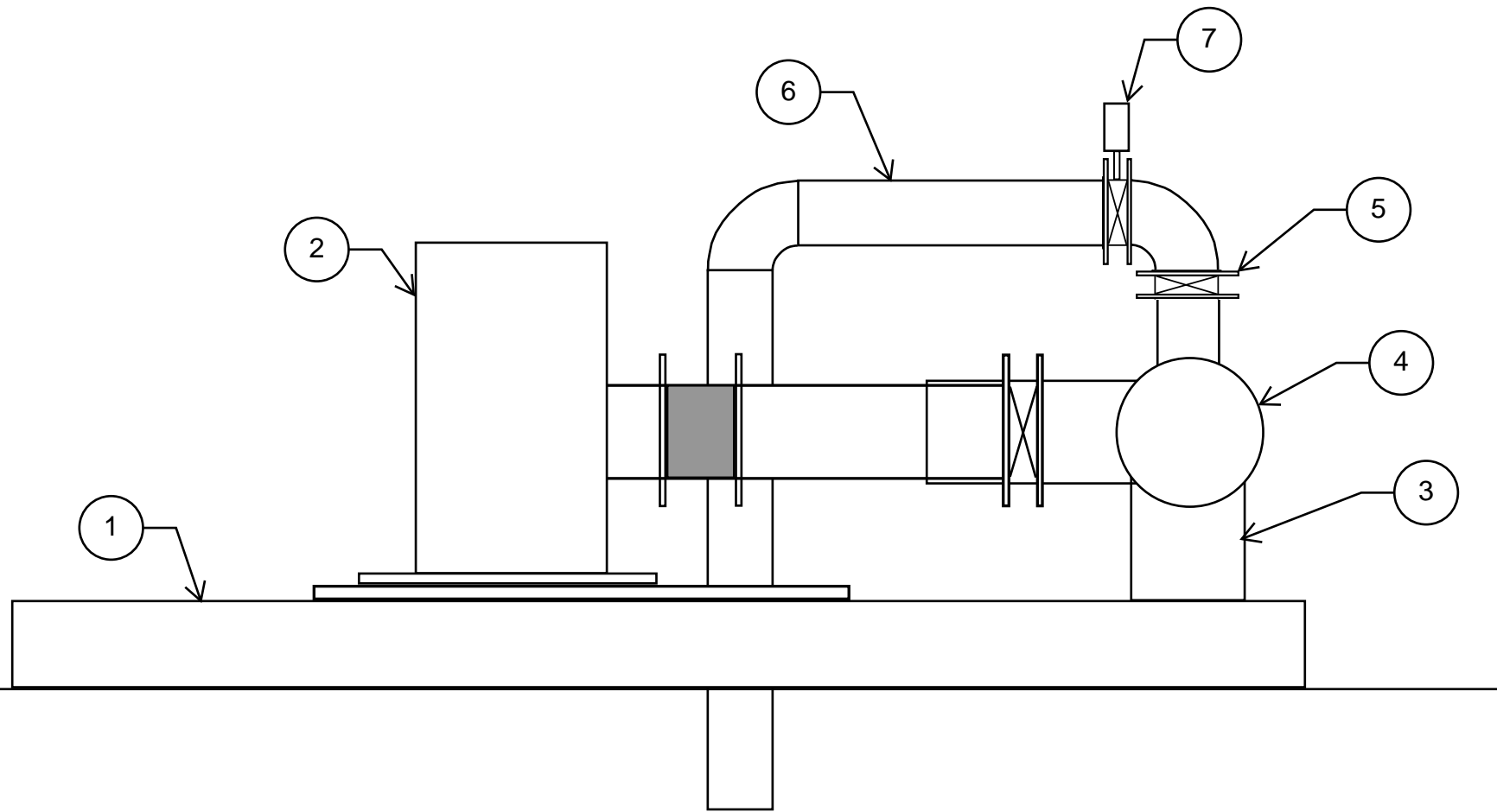
ITEM NO.	ITEM DESCRIPTION	NOTES	ITEM NO.	ITEM DESCRIPTION	NOTES
1	CONTROL PANEL	REMOVE AND DISPOSE.	6	EXHAUST FAN	REMOVE AND DISPOSE.
2	PRV	REMOVE AND DELIVER TO COG.	7	ELECTRICAL SERVICE EQUIPMENT	REMOVE AND DISPOSE.
3	DISCHARGE PIPING AND VALVES	REMOVE AND DISPOSE. REUSE PIPE SUPPORTS IF POSSIBLE.	8	LIGHTS AND ELECTRICAL CONDUITS MOUNTED TO ROOF	REMOVE AND DISPOSE.
4	PUMP SKID	REFURBISH BY BLASTING AND PAINTING.	9	CONCRETE ROOF PANELS AND EQUIPMENT HATCH	REMOVE AND DISPOSE.
5	VENTILATION LOOVER	REMOVE AND DISPOSE.			



NOTE: ALL DIMENSIONS ARE  
BASED ON DISTANCE FROM  
INSIDE BUILDING WALLS.



ITEM NO.	ITEM DESCRIPTION	NOTES	ITEM NO.	ITEM DESCRIPTION	NOTES
1	EXISTING PRECAST BUILDING		12	NEW 2" CHECK VALVE AND BALL VALVE ASSEMBLY	SERVES SUBMERSIBLE PRESSURE MAINT. PUMP
2	NEW PITCHED CONCRETE ROOF AND EQUIP. HATCH	HATCH SIZE: 6' x 3'	13	10" MAG METER	FURNISHED BY OTHERS
3	EXISTING PUMP SKID	REFURBISH.	14	10" DIAM. X 22" STEEL SPOOL (FL X PE)	CONFIRM LENGTH
4	EXISTING PUMP DISCHARGE HEAD (TYP OF 3)		15	10" FLANGED COUPLING ADAPTER	
5	NEW 6" CHECK VALVE (TYP OF 3)	VAL MATIC SERIES 1400	16	NEW 10" WAFER BUTTERFLY VALVE W/HANDWHEEL ACTUATOR	
6	NEW 6" STEEL PIPING (FL X PE) (TYP OF 3)	GROOVED CONNECTIONS ARE PREFERRED.	17	LOUVERS (TYP OF 3)	
7	NEW 6" RESTRAINED FLANGED COUPLING ADAPTER (TYP OF 3)	CONTRACTOR SHALL PREPARE AND SUBMIT	18	EXHAUST FANS (TYP OF 2)	
8	NEW 6" WAFER BUTTERFLY VALVE (TYP OF 3)	SHOP DRAWINGS ON ALL NEW PIPING FOR	19	PUMP CONTROL PANEL	BY CITY'S ELECTRICAL CONTRACTOR
9	NEW 10" DIAM. STEEL PUMP DISCHARGE HEADER	REVIEW AND APPROVAL.	20	NEW RTU ANTENNA	BY CITY'S ELECTRICAL CONTRACTOR
10	NEW OR MODIFIED STEEL PIPE SUPPORTS (TYP OF 3)		21	NEW BUILDING ELECTRICAL SERVICE SYSTEM	BY CITY'S ELECTRICAL CONTRACTOR
11	NEW 4" PRESSURE RELIEF/ANTICIPATION SYSTEM	REFER TO SHEET 5.			



4" PRESSURE RELIEF/SURGE ANTICIPATION SYSTEM

ITEM NO.	ITEM DESCRIPTION	NOTES
1	EXISTING PUMP SKID	
2	EXISTING PUMP DISCHARGE HEAD	
3	NEW PUMP DISCHARGE HEADER SUPPORTS	
4	NEW 10" DIAM. STEEL PUMP DISCHARGE HEADER	
5	NEW 4" BUTTERFLY VALVE WITH LEVER ACTUATOR	ITEM 5 ISOLATION VALVE
6	NEW 4" PRESSURE RELIEF/ANTICIPATION PIPING	
7	NEW 4" BUTTERFLY VALVE WITH ELECTRIC ACTUATOR	SUPPLIED BY PUMP CONTROLS MANUFACTURER/REP



# EXHIBIT 7

## FLOWTRONEX PSI Ltd

### Automatic Vertical Turbine Variable Speed Prefabricated Pump Station Technical Specification

Project Name: Highland Hills Golf Course	March 18, 1997
Project Location: Greeley, Colorado	

Pumping System Model No.    FPX- VWTP-2000-4-115  
 Total Design Criteria:        Quantity of Pumps: 4  
 Total Design Flow:            2000 GPM @ 115 psi

Motor and Pump Data:		PM Pump	Pump#1	Pump#2	Pump#3
<b>Motor Spec</b>	Motor h.p.	5	75	75	75
	Motor rpm	1800	1800	1800	1800
	Motor service factor	1.15	1.15	1.15	1.15
	Motor efficiency	84%	91%	91%	91%
	Motor power factor	85	87	87	87
	Motor type	SUB	WP1	WP1	WP1
	Motor disconnect volts	600	600	600	600
	Motor FLA rating, amps	7.6	96	96	96
	Motor fuse amps	10	125	125	125
	Motor fuse AIC rating	200,000	200,000	200,000	200,000
	Motor IEC starter size	12	110	100	100
	Motor O.L. rating, amps	7.6	96	96	96
	Motor cfm requirements	80	1200	1200	1200
	Total cfm requirements				3,680
<b>Pump Spec</b>	Pump gpm	45	667	667	667
	Pump efficiency at design	65%	83.85%	83.85%	83.85%
	Pump shut off head	430	375	375	375
	Pump column pipe id	2"	8"	8"	8"
	Pump shaft od	n/a	1.25"	1.25"	1.25"
	Pump discharge size	2"	8"	8"	8"
	Pump check valve size	2"	8"	8"	8"
	Pump check rating, psi	200	200	200	200
	Pump check psi drop at capacity	.75	1	1	1
	Pump discharge isolation valve size	2"	8"	8"	8"
	Pump disch. isolation valve rating, psi	200	200	200	200

2,000 gpm

Motor Starting Code G, Class F Insulation,  
 Minimum water coverage as measured from eye of bottom impeller: 24"

Service Entrance; 297 amps, 200,000 Fault Amps, 237 KVA, 460 volts, 3 phase, 60 HZ  
 Main Disconnect:        600 Volts, 400 amps

Starting Equipment - U.L. Listed as Industrial Control Assembly:  
 Controls U.L. Listed as Industrial Control Assembly.  
 VFD Controls U.L. Listed as Industrial Control Assembly:

Operating Temp: 0 to 40 °C (32 - 104 °F)  
 Humidity: 5-95% Non-condensing  
 Minimum Efficiency (full load, base speed) 98%

Input Voltage:            3 phase, 480 Volts AC

Input frequency: 50/60 hz  
Output Voltage: 3 phase, 0 - 480 Volts AC  
Frequency Rating: 100% continuous drive rating, Intermittent  
111% Drive rating for one minute.

Phase Failure and low voltage shutoff at 90% of motor name plate voltage on all three legs 83% on one leg for five seconds.

Low discharge pressure shutdown at 105 psi after all pumps are running for 60 seconds continuously.

High discharge pressure shutdown at 125 psi after all pumps are running for 60 seconds continuously.

Low water level safety shutdown if water falls to within two feet of pump suction.

Relief Valve Size: 6"  
Pressure Rating: 175 psi  
Pilot Setting: 160 psi

Flow sensor Brass, Pressure rating: 400 psi

System Isolation Valve: 8" Pressure rating: 200 psi

LS-32 with 21" SDR

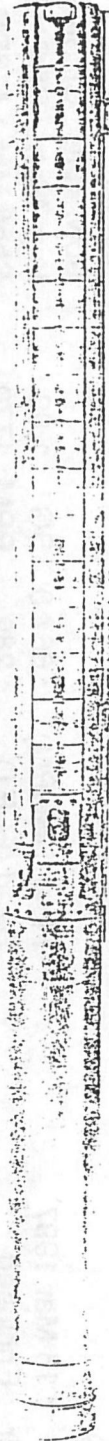
MODEL  
**40S**

**40 GPM**

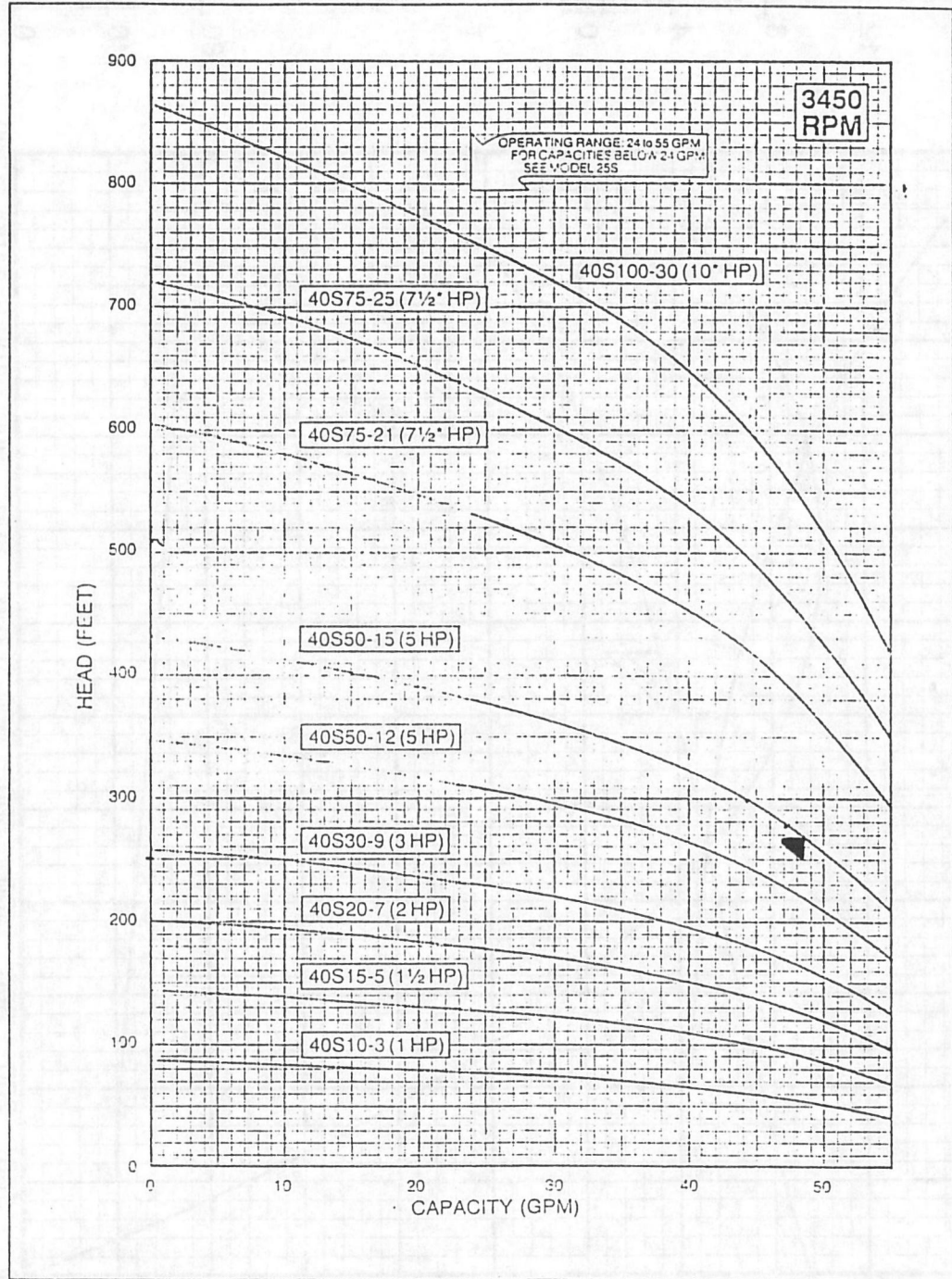
**GRUNDFOS**

FLOW RANGE  
24 to 55 GPM

PUMP OUTLET  
2" NPT



**PERFORMANCE CURVES**

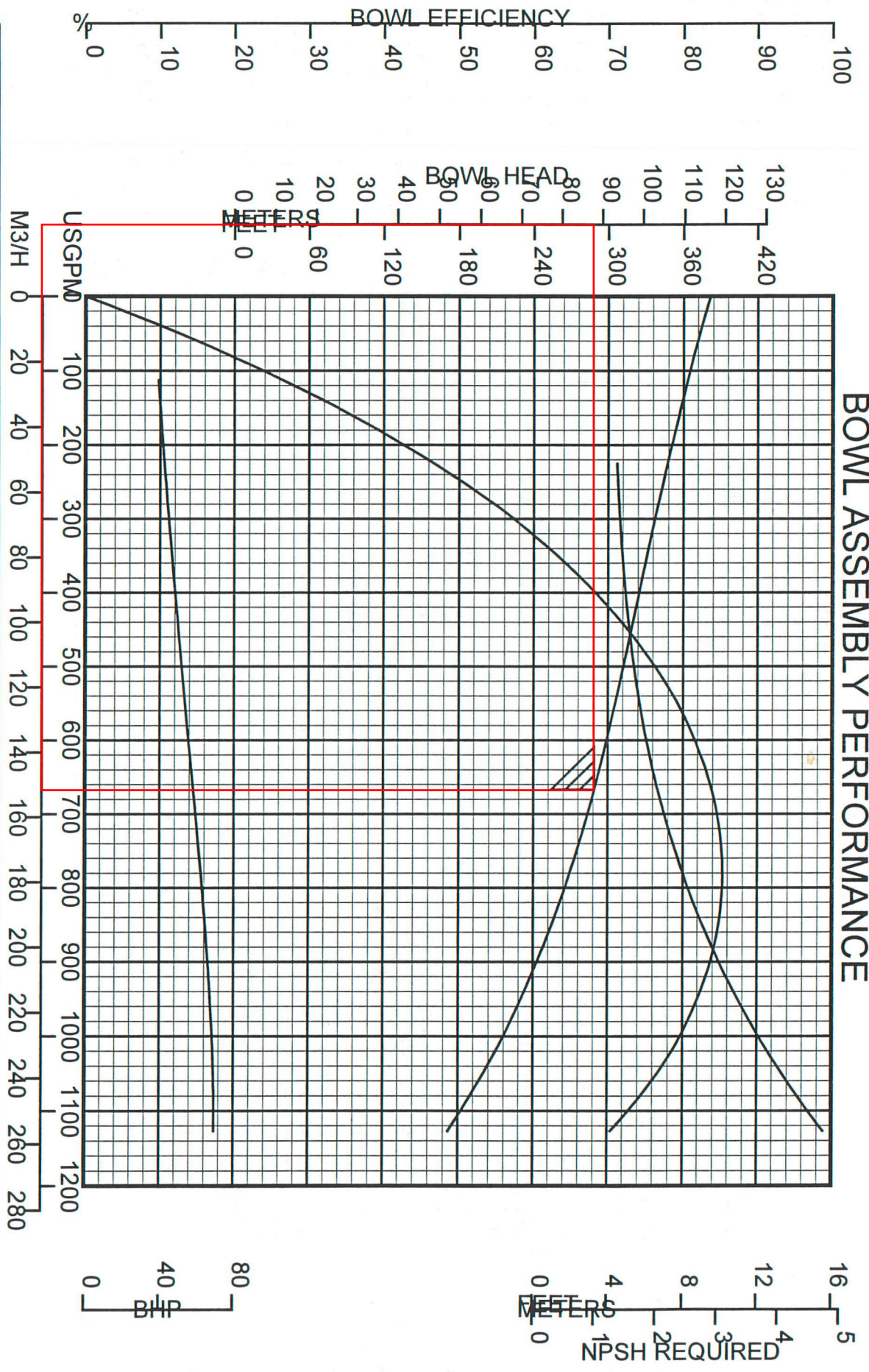


**DIMENSIONS AND WEIGHTS**

MODEL NO.	HP	LENGTH (INCHES)	WIDTH (INCHES)	APPROX. UNIT SHIPPING WT. (LBS.)
40S10-3	1	25 5/8	3 15/16	32
40S15-5	1 1/2	30 1/2	3 15/16	37
40S20-7	2	33	3 15/16	41
40S30-9	3	43 3/8	3 15/16	65
40S50-12	5	51 1/8	3 15/16	78
40S50-15	5	56 1/8	3 15/16	84
40S75-21	7 1/2*	74 1/2	3 15/16	120
40S75-25	7 1/2*	81 1/4	3 15/16	124
40S100-30	10*	103 1/2	3 15/16	181

\* with motor is provided as standard for models.  
Specifications are subject to change without notice.  
Deep Set models for higher head.

# BOWL ASSEMBLY PERFORMANCE



Customer: \_\_\_\_\_  
 Project : \_\_\_\_\_  
 Service : \_\_\_\_\_  
 Date : 18 Mar 1997  
 Impeller : Enclosed

Flow (USGPM) : 667.0 SG : 1.00  
 Head (FEET) : 289 RPM : 1770

Pump : 12M75  
 Stages : 4  
 Bowl Mat. : CI/LINED  
 Imp. Mat. : BRONZE  
 Shaft Mat. : 416SS

GUARANTEES ARE BASED ON SHOP TEST WHEN HANDLING CLEAR FRESH WATER AT A TEMPERATURE OF NOT OVER 85 F. CURVES ARE APPROXIMATE. PUMP IS GUARANTEED FOR ONE SET OF CONDITIONS, CAPACITY, HEAD, AND EFFICIENCY.