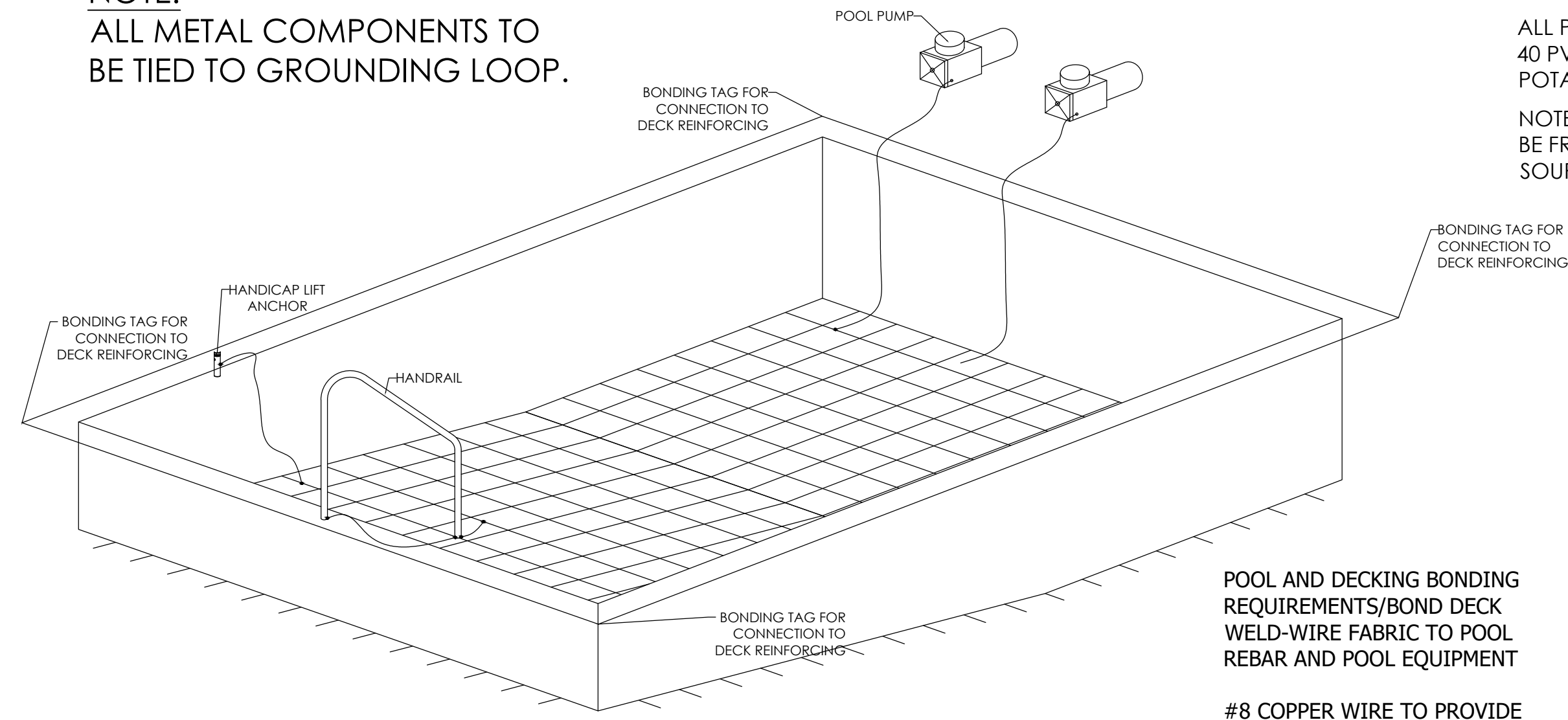


NOTE:
 ALL METAL COMPONENTS TO
 BE TIED TO GROUNDING LOOP.

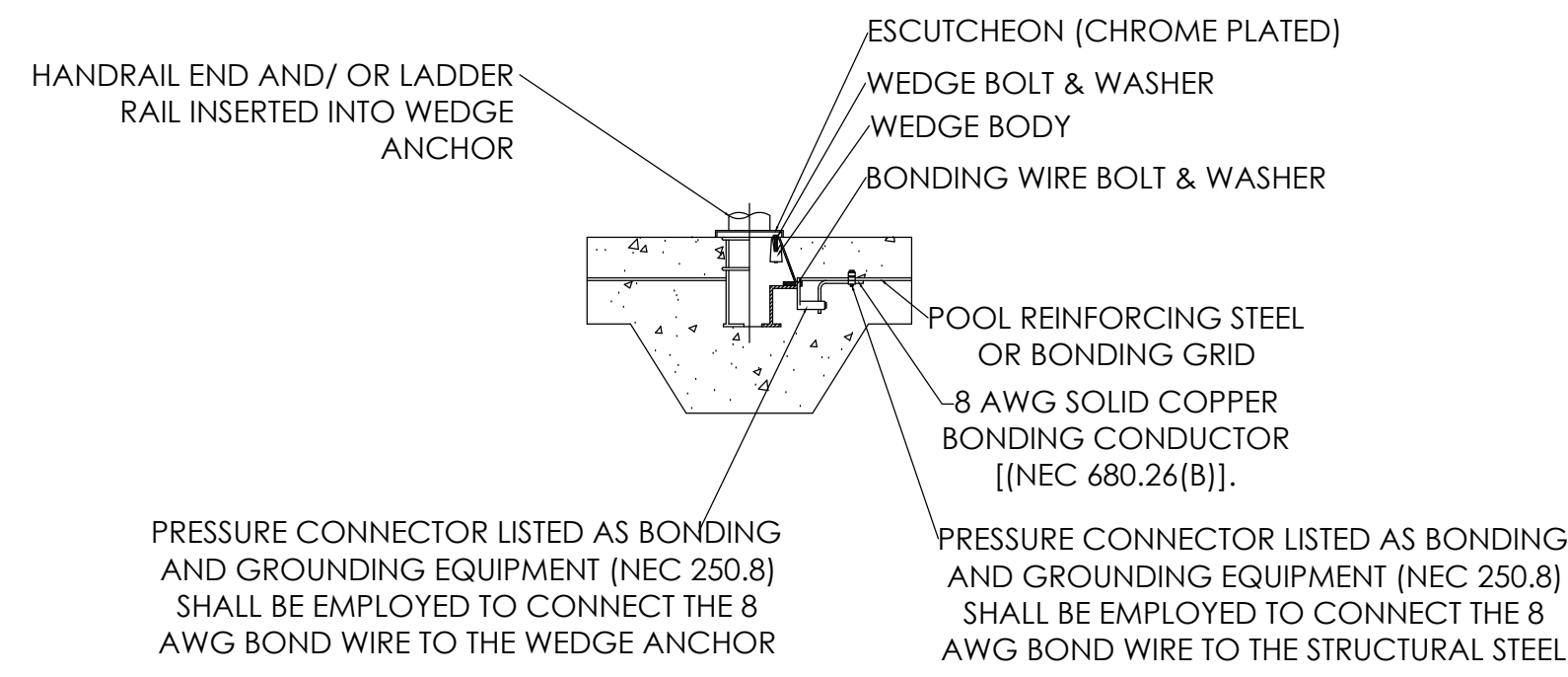


ALL PIPING SHALL BE SCHEDULE
 40 PVC - N.S.F. APPROVED FOR
 POTABLE WATER W/ LOGO ON PIPE.
 NOTE: POOL MAKEUP WATER SHOULD
 BE FROM AN APPROVED MUNICIPAL
 SOURCE.

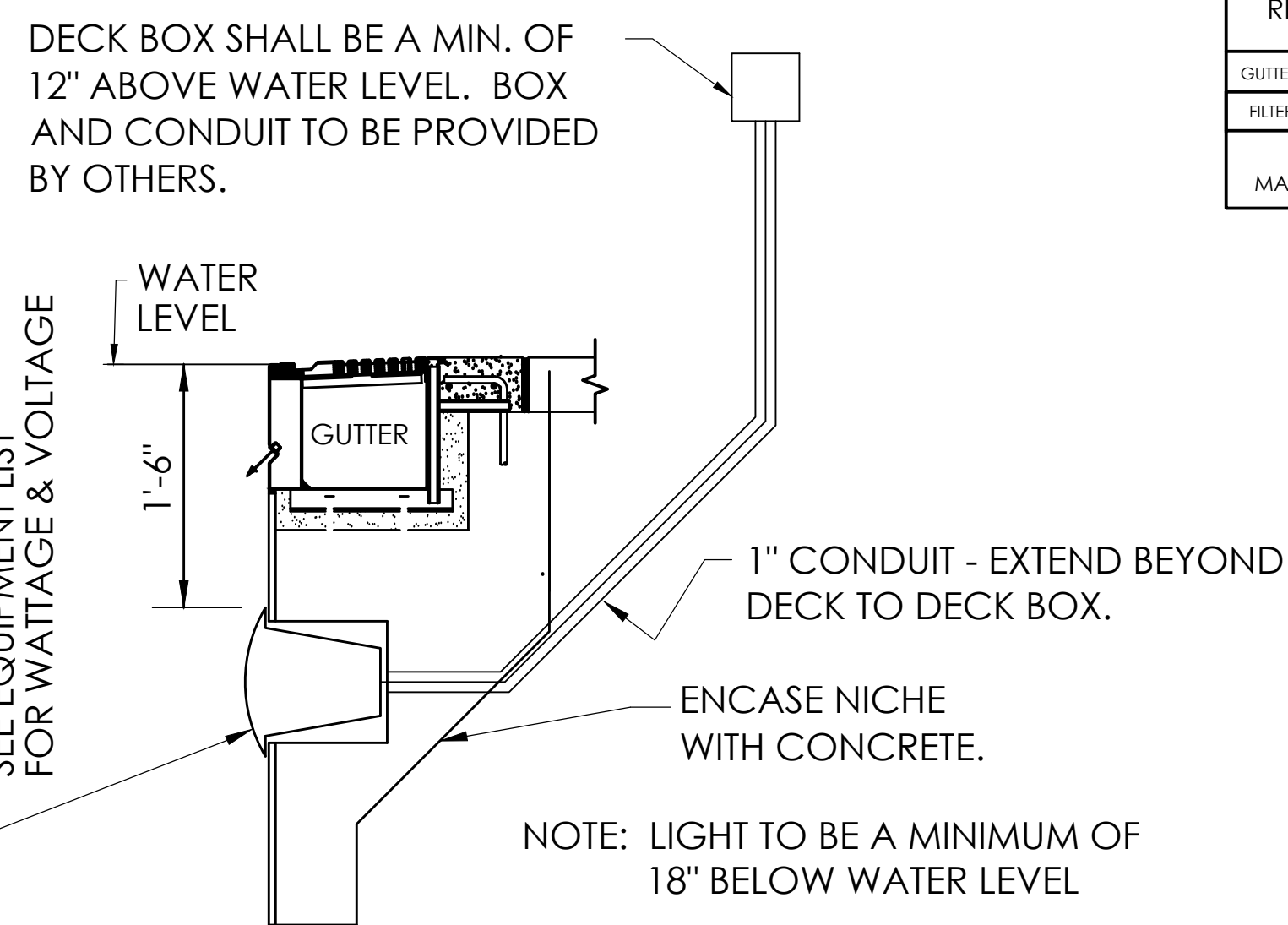
POOL AND DECKING BONDING
 REQUIREMENTS/BOND DECK
 WELD-WIRE FABRIC TO POOL
 REBAR AND POOL EQUIPMENT

#8 COPPER WIRE TO PROVIDE
 CONTINUOUS LOOP AROUND
 POOL HITTING 4 CORNERS AND
 STINGERS FROM THE SHELL. (BY
 OTHERS)

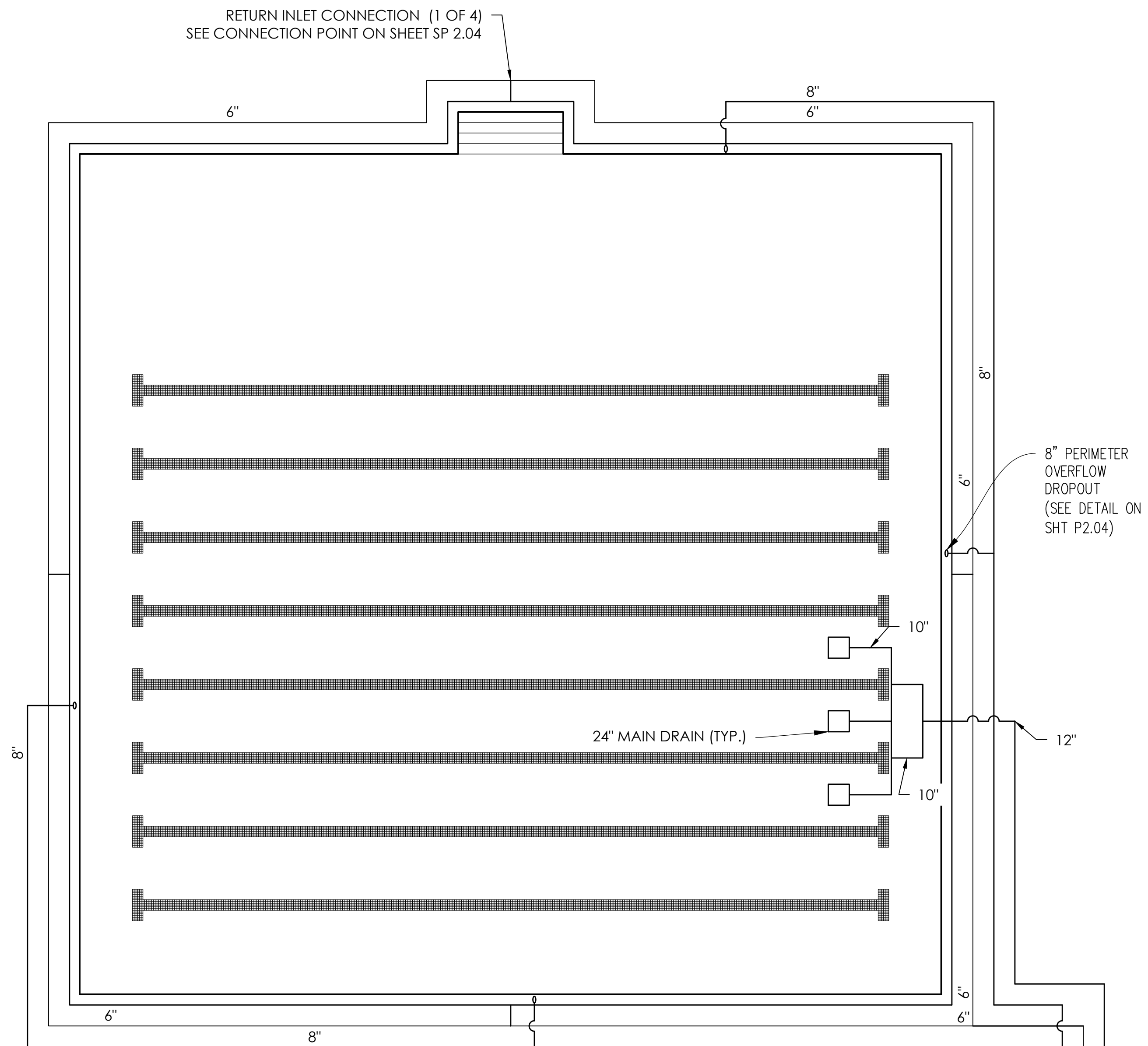
TYPICAL BONDING DETAIL
 N.T.S.



TYPICAL BONDING DETAIL FOR METALLIC PARTS
 NOT TO SCALE

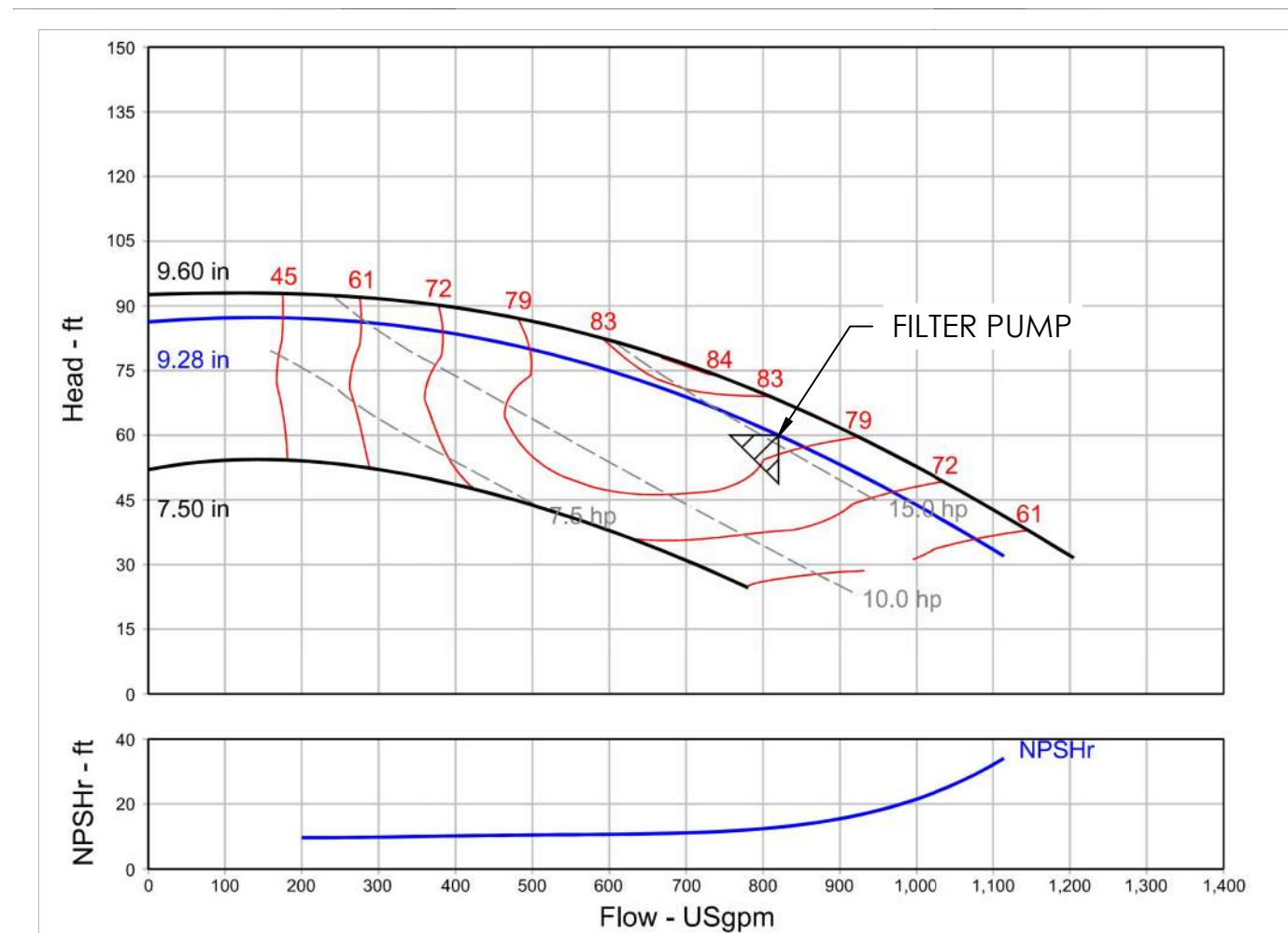


TYPICAL LIGHT DETAIL
 N.T.S.



PIPING PLAN
 SCALE: 1/8" = 1'-0"

POOL FLOW SCHEDULE				
PIPE	SIZE	FLOW	VELOCITY	HEAD LOSS
RETURN	8"	820 gpm	5.25 fps	1.11'
	6"	410 gpm	4.55 fps	1.79'
GUTTER OVERFLOW	8"	410 gpm	2.42 fps	0.30'
FILTER SUCTION	8"	820 gpm	5.25 fps	1.11'
POOL	12"	820 gpm	2.32 fps	0.15'
MAIN DRAIN	24x24 425.78 ft	1200 gpm	0.90 fps	



ISSUE DATE	ISSUED BY	CHECKED BY	DRAWN BY
100% CDS 05.14.2024			TCD
IFB SET 05.28.2024			BMTH



RAINBOW CITY RECREATION CENTER
 RAINBOW CITY, ALABAMA

POOL PIPING

SP2.02

GMC # ABHM230021

PADDOCK FIBERGLASS HORIZONTAL FILTERS

ITEM DESCRIPTION

- FIBERGLASS FILTER TANK WITH FLANGED CONNECTIONS & SABLES
- TANK RELEASE ASSEMBLY
- 1" AIR RELEASE
- SOIL BE PVC OVERBRAIN HEADER WITH 1/2" PVC LATERALS
- SOIL BE PVC UNDERBRAIN HEADER WITH 1/2" NPT THREADED LATERALS
- COVER FRAME
- FILTER SAND 40 TO 50mesh UNIFORMITY COEFFICIENT C_U 1.65
- 1" COIL TO THE SAND MEDIA
- FIBERGLASS INFILTE PLATES

VALVE LEGEND

NO.	VALVE DESCRIPTION	FILTER	BACKWASH
1	RETURN TO POOL	X	X
2	BACKWASH TO WASTE	X	D
3	FILTER INFLUENT	D	X
4	BACKWASH INFLUENT	X	D

GENERAL NOTES:

FRING - SOIL BE PVC MAX. VELOCITY LESS THAN 10 FPS. FRING DEPOTED WITH SANDS (DO NOT STAPLED IN FRING).

FLUID WORKING PRESSURE @ 50 PSI.

PADDOCK FIBERGLASS HORIZONTAL FILTERS

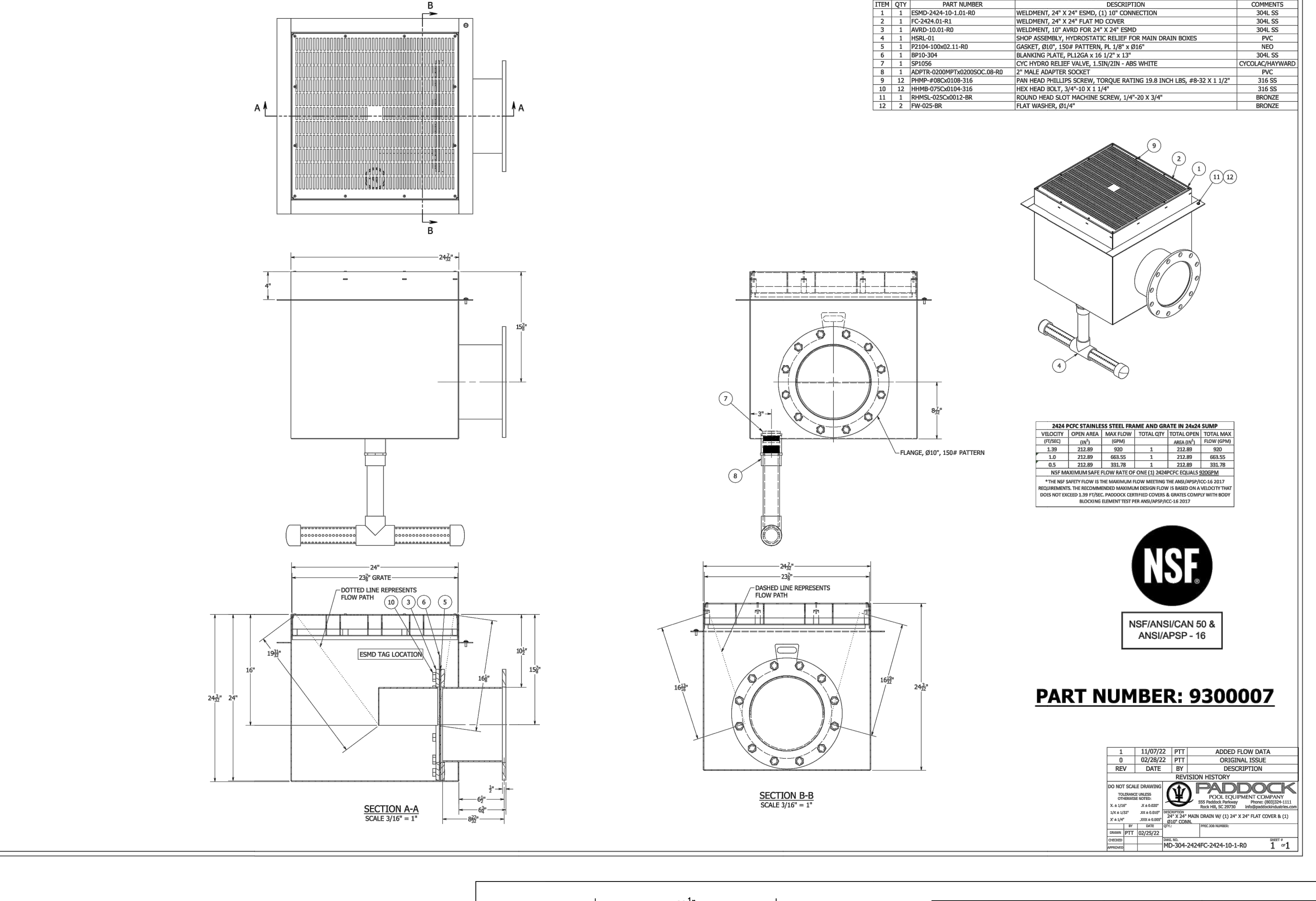
555 Paddock Parkway, Rock Hill, SC 29730-1876
Phone: (803)949-2729 Fax: (803)324-1116

CATALOGUE

CATALOG NO.	DIAM.	FILTER AREA	BACKWASH RATE	TANK SIZE	OVERBRAIN LATERALS	UNDERBRAIN LATERALS	MEDIA PER TANK (CU FT)	WGT. PER TANK (LBS)
HZF-24-16.5	24"	16.5 FT ²	2475 GPM	24" x 24" x 4"	8	8	10.50	569
HZF-24-18	24"	18 FT ²	2475 GPM	24" x 24" x 4"	8	8	11.60	626
HZF-24-20	24"	20 FT ²	300 GPM	30" x 30" x 4"	8	8	15.64	844
HZF-24-22	24"	22 FT ²	345 GPM	34" x 34" x 4"	8	8	17.96	975
HZF-24-24	24"	24 FT ²	375 GPM	36" x 36" x 4"	8	8	19.59	1065
HZF-24-26	24"	26 FT ²	360 GPM	36" x 36" x 4"	8	8	23.73	1286
HZF-24-28	24"	28 FT ²	405 GPM	40" x 40" x 4"	8	8	27.70	1483
HZF-24-30	24"	30 FT ²	450 GPM	42" x 42" x 4"	8	8	29.53	1604
HZF-24-32	24"	32 FT ²	495 GPM	44" x 44" x 4"	8	8	32.30	1740
HZF-24-34	24"	34 FT ²	540 GPM	46" x 46" x 4"	8	8	35.02	1881
HZF-24-36	24"	36 FT ²	585 GPM	48" x 48" x 4"	8	8	37.69	2028
HZF-24-38	24"	38 FT ²	630 GPM	50" x 50" x 4"	8	8	40.32	2181
HZF-24-40	24"	40 FT ²	675 GPM	52" x 52" x 4"	8	8	42.91	2340
HZF-24-42	24"	42 FT ²	720 GPM	54" x 54" x 4"	8	8	45.46	2505
HZF-24-44	24"	44 FT ²	765 GPM	56" x 56" x 4"	8	8	48.00	2676
HZF-24-46	24"	46 FT ²	810 GPM	58" x 58" x 4"	8	8	50.51	2853
HZF-24-48	24"	48 FT ²	855 GPM	60" x 60" x 4"	8	8	53.00	3036
HZF-24-50	24"	50 FT ²	900 GPM	62" x 62" x 4"	8	8	55.47	3225
HZF-24-52	24"	52 FT ²	945 GPM	64" x 64" x 4"	8	8	57.92	3420
HZF-24-54	24"	54 FT ²	990 GPM	66" x 66" x 4"	8	8	60.35	3621
HZF-24-56	24"	56 FT ²	1,035 GPM	68" x 68" x 4"	8	8	62.76	3828
HZF-24-58	24"	58 FT ²	1,080 GPM	70" x 70" x 4"	8	8	65.15	4041
HZF-24-60	24"	60 FT ²	1,125 GPM	72" x 72" x 4"	8	8	67.52	4260

FIBERGLASS HORIZONTAL FILTERS

CATALOG NO.	DIAM. 'A'	DIAM. 'B'	DIAM. 'C'	DIAM. 'D'	DIAM. 'E'	DIAM. 'F'	DIAM. 'G'	DIAM. 'H'
HZF-24-16.5	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-18	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-20	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-22	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-24	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-26	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-28	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-30	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-32	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-34	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-36	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-38	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-40	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-42	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-44	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-46	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-48	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-50	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-52	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-54	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-56	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-58	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"
HZF-24-60	2'-0"	2'-0"	3'-6"	3'-6 1/2"	2'-10"	1'-4 1/4"	2'-4"	8'-4 1/2"



GRUNDFOS

Submittal

Grundfos Series LC - End Suction Centrifugal Pump, Close Coupled

QUOTE NUMBER / ID 08121-0133 UNIT TAG 001 QUANTITY 1

REPRESENTATIVE SERVICE Filter Pump DATE
ENGINEER APPROVED BY DATE
CONTRACTOR ORDER # DATE

LC 40957 Part Number N/A
1760 rpm

Conditions of Service	Pump Data	Motor Data
Flow: 620.0 USgpm	Impeller Diameter: 9.28 in	Motor HP: 20 HP
Head: 60.00 ft	Max. Imp. Dia: 9.60 in	BHP: 15.47
Fluid: Cold Water	Min. Imp. Dia: 7.50 in	Enclosure: ODP
Temperature: 69.00 deg F	Efficiency: 80.31%	Voltage: 230/460 V
NPSHr: 12.86 ft	Suction: 5 in.	Phase: 3 Phase
Viscosity: 1.00 cP	Discharge: 4 in.	Cycle: 60
Specific Gravity: 1.000 SG	PE (CL): 0.96	Frame Size: 25JM
	ER (CL): 4	

Typical Specifications

This specification covers a complete Variable Frequency Drive consisting of a pulse width modulated inverter (VFD) with built-in braking (40°C) without de-rating, and 131°F (50°C) with de-rating.

Features:

- Motor Switch Ride Through - during maintenance the motor maintenance switch can be opened and closed without stopping or tripping the drive.
- Thin Film Capacitors - eliminate the need to condition or reform the capacitors before applying power.
- View/Monitor nine parameters at one time - User selectable, users determine the parameters for their application.
- Smallest Type 12 footprint on the market - lower shipping cost and easy installation.
- Standard Inverter Protection (BACH, LON, Modbus).

Typical Applications

A. All VFDs shall have the same customer interface regardless of horsepower rating.

B. Input voltage shall be 208-240 and 380-480 Vac +/- 10%, 3-phase, 48-63 Hz.

C. VFDs and options shall be UL508 listed as a complete assembly.

D. Base VFD shall be UL listed for 100 KA SCGR.

E. All circuit boards shall be coated to protect against corrosion and meet IEC 60068-2-60 Method 1.

F. VFD shall utilize built-in wizards for start-up and easy commissioning.

G. VFD shall have a "Inverter" feature to allow end user to create and save custom settings.

H. VFD shall have Ethernet and RS-485 port as standard.

I. VFD shall have Ethernet and RS-485 port as standard.

SIEMENS

BT300 HVAC Drives

Submital Sheet Document No. 154-126
March 11, 2013

Figure 1. BT300 HVAC Drive without and with Integral Disconnect

Description

Siemens' industry's BT300 is designed specifically for the demands of today's HVAC systems. Increased focus on energy efficiency of variable flow systems has increased the need for easy-to-use and highly reliable variable frequency drives that reduce the total cost of installation and maintenance while maximizing energy savings.

Features:

- Motor Switch Ride Through - during maintenance the motor maintenance switch can be opened and closed without stopping or tripping the drive.
- Thin Film Capacitors - eliminate the need to condition or reform the capacitors before applying power.
- View/Monitor nine parameters at one time - User selectable, users determine the parameters for their application.
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I. VFD shall have Ethernet and RS-485 port as standard.

PADDOCK
POOL EQUIPMENT COMPANY

Strainer

304L ST. ST. 12 GA.

QTY. STRAINER SIZE INLET SIZE FLANGE DIAMETER OUTLET DIAMETER OPEN AREA RATIO WT (#)

4	4 X 4	4"	4"	9"	11.5 IN ²	20.6:1	191.7	
4	4 X 3	4"	3"	7 1/2"	11.5 IN ²	20.6:1	191.3	
6	6 X 6	6"	11"	10"	26.07 IN ²	9.16:1	194.2	
6	6 X 5	6"	11"	5"	26.07 IN ²	9.16:1	193.7	
6	6 X 4	6"	11"	4"	26.07 IN ²	9.16:1	193.0	
6	6 X 3	6"	11"	3"	7 1/2"	26.07 IN ²	9.16:1	192.5
8	8 X 8	8"	13 1/2"	8"	45.7 IN ²	5.22:1	196.9	
8	8 X 6	8"	13 1/2"	6"	11"	45.7 IN ²	5.22:1	195.6
8	8 X 5	8"	13 1/2"	5"	10"	45.7 IN ²	5.22:1	195.1
8	8 X 4	8"	13 1/2"	4"	9"	45.7 IN ²	5.22:1	194.3

WITH EXTRA STRAINER BASKET

QTY. STRAINER SIZE INLET SIZE FLANGE DIAMETER OUTLET DIAMETER OPEN AREA RATIO WT (#)

2	12"	2"	3/8"	3/4"	AVP-2		
3	12"	3"	3/4"	AVP-3			
4	18"	3 3/4"	3/4"	AVP-4			
6	18"	4 3/4"	7/8"	AVP-6			
8	24"	5 7/8"	7/8"	AVP-8			
10	25"	7 1/8"	1"	AVP-10			
12	30"	8 1/2"	1"	AVP-12			
14	35"	9 3/8"	1 1/8"	AVP-14			
16	40"	10 5/8"	1 1/8"	AVP-16			
18	45"	11 3/8"	1 1/4"	AVP-18			

DO NOT SCALE DRAWING

555 Paddock Parkway, Rock Hill, SC 29730-1876
Phone: (803)949-2729 Fax: (803)324-1116
info@paddockpool.com

ALABAMA
PROFESSIONAL ENGINEER
No. 35177
05/20/2024

DO NOT SCALE DRAWING

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Phone: (803)949-2729 Fax: (803)324-1116
info@paddockpool.com

PADDOCK
POOL EQUIPMENT COMPANY

DISPOSITION BY DATE

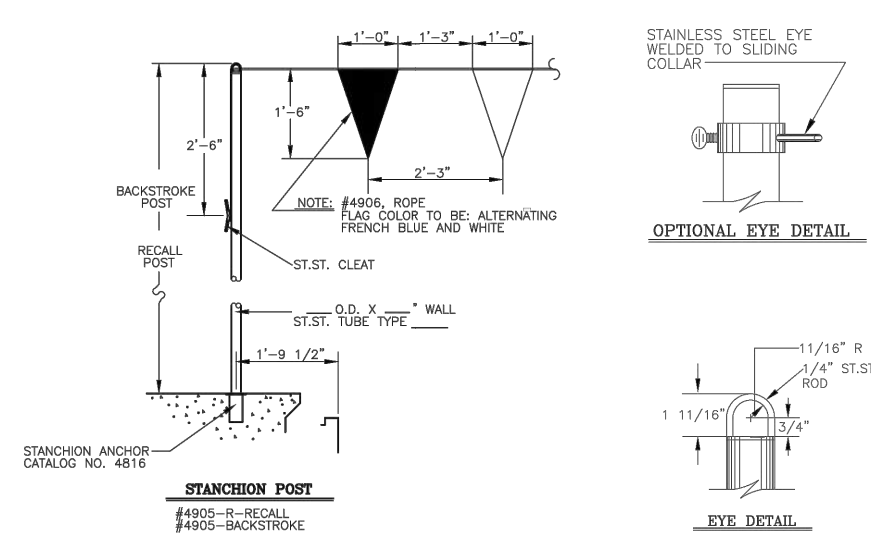
DISPOSITION	BY	DATE
APPROVED AS SUBMITTED		
APPROVED AS CORRECTED		
NOT APPROVED-RESUBMIT		

REVISIONS

NO.	DATE	BY	DESCRIPTION	WT
1	05/14/24	JPT	ADDED FROM CDS	194
2	05/14/24	JPT	ADDED FROM CDS	194



Stanchion Post



Paddock's Backstroke Posts and Recall Posts are fabricated from Type 304 or 316L stainless steel tubing with outside diameter of 1.90" and standard wall thickness .083", 1.120" and 1.45" are also available.

Each post is provided with an eyebolt at the top and a cleat for securing rope. Posts are held by anchor sockets located in pool bottom and pool deck so they can be removed if necessary.

Standard height of backstroke post is 7 feet. Also available in other heights.

Standard height of recall post is 5 feet. Also available in other heights.

Sliding collar is optional.

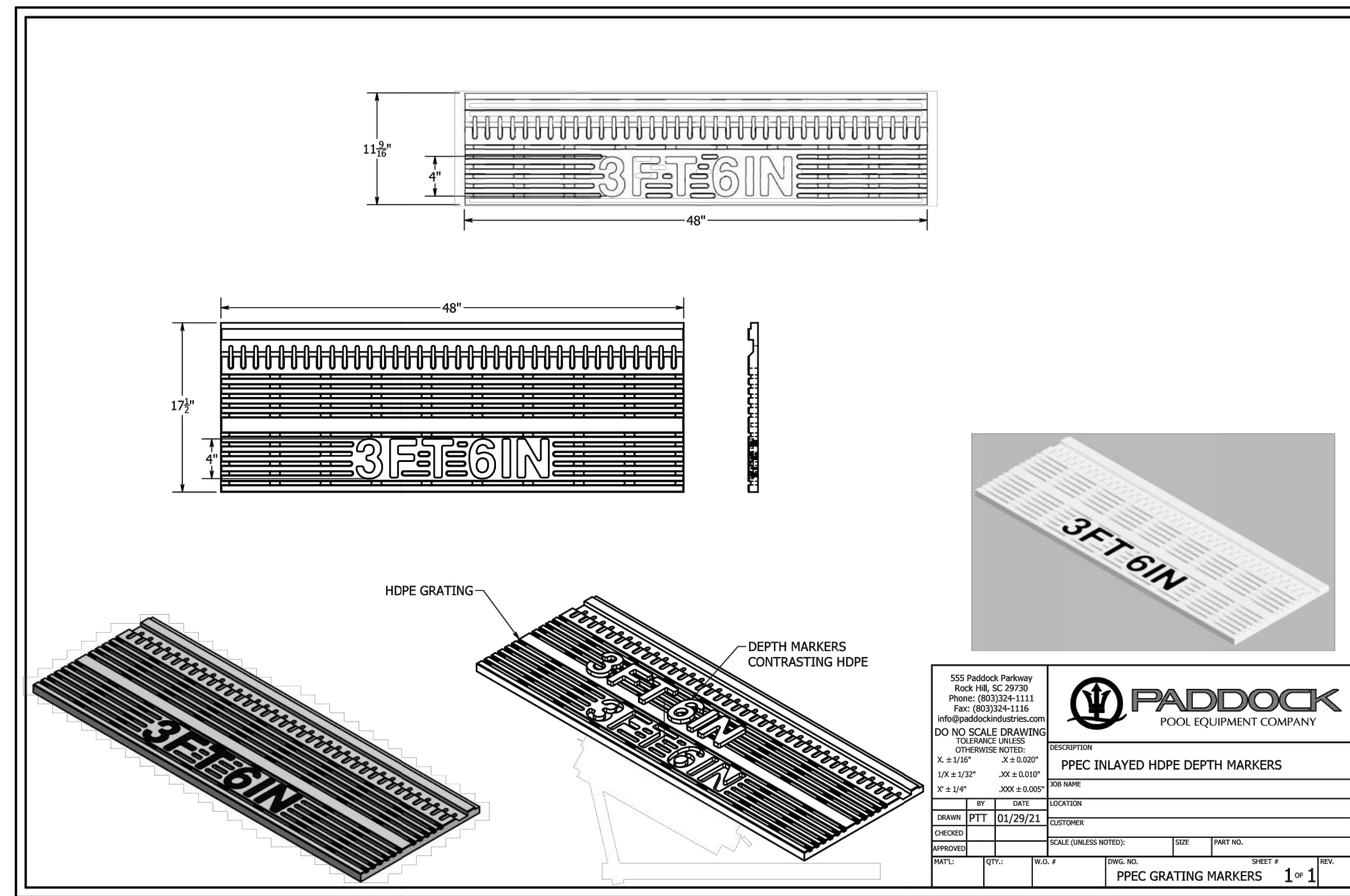
P/N _____ Model 4905 _____ Backstroke Post Height Required _____ FT _____ " OD x _____ " Wall Type _____ City _____

P/N _____ Model 4905R _____ Recall Post Height Required _____ FT _____ " OD x _____ " Wall Type _____ City _____

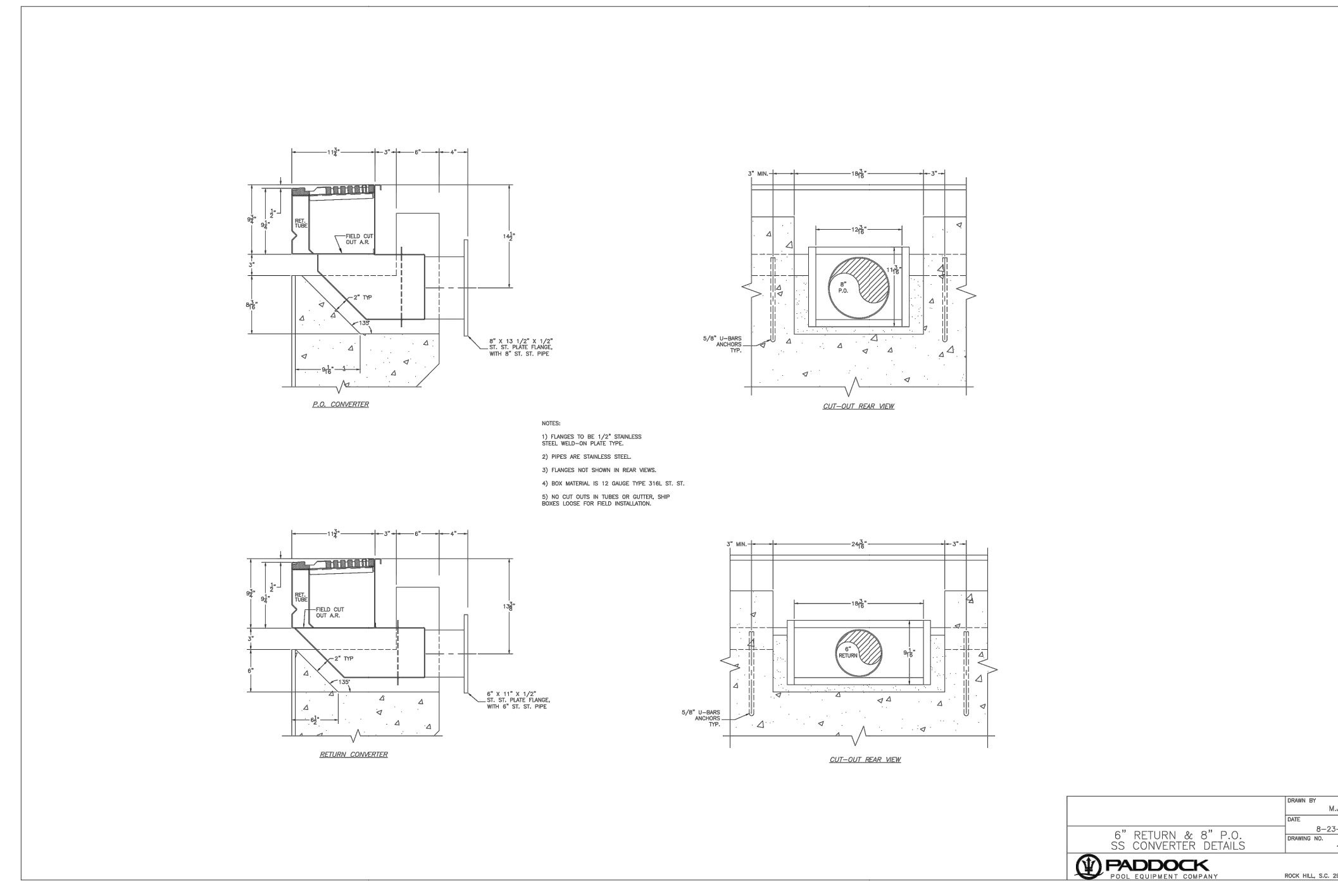
P/N 9500043, Model 4905SC, Sliding Collar with Eyebolt Qty _____

P/N _____ Model 4906, Backstroke Pennant Line, 48 Nylon Pennants per 100' Line Qty _____

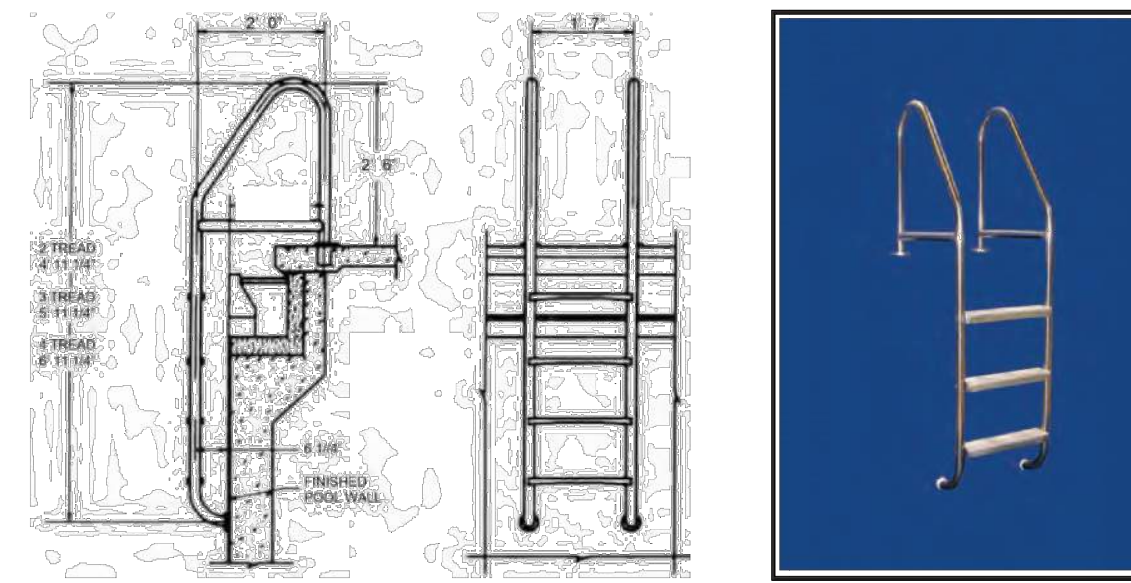
555 Paddock Parkway, Rock Hill, SC 29730 T: 800-849-2729 F: 803-324-1116 www.paddockindustries.com



Paddock Pool Equipment Company logo and product information for PPEC Inlayed HDPE Depth Markers.



Ladder



Paddock's Ladders are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083". (Outside diameter of 1.5" or wall thickness of 1.20" is also available.)

Ladder rails are spaced 19" apart with a cross brace for added stability and furnished with slip-resistant stainless steel treads.

Exposed surfaces shall be polished to a Paddock buff finish.

A rubber bumper on each rail protects the interior pool finish.

Paddock deck anchors with Paddock escutcheon plates are available.

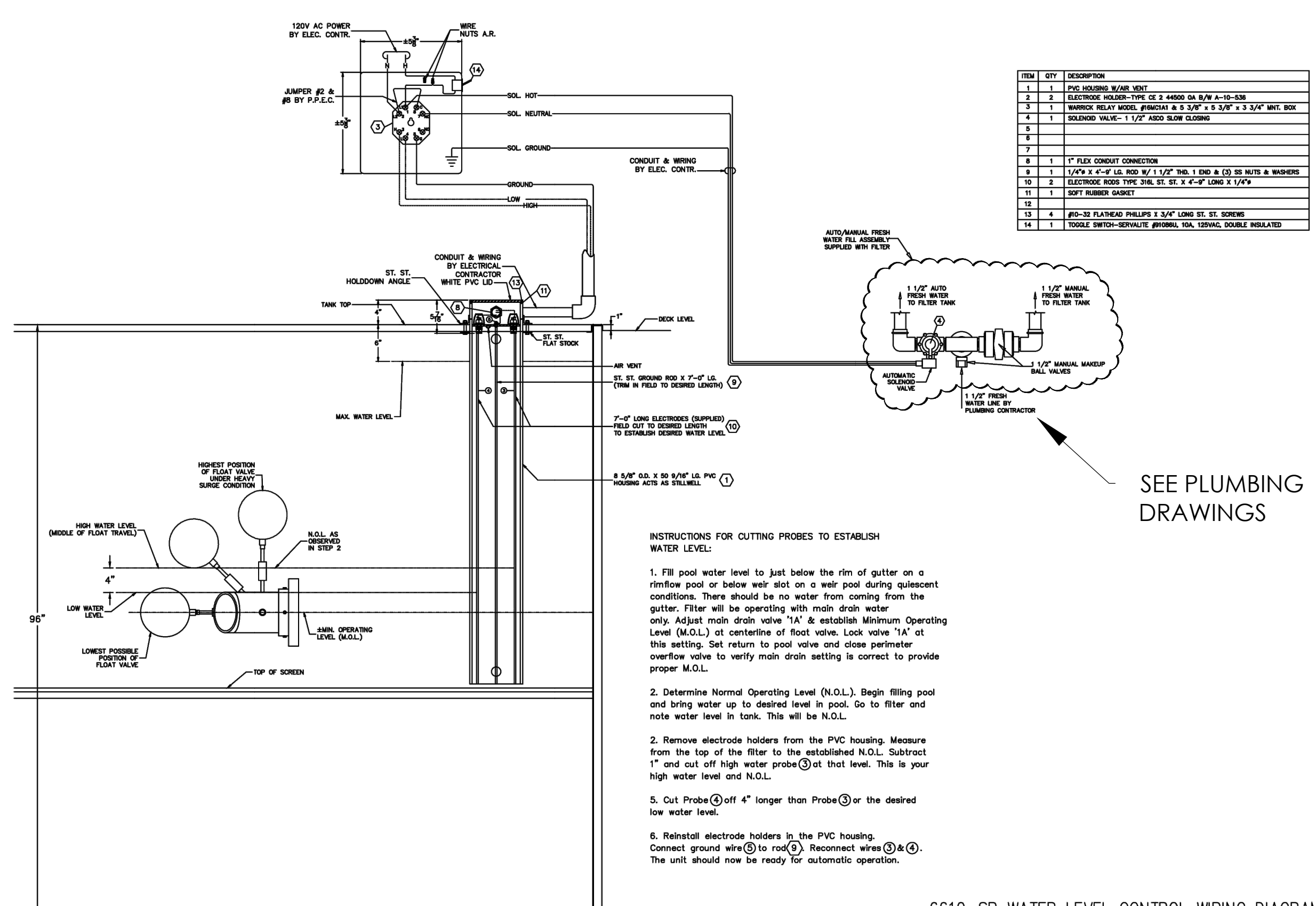
P/N _____ Model 4539 _____ 2-Tread Ladder Type _____ " OD x _____ " Wall Less Anchors, Qty _____

P/N _____ Model 4540 _____ 3-Tread Ladder Type _____ " OD x _____ " Wall Less Anchors, Qty _____

P/N _____ Model 4541 _____ 4-Tread Ladder Type _____ " OD x _____ " Wall Less Anchors, Qty _____

P/N _____ Model 4542 _____ 5-Tread Ladder Type _____ " OD x _____ " Wall Less Anchors, Qty _____

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6610-SP WATER LEVEL CONTROL WIRING DIAGRAM & INSTRUCTIONS.

UltraVac Vacuum Cart

System Operation

The UltraVac can operate in two different modes:

1. Filtration Mode: By recirculating the water through the 100 sq. ft. cartridge you can remove debris being vacuumed out of the pool without losing water.

2. Waste Mode: For removal of large amounts of debris or to avoid clogging the cartridge you can rotate the valve handle to bypass the filter and discharge the water directly to waste and not return to the pool.

Cart Construction

Welded from strong structural steel tubing and powder coated for protection the mobile portion of this revolutionary cleaning solution is capable of lasting many years even in the most demanding environments.

Maintenance

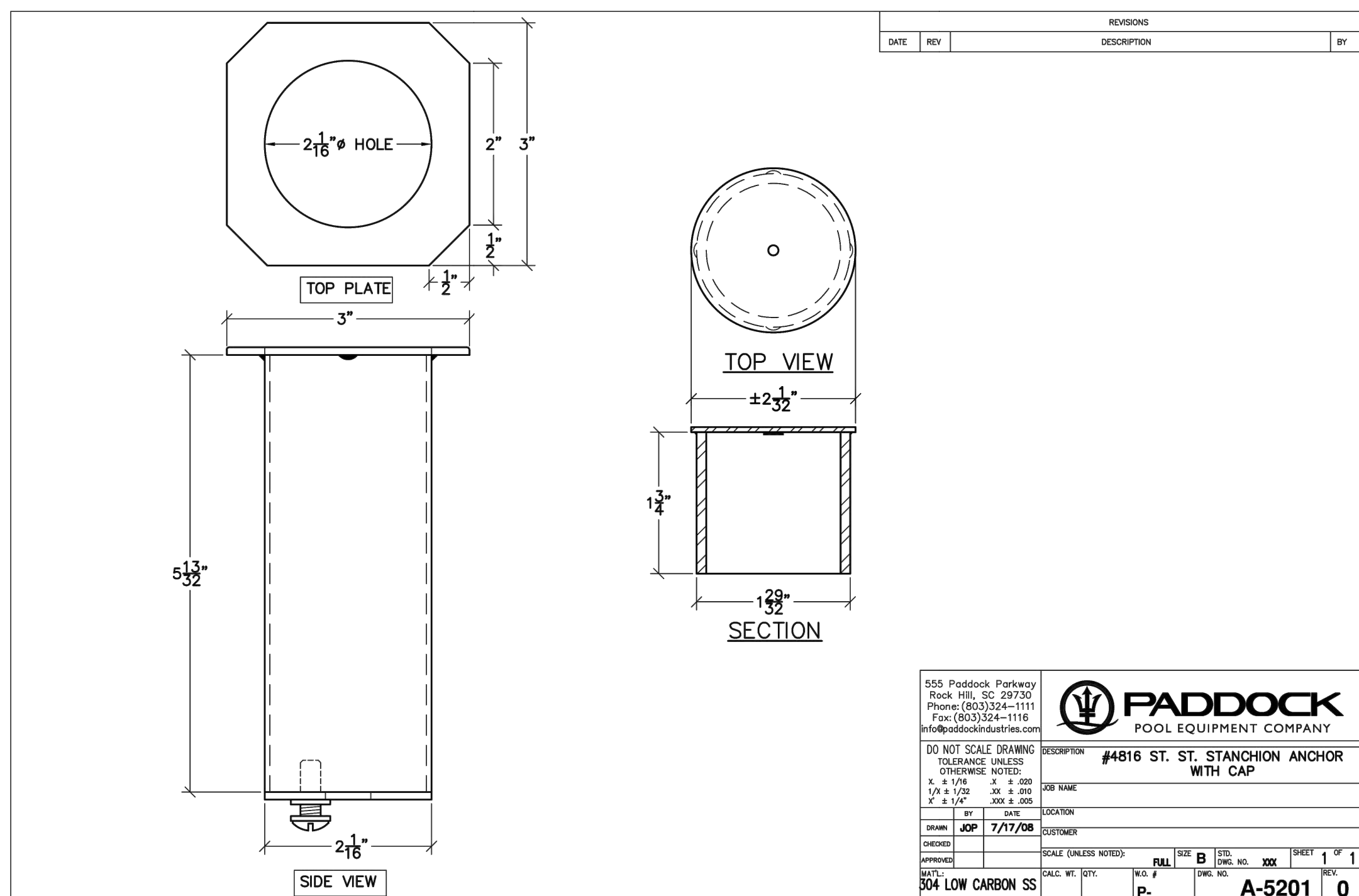
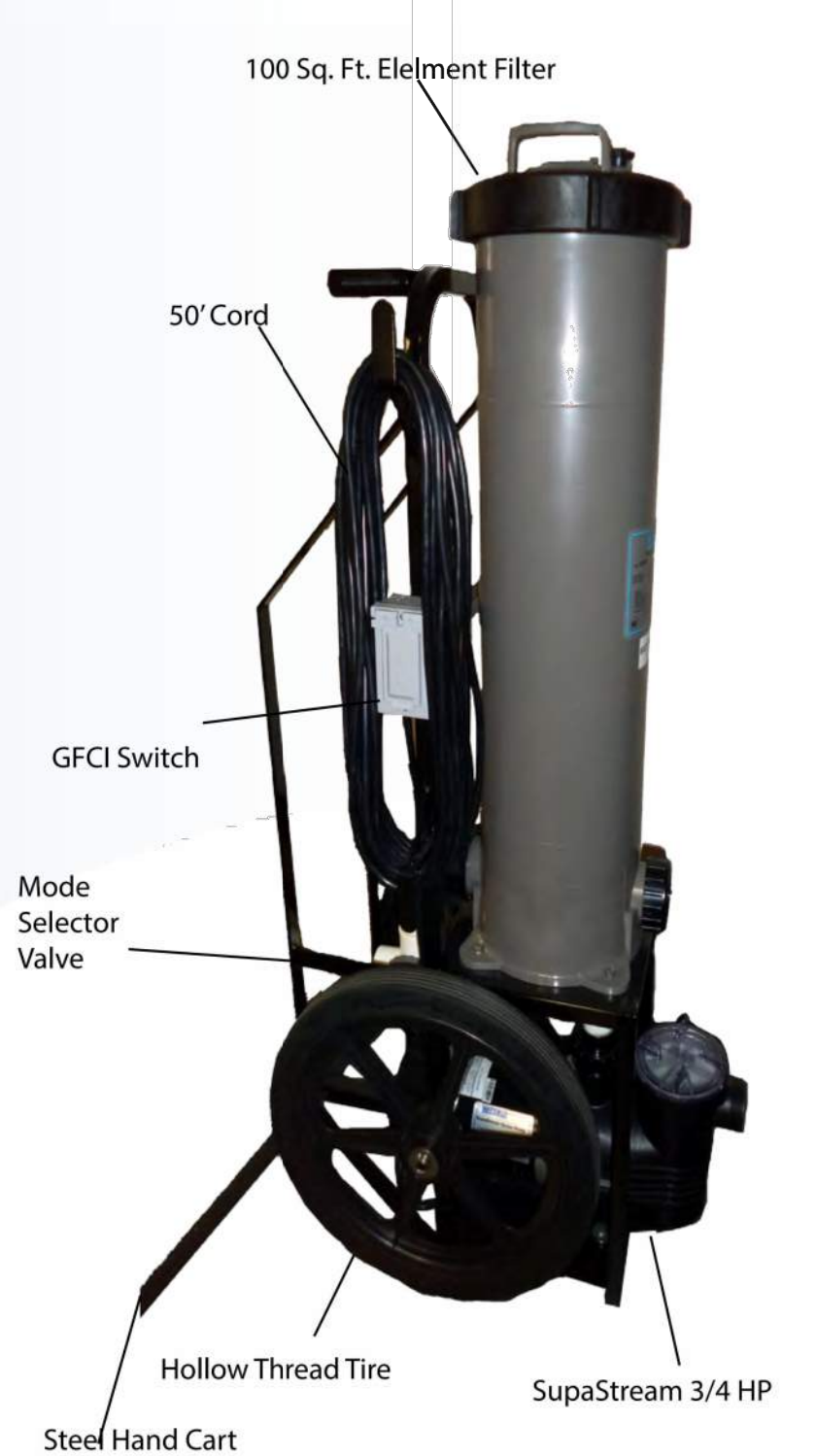
The 100 Square Foot Element in the filter housing is made from high strength polyester backed up with a sturdy plastic core for years of use. A simple locking arrangement on the filter lid is used to make cleaning the element quick and easy.

Warranty

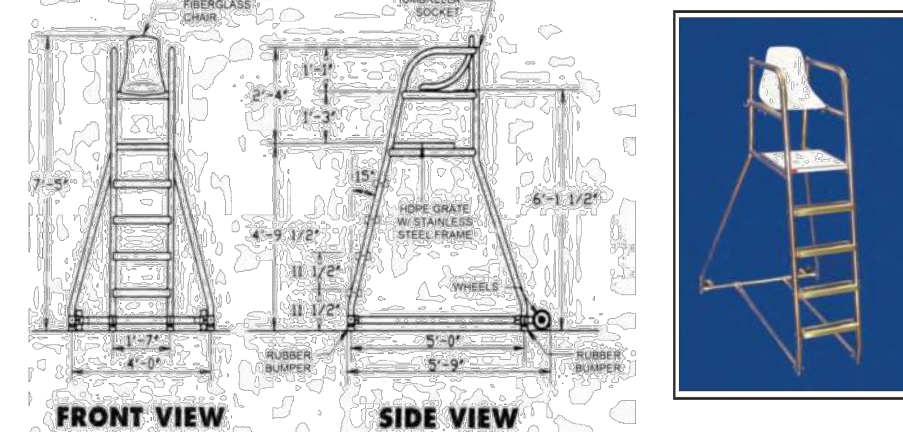
Waterco warrants the UltraVac cart and all of its components for a period of 1 year under normal operating conditions.

Information table with columns for Part Number, Filter Area (sq feet), Pump HP, and Pipe Size.

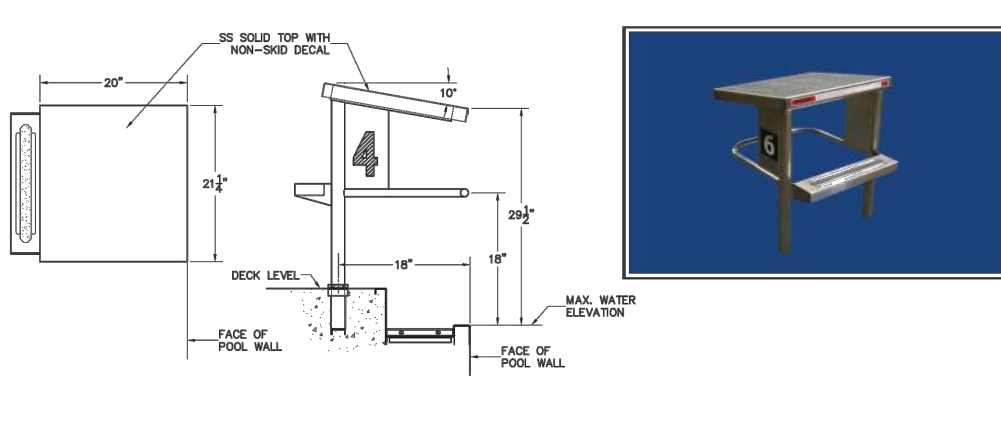
Waterco logo and distributor information for various regions including Canada, USA, Europe, and Australia.



Movable Lifeguard Chair



EZ Set II Starting Platform



Paddock's EZ Set II Starting Platform is quickly and easily removable.

Platform shall be rear mounted and have a 20" wide x 21 1/4" long top.

Flush with the front edge of the platform is a backstroke starting bar.

A mounting track shall be positioned off the rear legs. Tread shall have a deeply formed integral slip resistant surface firmly attached to the legs by welded stainless steel gussets.

At each side of the platform, attached to the legs, shall be a stainless steel plate on which the lane number is displayed with a 4" standard numeral.

Top of starting platform shall be with a non-slip solid surface.

Colors, custom logos and vertical backstroke grips are available as options.

4909-A anchors with 19" spacing are sold separately.

4909-S EZ Set II Starting Platform St. Sk. Type _____ Qty _____

Also available in Long Reach with 24" Setback St. Sk. Type _____ Qty _____

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555 Paddock Parkway, Rock Hill, SC 29730 T: 800-849-2729 F: 803-324-1116 www.paddockindustries.com

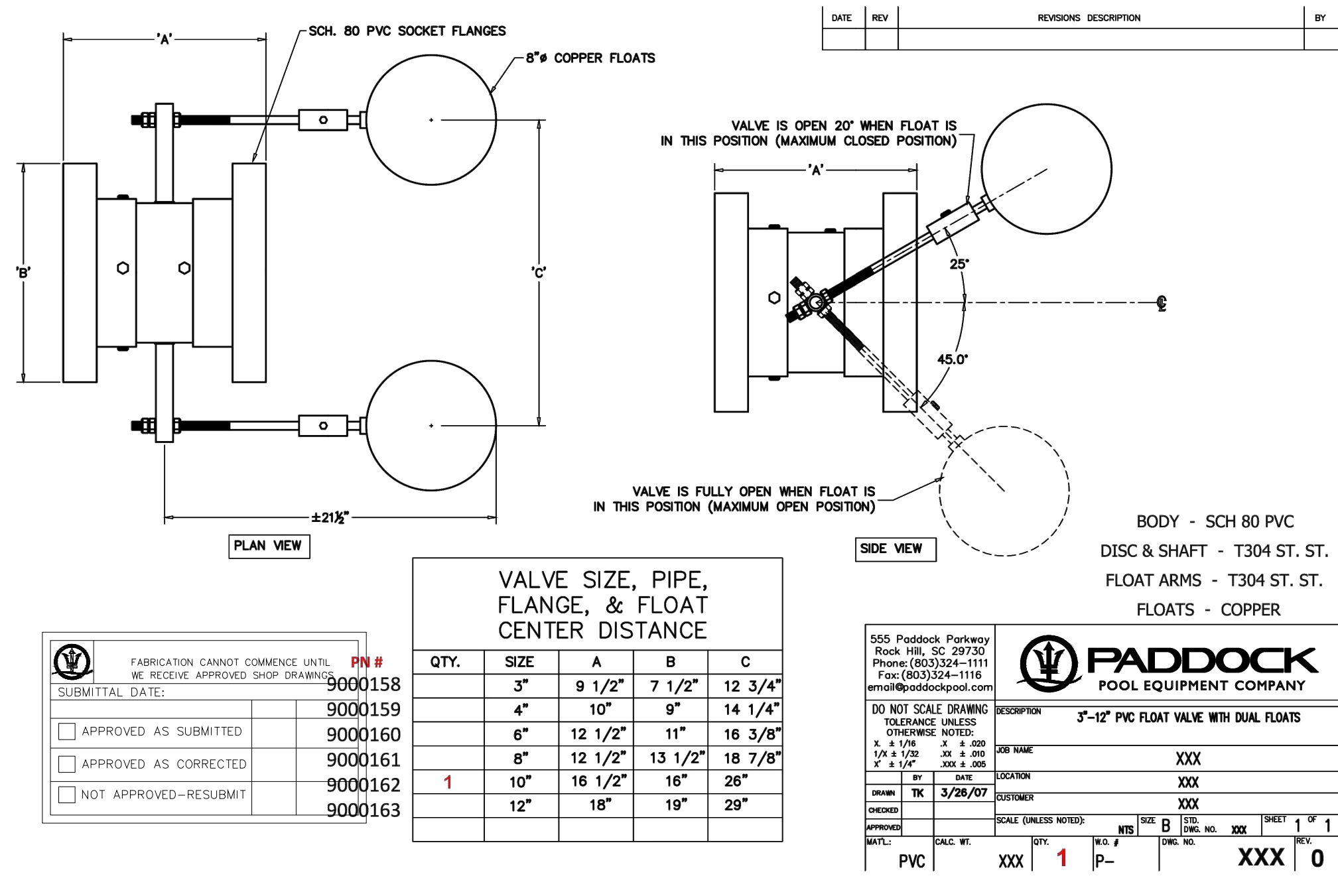


Table for Valve Size, Pipe, Flange, & Float Center Distance with columns for QTY, SIZE, A, B, C.

Paddock Pool Equipment Company logo and product information for the valve assembly.

RAINBOW CITY RECREATION CENTER RAINBOW CITY, ALABAMA

POOL DETAILS

SP2.04

GMC # ABHM230021

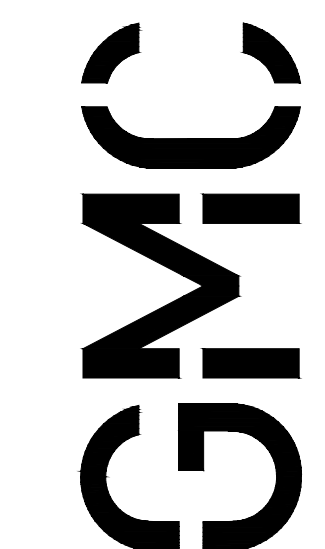
Table with columns for ISSUE DATE, 100% CDs, IFB SET, and DRAWN BY.



DRAWN BY: TCD

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Schoel logo and project information for PROJECT NO. 24162.00.



Goodwyn Mills Cowood, LLC 2400 5th Avenue South, Suite 300 Birmingham, AL 35233 T: 205.879.4462 G M C NETWORK . C O M