

CODE REQUIREMENTS

CODE REQUIREMENTS

- ALL CONSTRUCTION RELATED TO THE POOL AND SURROUNDING POOL AREA SHALL BE IN FULL ACCORDANCE WITH THE LAC TITLE 51 XXIV CODE, AND ALL OTHER APPLICABLE CODES, AND STANDARDS.
- THIS POOL IS AN EXISTING OUTDOOR POOL WHICH IS BEING REFURBISHED.

NOTE: GOING FORWARD WITHIN THIS DOCUMENT: ALL SUBSECTIONS REFERENCED FROM THE LAC TITLE XXIV CODE SHALL EXCLUDE "LAC TITLE 51 XXIV CODE" AND LIST ONLY THE SPECIFIC SUBSECTION BEING REFERENCED. IT IS UNDERSTOOD THAT ALL SUBSECTIONS BEING REFERENCED WITHIN THIS DOCUMENT ARE UNDER LAC TITLE 51 XXIV CODE.

DESIGN REQUIREMENTS

- PER 301.B - ALL INTERIOR SURFACES OF THE POOL SHALL RECEIVE A LIGHT COLORED PLASTER ON ALL SURFACES NOT TILED. PLASTER TO BE WHITE.
- PER 305.A - ALL POOL WALLS SHALL BE VERTICAL AND PLUMB.
- PER 311.A - THE MINIMUM WATER DEPTH IS 3'-8".
- PER 311.C - THIS POOL IS DESIGNED NOT TO EXCEED THE 4'-6" WATER DEPTH, THEREFORE NOT REQUIRING A 4" MINIMUM CONTRASTING BAND. DEEPEST WATER DEPTH ON THIS POOL IS 4'-6".
- PER 311.E - DUE TO THE ESTABLISHED WATER DEPTHS, THERE WILL BE NO DIVING ALLOWED IN THIS POOL. ALL WATER DEPTH TILE MARKER LOCATIONS SHALL ALSO INCLUDE A 6"x6" INTERNATIONAL NO DIVING SYMBOL. DEPTH MARKER SPACING IS NOT TO EXCEED 25'-0" ON CENTERS IN FULL COMPLIANCE WITH CODE.
- PER 315.A - THE POOL TURNOVER RATE SHALL BE SIZED AT 3.1 HOURS.
- PER 323.B - POOL DECK SHALL BE CONSTRUCTED OF 4" CONCRETE SLAB ON GRADE WITH NON-SLIP RESISTANT CONTENTIOUS FINISH.
- PER 323.F.3 - THE MINIMUM CONTINUOUS UNOBSTRUCTED DECK WIDTH SHALL BE 4 FEET.
- PER 323.G - THE POOL DECK SHALL BE 1/2" PER 1 FOOT. (SEE PLAN SHEET PL-1.0 FOR SLOPE DIRECTION). NOTE THAT WATER SHALL SHED OFF OF THE POOL DECK, AND INTO EXISTING LANDSCAPED PLANS WHICH EXHIBIT DRAINAGE TO CATCH STORM WATER.
- PER 323.J - CONTROL JOINTS AROUND THE COPING AND THROUGHOUT THE DECK SHALL BE CONSTRUCTED TO A MINIMUM WIDTH OF 1/2".
- PER 323.O - POOL DECK SHALL BE SLOPED AS INDICATED ON SHEET PL-1.0.
- PER 323.P - SITE DRAINAGE SHALL BE INSTALLED TO EFFECTIVELY SHED WATER FROM POOL DECK AND POOL, AND PREVENT FLOODING OR EROSION OF LANDSCAPING ONTO POOL DECK OR POOL.
- PER 323.Q - ALL POOL CIRCULATION SYSTEM PIPING SHALL BE TESTED WITH AN INDUCED STATIC HYDRAULIC PRESSURE TEST AT 25 PSI FOR 30 MINUTES, AND SHALL BE PERFORMED BEFORE ANY OF THE PIPING IS COVERED UP. PIPING WILL REMAIN UNDER PRESSURE THROUGHOUT THE ENTIRE DURATION OF THE CONSTRUCTION PROCESS AS MUCH AS FEASIBLY POSSIBLE.
- PER 323.S - A HOSE BIB AND VACUUM BREAKER SHALL BE PROVIDED FOR WASHING DOWN THE ENTIRE POOL DECK AREA.
- PER 325 - TWO MEANS OF EXIT/EGRESS IS PROVIDED ON THIS POOL BY MEANS OF STAIRS EACH WITH A HANDRAIL.
- PER 327 - ALL STAIR TREADS ARE 16", ALL RISERS ARE UNIFORMLY 12", WITH THE BOTTOM RISER VARYING NO MORE THAN PLUS OR MINUS 2", TWO HANDRAILS SHALL BE PROVIDED (ONE HANDRAIL FOR EACH EXIT ENTRY), AND SHALL BE NO MORE THAN 18 INCHES HORIZONTAL DISTANCE FROM THE FACE OF BOTTOM RISER. THE OUTSIDE DIAMETER OF THE HANDRAIL IS 1.90" O.D..

CIRCULATION SYSTEMS

- PER 501 - ALL POOL EQUIPMENT IS SIZED TO MEET 3.1 TURN OVER RATE, MEETING THE MINIMUM HOUR REQUIREMENT, AND ALL POOL EQUIPMENT SHALL MEET NSF 50 PER LAC TITLE 51 CODE.
- PER 503.A - WATER VELOCITY FOR RETURN PIPING SHALL NOT EXCEED 8FPS, AND VELOCITY FOR THE SUCTION PIPING SHALL NOT EXCEED 6 FPS. (SEE ATTACHED VELOCITY CHART AS SHOWN ON PLAN SHEET PL-1.1)
- PER 503.C.1 - THIS POOL SHALL BE PROVIDED WITH A FLOW METER SHOWING FLOW RATE THROUGH THE FILTER SYSTEM IN GALLONS PER MINUTE.
- PER 505 - PROPERLY SIZED SAND FILTER SHALL BE PROVIDED WITH A SIGHT GLASS TO DETERMINE WATER CLARITY.
- PER 507 - A RECIRCULATION PUMP SHALL BE PROVIDED WHICH MEETS OR EXCEEDS THE MAXIMUM FLOW RATE FOR THE POOL RECIRCULATION SYSTEM.
- PER 509 - THIS POOL SHALL HAVE A TOTAL OF 5 RETURN INLETS (2 DIRECTIONAL EYEBALL INLETS, AND 2 ADJUSTABLE FLOOR RETURN INLET ON THE TOP LANDINGS OF THE STEPS AS SHOWN PER PLAN PL-1.0 AND PL-1.1. TWO MAIN DRAINS ARE TO BE LOCATED AS SHOWN ON PLANS, AND EACH TO ACCOMMODATE THE MAXIMUM FLOW RATE FOR THIS POOL. ALL RETURN INLETS PROVIDED MEET THE MINIMUM OF TWO INLETS PER 600 SQUARE FEET OF WATER SURFACE AREA.
- PER 511 - ALL WALL RETURN INLETS AND FLOOR RETURN INLET SHALL BE ADJUSTABLE. THE WALL RETURN INLETS ARE ALL LOCATED BETWEEN 10 INCHES AND 15 INCHES BELOW POOL OPERATING LEVEL.
- PER 513 - ALL SUCTION OUTLETS SHALL HAVE ANTI-VORTEX COVERS (THIS INCLUDES THE MAIN DRAINS, AND ALL SUCTION COVERS FOR THE EQUALIZER LINES ON EACH SKIMMER. EACH 8" MAIN DRAIN IS SPACED AT 6'-0" FROM CENTER TO CENTER.

GENERAL STANDARDS

- PER 701 - ALL DEPTH MARKER REQUIREMENTS FOR THIS CODE SECTION ARE IDENTIFIED ON PLAN SHEET PL-1.2, DETAIL 03 & 04, AND ALL REFERENCED ON PLANS PL-1.0 AND PL-1.1.
- PER 703 - THIS CLASS C POOL SHALL BE PROVIDED WITH A 12FT. LONG STRONG POLE WITH SHEPARD'S HOOK (LIFESAVING HOOK), 60 FT. THROWING ROPE AND RING BUOY, AND TELEPHONE WITH POSTED EMERGENCY NAMES AND NUMBERS.
- PER 707.A - ALL FRESH WATER SUPPLY LINES, AND BACKWASH LINES SHALL BE SEPARATED BY A 6" MINIMUM AIR GAP, PREVENTING A PHYSICAL CONNECTION OF THE THE FRESH WATER SUPPLY LINE, OR THE BACKWASH LINE TO THE POOL WATER BODY.
- PER 711 - BACKWASH WATER SHALL BE DISCHARGED INTO AN EXISTING SANITARY SEWER LINE THROUGH A 6" MINIMUM AIR GAP.
- PER 713.A - POOL CONTRACTOR TO COMPLY WITH THE REQUIREMENTS OF THE LATEST NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION AGENCY SHALL BE COMPLIED WITH.
- PER 715.A - THIS POOL WILL NOT BE OPEN FOR USE DURING NON-DAYLIGHT HOURS.

35. PER 717 - THE EXISTING POOL EQUIPMENT IS VENTILATED AS REQUIRED PER LAC TITLE 51..

36. PER 733.A - EXISTING POLE HOOKS, ROPES, BUOYS, FIRST AID KIT, AND OTHER LIFESAVING EQUIPMENT ARE TO BE PROVIDED BY THE OWNER IN COMPLIANCE WITH CODE.

DISINFECTION & BACTERIOLOGICAL QUALITY

- PER 901.A - ALL DISINFECTANT EQUIPMENT SHALL COMPLY WITH NSF STANDARD 50.
- PER 901.A.2 - THE CHLORINATOR PROVIDING DISINFECTANT TO THE POOL WATER IS TO BE ADJUSTED PENDING FIELD TESTING MEASURES THAT ARE SIMPLE AND ACCURATE.
- PER 901.C - THE POOL SHALL BE SUPPLIED WITH A CHEMICAL TEST KIT WHICH TESTS ALLOWS FOR TESTING OF ALL LEVELS MENTIONED IN NOTE 66 WITHIN THIS DOCUMENT VIA THE DPD METHOD OF DETECTING CHLORINE RESIDUAL. (TAYLOR TEST KIT K-2006 OR BETTER WILL BE PROVIDED).
- THE TESTING RESULTS FOR RESIDUALS SHALL MEET THE FOLLOWING.....
 - TESTING FOR DETERMINATION OF pH, CHLORINE (TOTAL AND FREE), TOTAL ALKALINITY, AND CALCIUM HARDNESS.
 - DISINFECTANT LEVELS AND pH SHALL BE MEASURED TWICE PER DAY, AND HOURLY WHEN POOL IS IN HEAVY USE.
 - TOTAL ALKALINITY TO BE MEASURED WEEKLY
 - CALCIUM HARDNESS TO BE MEASURED MONTHLY.

LEVEL REQUIREMENTS ARE....

CHLORINE	1.0 ppm MINIMUM
FAC	3.0 ppm MAXIMUM 10 MG/L MAXIMUM
TOTAL ALKALINITY	60 - 180 ppm (MG/l)
CALCIUM HARDNESS	1000 ppm (MG/L) MAXIMUM

GENERAL CONSTRUCTION NOTES

- REFERENCE HARDSCAPE & DRAINAGE PLANS FOR FINISHED GRADES, AND DRAINAGE.
- FOR ALL FINISHES ON THE POOL AND POOL DECK, REFERENCE THE HARDSCAPE PLANS.
- ALL POOL DECK DEPTH MARKERS (BOTH DECK MOUNTED AND WALL MOUNTED) ARE IDENTIFIED IN THE POOL PLAN VIEWS AND SECTIONS, AND SPECIFICALLY ON SHEET PL-1.2, DETAIL 03 & 04.
- ALL 2"x2" DARK CONTRASTING EDGE TILE WITHIN THE POOL IS IDENTIFIED THROUGHOUT ALL POOL PLAN VIEWS AND SECTION VIEWS. COLORS ARE IDENTIFIED IN THE HARDSCAPE PLANS.
- DIMENSIONAL LAYOUT PLAN FOR POOL ON SHEET PL-1.0 IDENTIFIES THE LOCATIONS OF ALL SKIMMERS, INLETS, DRAINS, DEPTH CHANGES, DEPTH MARKERS, HAND RAIL, LADDER, AND ADA LIFT MOUNTING LOCATION.
- ALL SKIMMERS ARE TO HAVE EQUALIZER LINES WITH SUCTION COVERS.
- POOL EQUIPMENT ROOM IS EXISTING, AND SHALL REMAIN DIRECTLY EXHAUSTED TO THE OUTSIDE ATMOSPHERE.
- THE POOL BEING RENOVATED IS OUTDOORS.

POOL CALCULATIONS

POOL VOLUME CALCULATIONS

136 sq. ft x 17 ln. ft. = 2312 cu ft.
2,312 x 7.48 gallons = 17,294 gallons

TOTAL SYSTEM DESIGN FLOW RATE = 116 GPM
POOL FLOW RATE = 116 X 0.80 = 92.8 GPM
WATER FEATURE FLOW (DECK JETS) = 116 X .02 = 23.2 GPM

20% of 116 GPM = 23.2 GPM

22 gpm x 23.2 gpm (deck jets consumption is less than 20% of the total return rate of filtered water)

POOL COPING (OUTER PERIMETER) = 133 LN. FT.

POOL COPING (INNER PERIMETER) = 125 LN. FT.

WATER SURFACE AREA = 698 SQ. FT.

DESIGNED AT 116 GPM WITH 75 FT. OF HEAD

27 BATHERS MAX LOAD CAPACITY

TR160 C FILTER

3 HP WHISPERFLO XF PUMP

HEAD LOSS CALCULATIONS

RETURN HEADLOSS

QTY	UNIT	LISTING DESCRIPTION
2.0	FT	2' FLOW METER
4.06	FT	ADJUSTABLE FLOOR INLET (2 EACH)
4.02	FT	3/4" DIRECTIONAL EYEBALL FITTING (6 EACH)
8.0	FT.	TR140 SAND FILTER
7.0	FT.	2" HI-FLO VALVE
.34	FT.	1.5" PIPE (476 LN. FT.)
1.37	FT.	1.5" TEE FITTING (13 EACH)
5.15	FT.	1.5" 90 DEGREE ELBOW FITTING (24 EACH)
6.66	FT.	2.0" PIPE (90 LN. FT.)
2.06	FT.	2" 90 DEGREE ELBOW FITTING (9 EACH)
3.63	FT.	2.5" BALL VALVE (2 EACH)
5.00	FT.	3" BALL VALVE (2 EACH)
.50	FT.	3" BALL CHECK VALVE (1 EACH)
6	FT	4 DECK JETS (EACH AT 1.5 FT. OF ELEVATION CHANGE)
54.52	FT.	TOTAL

SUCTION HEADLOSS

QTY	UNIT	LISTING DESCRIPTION
3.00	FT.	2.0" BALL VALVE (2 EACH)
7.0	FT.	SKIMMER (2 EACH)
4.0	FT.	MAIN DRAIN INLETS (2 EACH)
1.86	FT.	3" PIPE (134 LN. FT.)
.05	FT.	3" TEE FITTING (2 EACH)
.29	FT.	3" 90 DEGREE ELBOW FITTING (6 EACH)
.07	FT.	2" PIPE (238 LN. FT.)
.20	FT.	2" TEE FITTING (1 EACH)
1.22	FT.	2" 90 DEGREE ELBOW FITTING (15 EACH)
17.69	FT.	TOTAL

GRAND TOTAL HEAD LOSS = 72.11 FT

SYSTEM HEAD LOSS TO BE 75 FT FOR DESIGN.

PIPE SCHEDULE WITH JETS

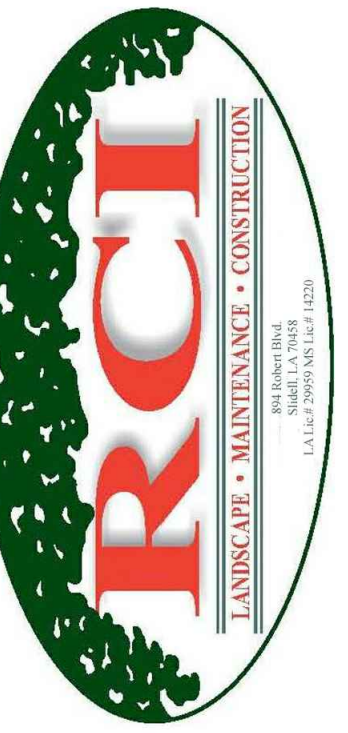
PIPE ID	DESCRIPTION	SIZE	TYPE	FLOW RATE	VELOCITY
A	MAIN DRAIN SUCTION	3.0 INCH	SCH 40 PVC	116.00 GPM	5.26 FPS
B	SKIMMER SUCTION	2.5 INCH	SCH 40 PVC	58.00 GPM	3.79 FPS
C	W. F. RETURN (FEEDS 4 FEATURES)	1.5 INCH	SCH 40 PVC	23.20 GPM	4.21 FPS
D	W.F. RETURN (FEEDS 1 FEATURE)	1.0 INCH	SCH 40 PVC	05.80 GPM	2.37 FPS
E	W.F. RETURN (FEEDS 2 FEATURES)	1.0 INCH	SCH 40 PVC	11.60 GPM	4.74 FPS
F	SKIMMER SUCTION	2.0 INCH	SCH 40 PVC	67.00 GPM	6.80 FPS
G	INLET RETURN (FEEDS 6 INLETS)	2.5 INCH	SCH 40 PVC	92.80 GPM	6.07 FPS
H	INLET RETURN (FEEDS 4 INLETS)	2.0 INCH	SCH 40 PVC	61.87 GPM	6.32 FPS
I	INLET RETURN (FEEDS 3 INLETS)	2.0 INCH	SCH 40 PVC	46.40 GPM	4.74 FPS
K	INLET RETURN (FEEDS 1 INLET)	1.5 INCH	SCH 40 PVC	15.47 GPM	2.81 FPS
J	INLET RETURN (FEEDS 2 INLETS)	1.5 INCH	SCH 40 PVC	30.93 GPM	5.62 FPS
L	ELECTRICAL CONDUIT	1.0 INCH	SCH 40 HDPE	N/A	N/A
M	SUPPLY LINE	1.0 INCH	SCH 40 PVC	N/A	N/A
N	OVERFLOW	1.5 INCH	SCH 40 PVC	N/A	N/A

PIPE SCHEDULE WITHOUT JETS

PIPE ID	DESCRIPTION	SIZE	TYPE	FLOW RATE	VELOCITY
A	MAIN DRAIN SUCTION	3.0 INCH	SCH 40 PVC	116.00 GPM	5.26 FPS
B	SKIMMER SUCTION	2.5 INCH	SCH 40 PVC	58.00 GPM	3.79 FPS
F	SKIMMER SUCTION	2.0 INCH	SCH 40 PVC	67.00 GPM	6.80 FPS
G	INLET RETURN (FEEDS 6 INLETS)	2.5 INCH	SCH 40 PVC	116 GPM	7.58 FPS
H	INLET RETURN (FEEDS 4 INLETS)	2.0 INCH	SCH 40 PVC	77.33 GPM	7.90 FPS
I	INLET RETURN (FEEDS 3 INLETS)	2.0 INCH	SCH 40 PVC	58.00 GPM	5.92 FPS
J	INLET RETURN (FEEDS 1 INLET)	1.5 INCH	SCH 40 PVC	19.33 GPM	3.51 FPS
K	INLET RETURN (FEEDS 2 INLETS)	1.5 INCH	SCH 40 PVC	38.67 GPM	7.02 FPS
L	ELECTRICAL CONDUIT	1.0 INCH	SCH 40 HDPE	N/A	N/A
M	SUPPLY LINE	1.0 INCH	SCH 40 PVC	N/A	N/A
N	OVERFLOW	1.5 INCH	SCH 40 PVC	N/A	N/A

POOL DESIGN DATA

WATER VOLUME =	17,294 GALLONS
POOL TURNOVER RATE @92.8 GPM =	3.1 HOURS
TOTAL TURN OVER RATE @116 GPM =	2.48 HOURS
TOTAL DESIGN FLOW RATE =	116 GPM
WATER SURFACE AREA =	698 SQ. FT.
POOL PERIMETER =	125 LN. FT.
DESIGN HEAD LOSS =	75 FT.
MAXIMUM BATHER LOAD =	27 PERSONS



894 ROBERT BOULEVARD
SLIDELL, LOUISIANA 70458
PH: 985-643-2427
FAX 985-643-2691
RROTOLO@ROTOLOCONSULTANTS.COM

APARTMENT HOMES BY TONTI
PATIO VILLA POOL RENOVATION
 3340 NORTH ARNOULT ROAD, METAIRIE, LA

Copyright 2016 Rotolo Consultants Inc.
These drawings or parts thereof, may not be reproduced in any form, by any method, for any purpose, without prior written consent from Rotolo Consultants Inc.
Contact: Rod Rotolo 985-643-2427
Project No:

Revisions:

No:	Date:	Description:
REV 1	6/14/16	COMMENT LTR REVS.
REV 2	7/29/16	COMMENT LTR REVS.

Date: 3/30/2016

Drawn: TJH

Checked: MR

Sheet Title:

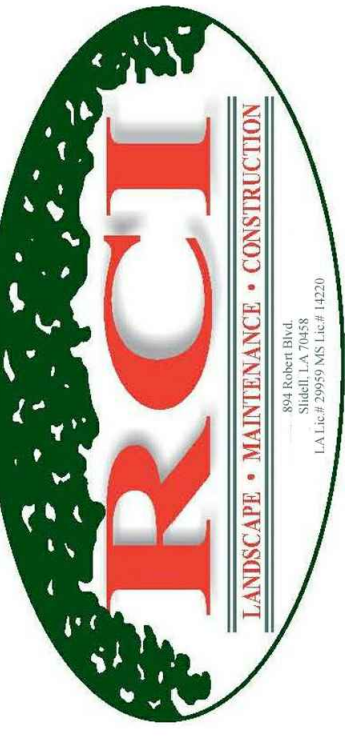
**SPECIFICATIONS,
NOTES, &
CALCULATIONS**

Drawing No.

G-1.0

Sheet No.

1 of 7



894 ROBERT BOULEVARD
SLIDELL, LOUISIANA 70458
PH: 985-643-2427
FAX: 985-643-2697
RROTOL@RROTOLCONSULTANTS.COM

**APARTMENT HOMES BY TONTI
PATIO VILLA POOL RENOVATION**
3340 NORTH ARNOULT ROAD, METAIRIE, LA

Copyright 2016 Rotolo Consultants Inc.
These drawings or parts thereof, may not be reproduced in any form, by any method, for any purpose, without prior written consent from Rotolo Consultants Inc.
Contact: Rod Rotolo 985-643-2427
Project No:

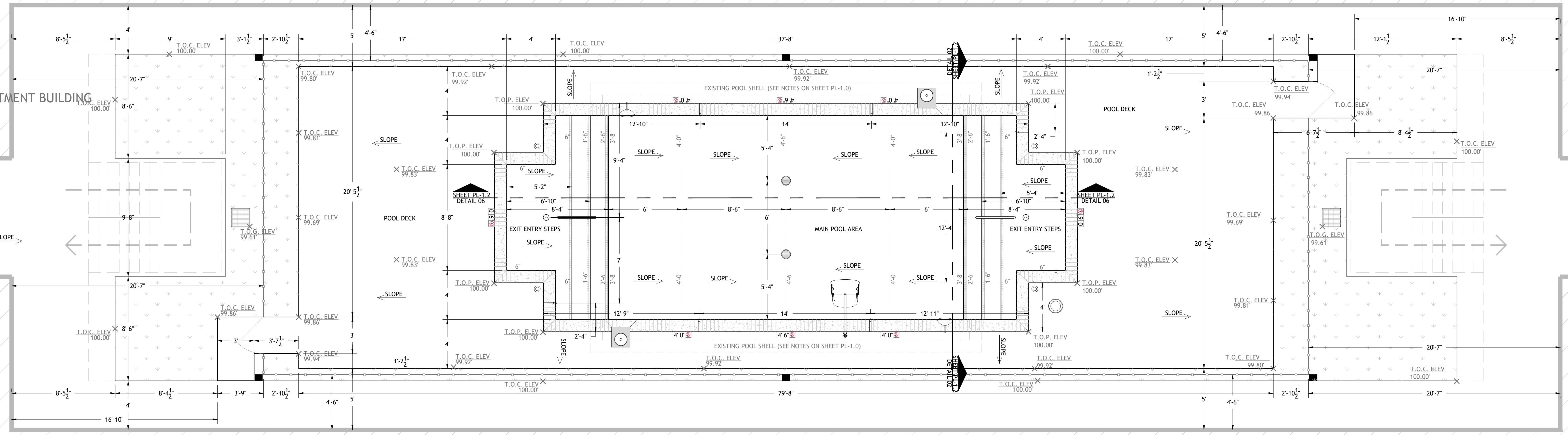
Revisions:		
No.	Date:	Description:
REV 1	6/14/16	COMMENT LTR REV.
REV 2	7/29/16	COMMENT LTR REV.

Date: 3/30/2016
Drawn: TJH
Checked: MR
Sheet Title:

POOL, & POOL DECK LAYOUT & GRADING PLAN

Drawing No.
PL-1.0
Sheet No.
3 of 7

EXISTING APARTMENT BUILDING



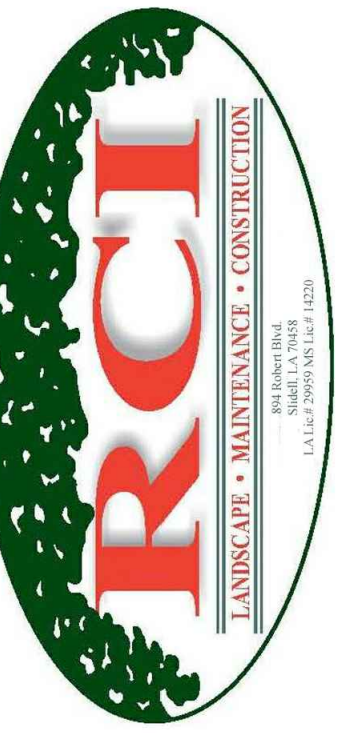
EXISTING APARTMENT BUILDING

01 POOL AND POOL DECK LAYOUT & GRADING PLAN
PL-1.0 SCALE: 1/4" = 1'-0"

- GENERAL NOTES**
1. ALL GRADES ON POOL DECK ARE TO BE 1/8" MINIMUM AND 1/4" MAXIMUM SLOPE.
 2. ALL GRADES WITHIN POOL ARE TO BE 1/8" MINIMUM, AND 1" MAXIMUM SLOPE.
 3. ALL POOL TREADS AND ENTRY AREAS ARE NOT TO EXCEED A 1/8" SLOPE MINIMUM.
 4. ARROWS ON PLAN INDICATE SLOPE DIRECTION.
 5. 100.00' ELEVATION IS ASSIGNED TO THE TOP OF COPING, AND THE TOP EDGE OF EXISTING SIDEWALK AS A REFERENCE WHEN ESTABLISHING GRADES.
 6. REFERENCE LANDSCAPING PLANS FOR ALL DRAINAGE PIPE ROUTING, AND COMPONENTS.
 7. NEW CONCRETE POOL DECK IS TO RECEIVE A SLIP RESISTANT WATERPROOF TOPPING.
 8. ALL POOL TILE, AND HARDSCAPE FINISHES, STYLES AND COLORS ARE IDENTIFIED IN THE LANDSCAPE PLANS.
 9. ALL CONSTRUCTION JOINTS WHERE THE POOL COPING MEETS THE CONCRETE DECK SHALL BE WATER TIGHT PER LAC.51:XXIV.323.J.

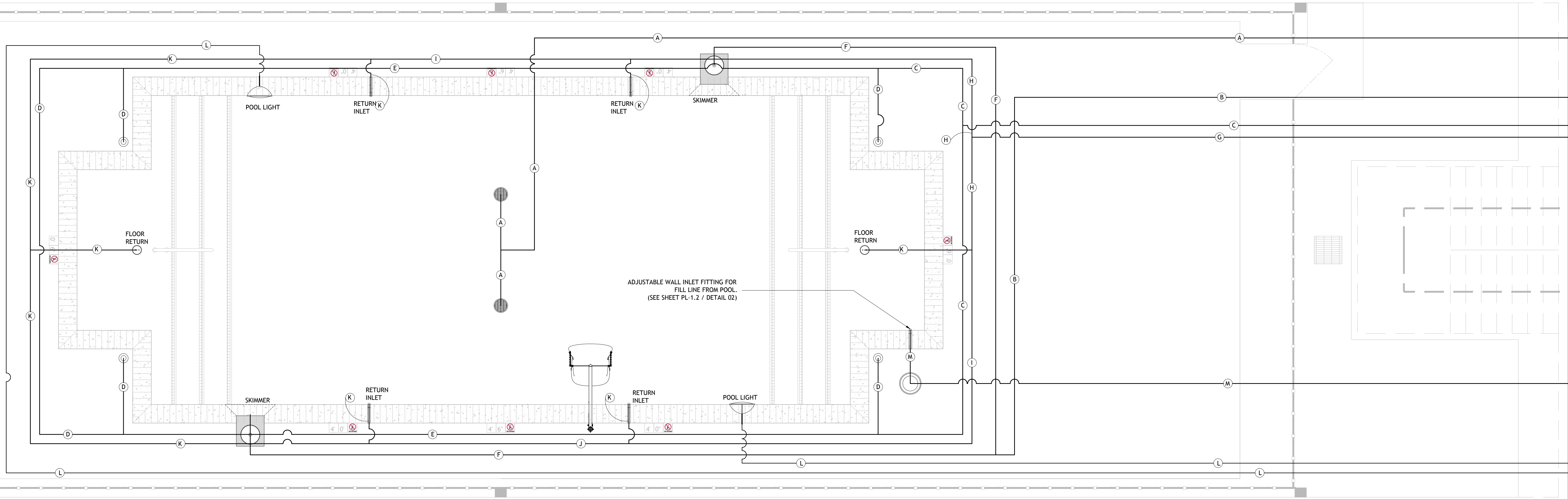
SYMBOL IDENTIFICATION LEGEND

	ADA POOL LIFT PER CODE
	SKIMMER (NSF CERTIFIED - VGB COMPLIANT)
	WALL INLET FITTING FOR SENSOR
	ADJUSTABLE EYEBALL WALL INLET
	MAIN DRAIN (VGB AND NSF COMPLIANT)
	DECK JET WATER FEATURE (4 TYPICAL)
	DEPTH MARKER TILES (SEE SHEET PL-1.2 / DET 3)
	1.90" O.D. S.S. HANDRAIL PER CODE
	ADJUSTABLE FLOOR INLET
	EXISTING DRAIN GRATE
	FINISHED ELEVATION LOCATION W/ ID MARKER
	T.O.C. TOP OF CONCRETE
	T.O.P. TOP OF POOL COPING
	NEW 6' POOL FENCE
	EXISTING DOWNSPOUT DRAIN LOCATIONS



894 ROBERT BOULEVARD
SLIDELL, LOUISIANA 70458
PH: 985-643-2427
FAX: 985-643-2691
RROTOLO@ROTOLOCONSULTANTS.COM

APARTMENT HOMES BY TONTI
PATIO VILLA POOL RENOVATION
3340 NORTH ARNOULT ROAD, METAIRIE, LA



01 PL-1.1 POOL PLUMBING LAYOUT PLAN
SCALE: 3/8" = 1'-0"

POOL DESIGN DATA	
WATER VOLUME =	17,294 GALLONS
POOL TURNOVER RATE @92.8 GPM =	3.1 HOURS
TOTAL TURN OVER RATE @116 GPM =	2.48 HOURS
TOTAL DESIGN FLOW RATE =	116 GPM
WATER SURFACE AREA =	698 SQ. FT.
POOL PERIMETER =	125 LN. FT.
DESIGN HEAD LOSS =	75 FT.
MAXIMUM BATHER LOAD =	27 PERSONS

- GENERAL NOTES**
1. ALL PLUMBING SHALL BE TESTED IN FULL ACCORDANCE WITH LAC TITLE 51 CODE, AND SHALL REMAIN UNDER PRESSURE.
 2. REFERENCE PLAN SHEET PL-1.4 / PIPING SCHEMATIC, AND SHEET PL-1. / DETAIL15 FOR PIPING TO POOL EQUIPMENT ROOM.
 3. ALL MAIN DRAIN AND SKIMMER SUCTION LINES ARE SIZED TO ACCOMMODATE THE RECIRCULATION RATE FOR BOTH THE DECK JETS AND ALL POOL RETURN INLETS INCLUSIVE.
 4. OVERFILL LINE FROM POOL TO BE INDIRECTLY CONNECTED TO THE EXISTING STORM DRAIN SYSTEM, AND TO HAVE A CHECK VALVE INSTALLED WITHIN THE LINE TO PREVENT UNWANTED BACKFLOW INTO THE POOL.
 5. THE POOL EQUIPMENT ROOM IS EXISTING, AND IS EXHAUSTED TO THE OUTSIDE ATMOSPHERE.

Copyright 2016 © Rotolo Consultants Inc.
These drawings or parts thereof, may not be reproduced in any form, by any method, for any purpose, without prior written consent from Rotolo Consultants Inc.
Contact: Rod Rotolo 985-643-2427
Project No:

No.	Date:	Description:
REV 1	6/14/16	COMMENT LTR REV.
REV 2	7/29/16	COMMENT LTR REV.

Date: 3/30/2016
Drawn: TJH
Checked: MR
Sheet Title:

POOL PLUMBING LAYOUT PLAN

Drawing No.

PL-1.1

4 of 7

PIPE SCHEDULE WITH JETS					
PIPE ID	DESCRIPTION	SIZE	TYPE	FLOW RATE	VELOCITY
A	MAIN DRAIN SUCTION	3.0 INCH	SCH 40 PVC	116.00 GPM	5.26 FPS
B	SKIMMER SUCTION	2.5 INCH	SCH 40 PVC	58.00 GPM	3.79 FPS
C	W. F. RETURN (FEEDS 4 FEATURES)	1.5 INCH	SCH 40 PVC	23.20 GPM	4.21 FPS
D	W.F. RETURN (FEEDS 1 FEATURE)	1.0 INCH	SCH 40 PVC	05.80 GPM	2.37 FPS
E	W.F. RETURN (FEEDS 2 FEATURES)	1.0 INCH	SCH 40 PVC	11.60 GPM	4.74 FPS
F	SKIMMER SUCTION	2.0 INCH	SCH 40 PVC	67.00 GPM	6.80 FPS
G	INLET RETURN (FEEDS 6 INLETS)	2.5 INCH	SCH 40 PVC	92.80 GPM	6.07 FPS
H	INLET RETURN (FEEDS 4 INLETS)	2.0 INCH	SCH 40 PVC	61.87 GPM	6.32 FPS
I	INLET RETURN (FEEDS 3 INLETS)	2.0 INCH	SCH 40 PVC	46.40 GPM	4.74 FPS
K	INLET RETURN (FEEDS 1 INLET)	1.5 INCH	SCH 40 PVC	15.47 GPM	2.81 FPS
J	INLET RETURN (FEEDS 2 INLETS)	1.5 INCH	SCH 40 PVC	30.93 GPM	5.62 FPS
L	ELECTRICAL CONDUIT	1.0 INCH	SCH 40 HDPE	N/A	N/A
M	SUPPLY LINE	1.0 INCH	SCH 40 PVC	N/A	N/A
N	OVERFLOW	1.5 INCH	SCH 40 PVC	N/A	N/A

PIPE SCHEDULE WITHOUT JETS					
PIPE ID	DESCRIPTION	SIZE	TYPE	FLOW RATE	VELOCITY
A	MAIN DRAIN SUCTION	3.0 INCH	SCH 40 PVC	116.00 GPM	5.26 FPS
B	SKIMMER SUCTION	2.5 INCH	SCH 40 PVC	58.00 GPM	3.79 FPS
F	SKIMMER SUCTION	2.0 INCH	SCH 40 PVC	67.00 GPM	6.80 FPS
G	INLET RETURN (FEEDS 6 INLETS)	2.5 INCH	SCH 40 PVC	116 GPM	7.58 FPS
H	INLET RETURN (FEEDS 4 INLETS)	2.0 INCH	SCH 40 PVC	77.33 GPM	7.90 FPS
I	INLET RETURN (FEEDS 3 INLETS)	2.0 INCH	SCH 40 PVC	58.00 GPM	5.92 FPS
J	INLET RETURN (FEEDS 1 INLET)	1.5 INCH	SCH 40 PVC	19.33 GPM	3.51 FPS
K	INLET RETURN (FEEDS 2 INLETS)	1.5 INCH	SCH 40 PVC	38.67 GPM	7.02 FPS
L	ELECTRICAL CONDUIT	1.0 INCH	SCH 40 HDPE	N/A	N/A
M	SUPPLY LINE	1.0 INCH	SCH 40 PVC	N/A	N/A
N	OVERFLOW	1.5 INCH	SCH 40 PVC	N/A	N/A

NOTES:

1. ANY AND ALL METAL PARTS ASSOCIATED WITH THE POOL WATER CIRCULATION SYSTEM (I.E. PUMPS) SHALL BE BONDED PER NEC 2008 ARTICLE 680.

2. ALL METAL PARTS WITHIN 5 FT. OF THE INSIDE WALL OF THE POOL AND NOT SEPARATED BY A PERMANENT BARRIER ARE REQUIRED TO BE BONDED PER NEC 2008 ARTICLE 680.

THIS LIST INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: ALL METAL PARTS OF THE POOL STRUCTURE, CONDUIT AND PIPING, METAL DOOR FRAMES, METAL WINDOW FRAMES, DIVING BOARDS, HANDRAILS, LADDERS, DRAINS, OUTLET PIPES, SLIDE SUPPORTS, WATER FEATURES, ETC..

THE BONDING OF THESE PARTS DOES NOT MEAN THEY ARE REQUIRED TO BE CONNECTED TO EACH OTHER; RATHER, IT MEANS THEY ARE REQUIRED TO BE CONNECTED TO A COMMON EQUIPOTENTIAL BONDING GRID.

3. ALL EQUIPOTENTIAL BONDING TERMINATIONS MUST BE MADE BY EXOTHERMIC WELDING. LISTED PRESSURE CONNECTORS OF THE SET SCREW OR COMPRESSION TYPE, LISTED CLAMPS, OR OTHER LISTED FITTINGS. (NEC 2008 ARTICLE 680)

POOL LIGHT FIXTURE ROPE ANCHOR, NOT REQUIRED IF LESS THAN 4" (NEC 2008 ARTICLE 680)

METAL WATER INLET PIPE

METAL DRAIN

POOL FLOOR

POOL DECK

POOL WALL

POOL PUMP, UV STERILIZER, FILTER, ETC. ANY METAL PARTS ASSOCIATED WITH THE POOL WATER CIRCULATION SYSTEM.

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

POOL DECK

POOL WALL

POOL FLOOR

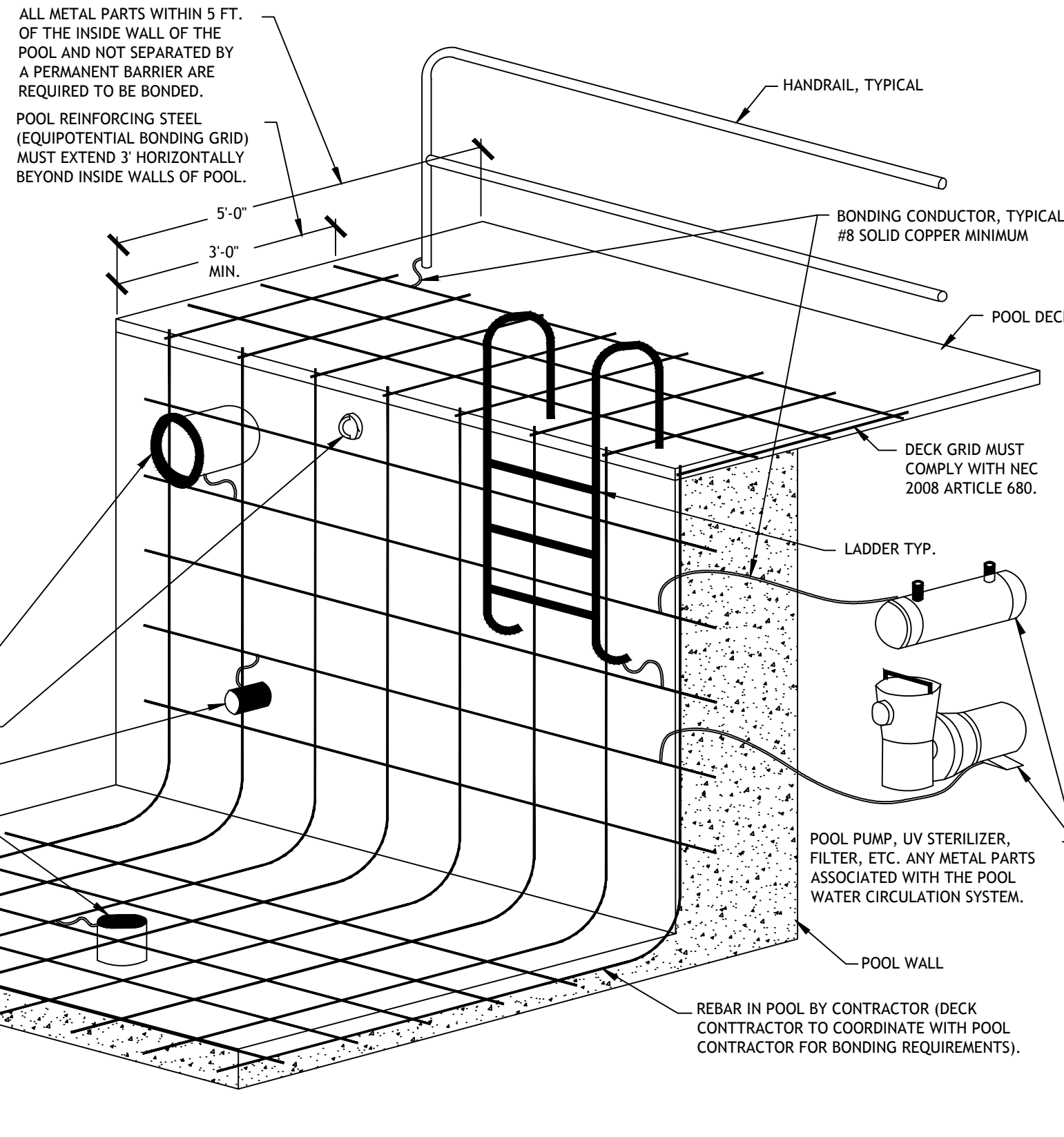
POOL DECK

POOL WALL

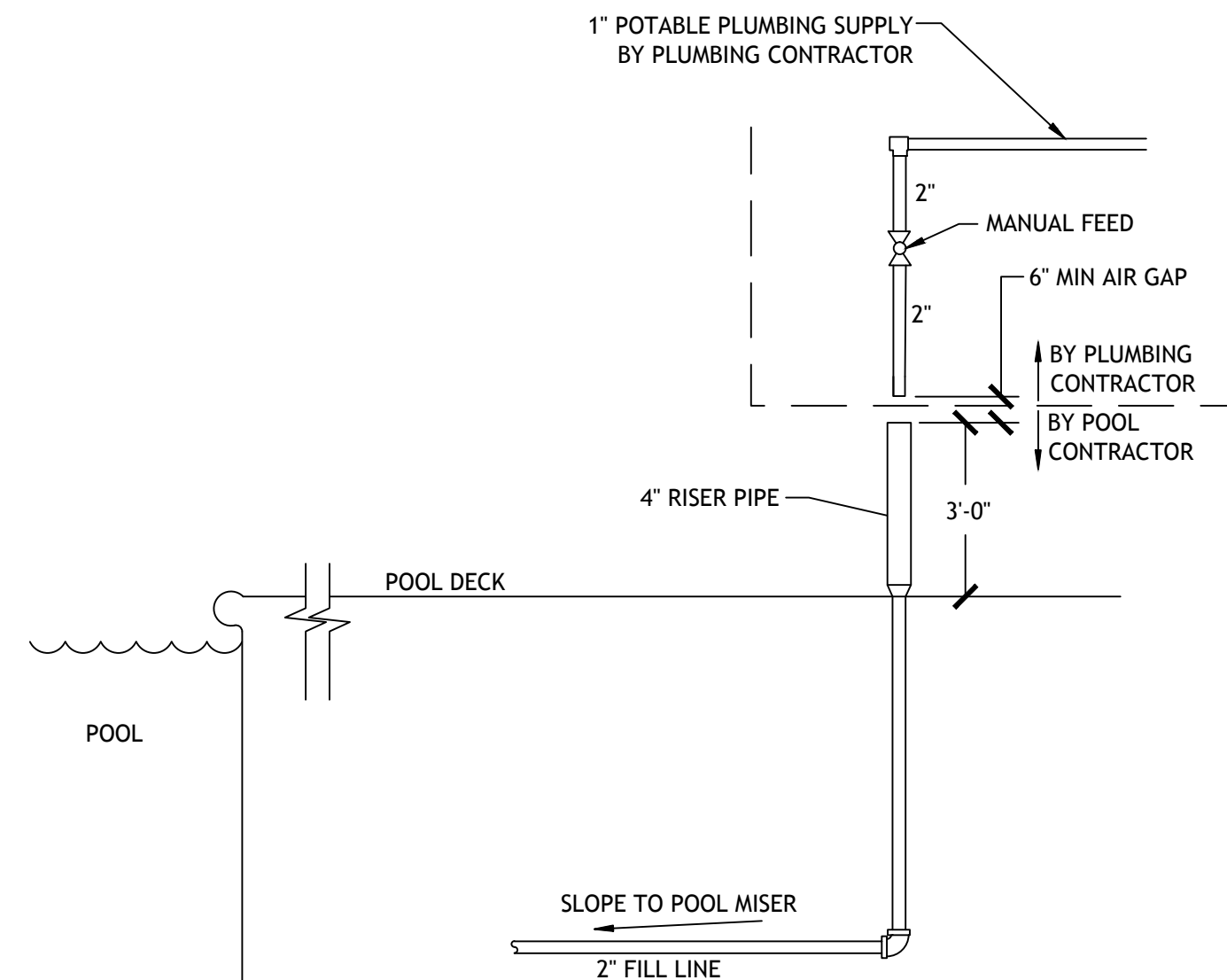
POOL FLOOR

POOL DECK

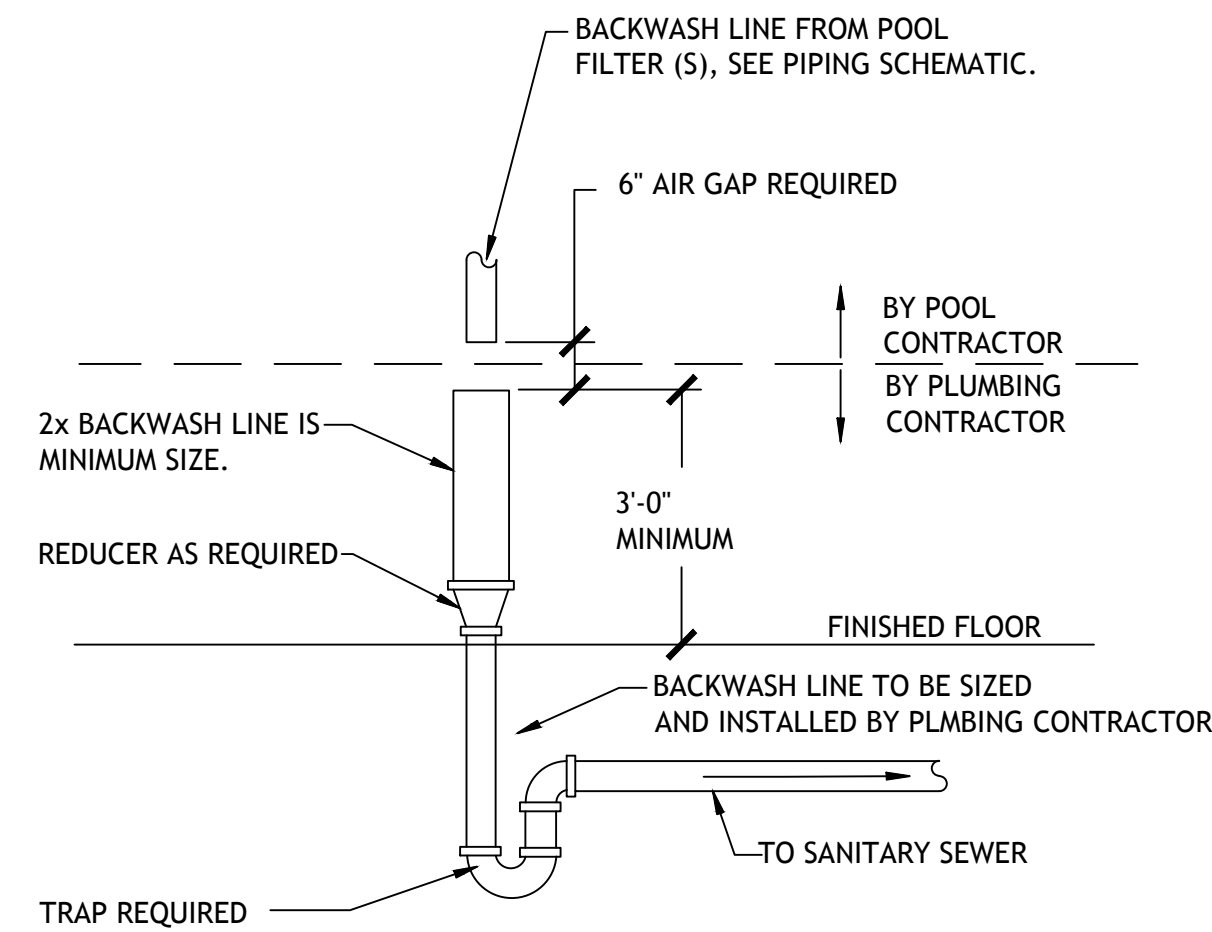
POOL WALL



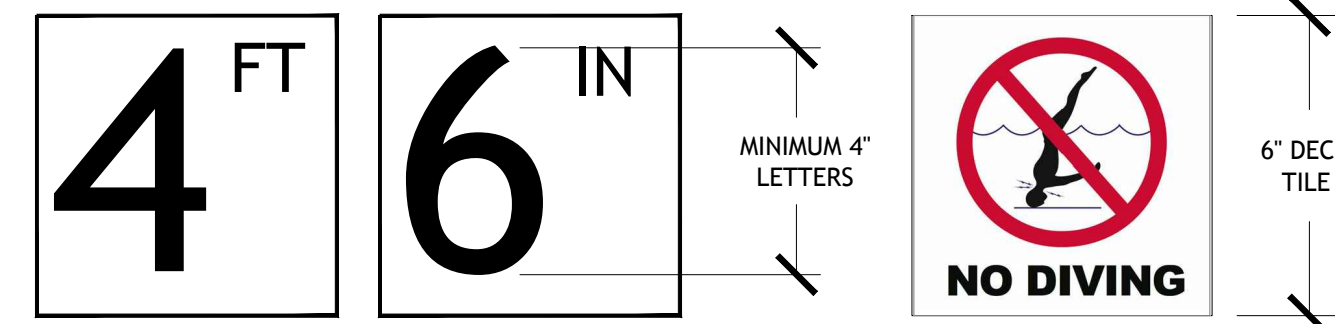
01 TYPICAL GROUNDING & BONDING DETAIL
PL-1.2 SCALE: NOT TO SCALE



02 AUTOFILL DETAIL
PL-1.2 SCALE: NOT TO SCALE

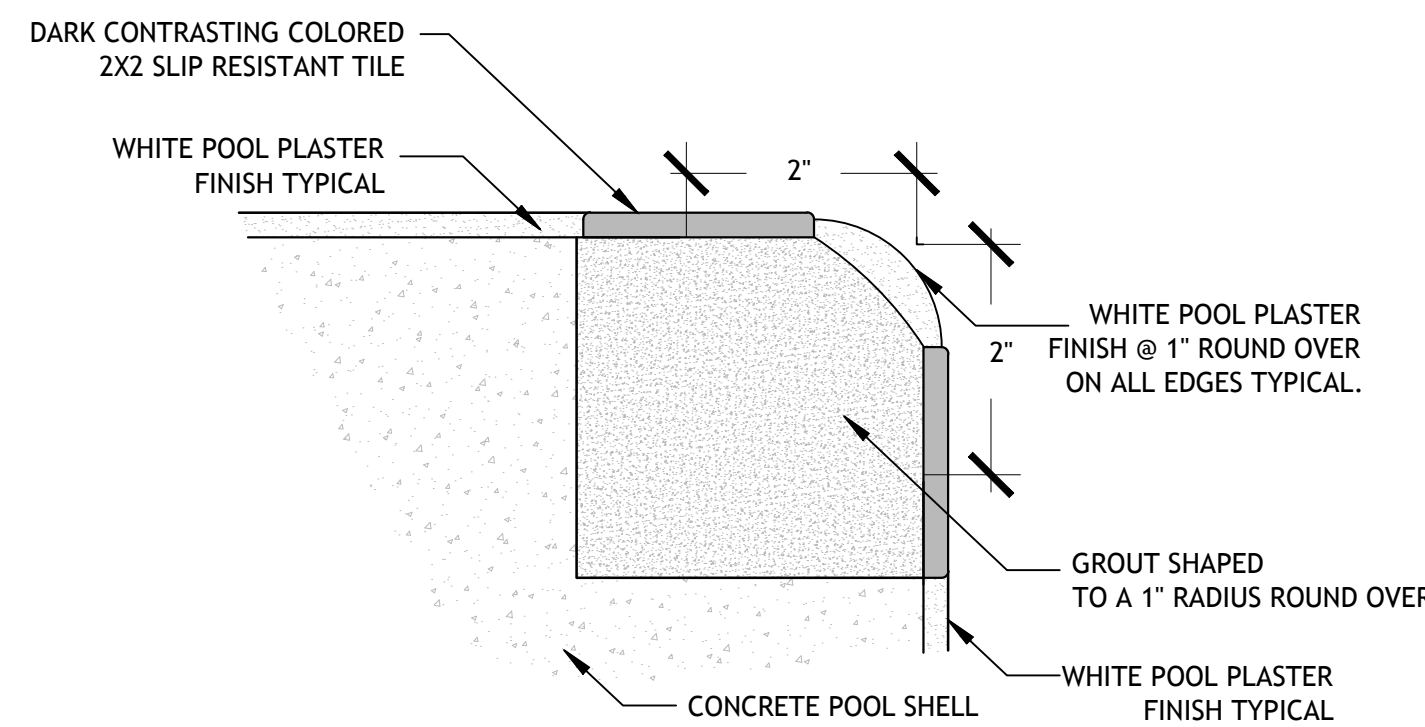


05 BACKWASH DETAIL
PL-1.2 SCALE: NOT TO SCALE

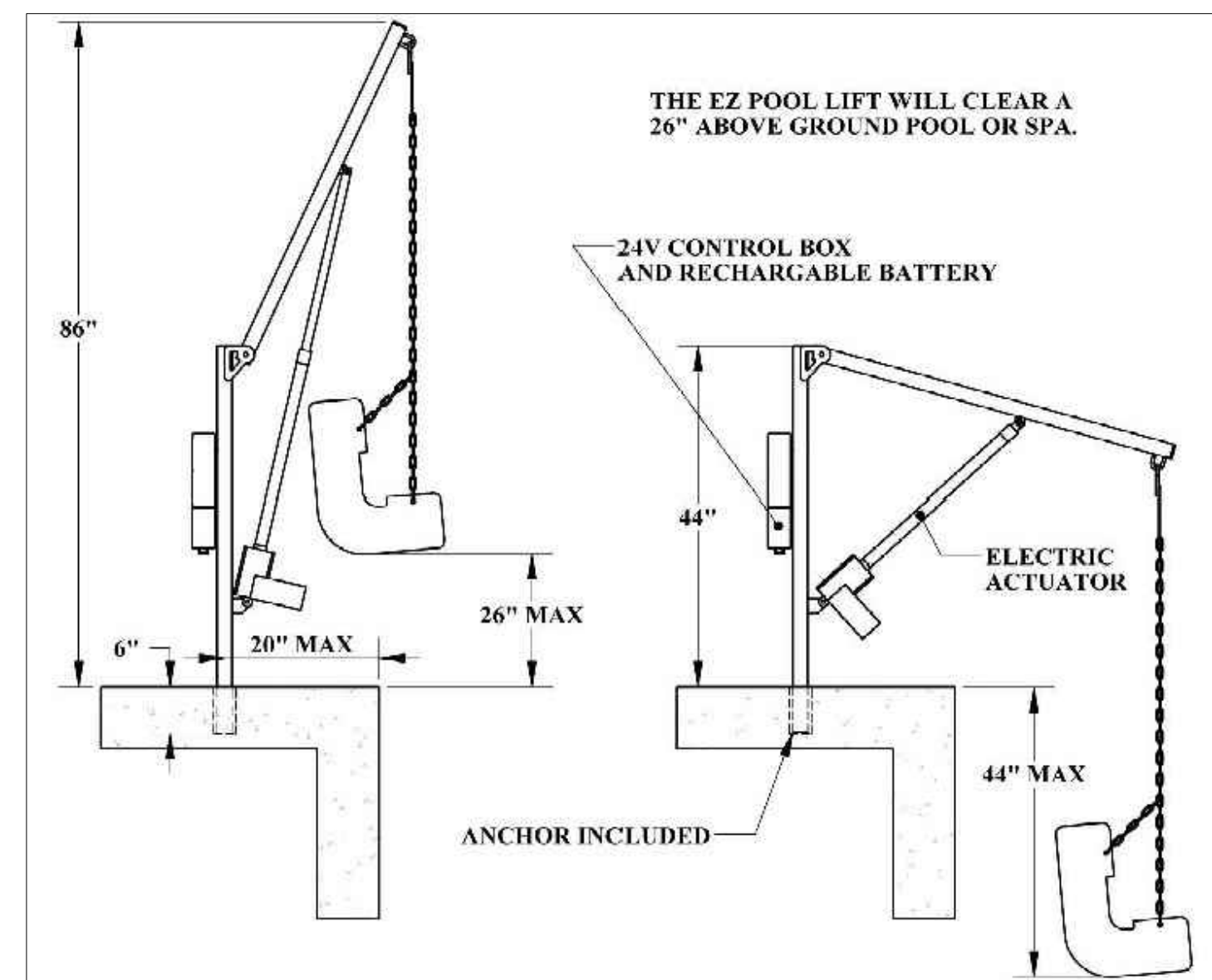


DEPTH MARKERS
MARKER REQUIREMENTS:
1. DEPTH MARKERS BOTH SHOWING FEET AND INCHES
2. NO DIVING SYMBOL MARKER WITH EACH DEPTH MARKER.

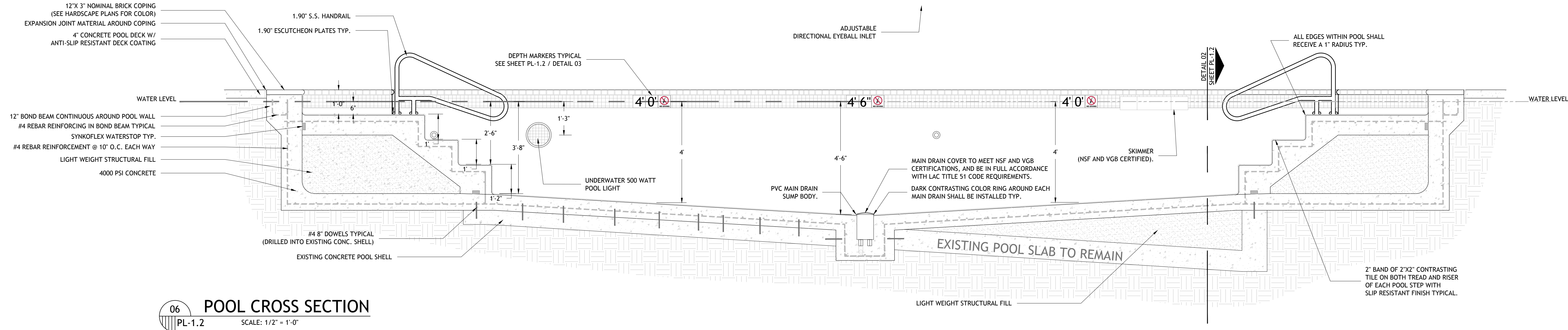
NOTES:
1. DEPTH MARKERS SHALL BE PLACED ON THE DECK WITH SPACING NOT TO EXCEED 25'-0", NO MORE THAN 2 FOOT OF CHANGE IN SLOPE, AND TO ALSO PLACE A CORRESPONDING DEPTH MARKER IN DUPLICATE ON THE POOL WALL.
2. DECK TILES TO BE WITHIN 18" OF THE POOL WATER SURFACE
3. DECK TILES TO BE POSITIONED TO BE READ WHILE STANDING ON THE DECK FACING THE WATER.
4. DEPTH MARKERS TO BE IN ENGLISH.
5. NUMERICAL COLOR OF LETTERING TO BE BLACK, ON WHITE BACKGROUND.
6. "NO DIVING" INTERNATIONAL SYMBOL MARKER TO BE PLACED AT EVERY LOCATION WHERE A DEPTH MARKER IS LOCATED.
7. ALL DECK DEPTH MARKERS & NO DIVING SYMBOLS ARE TO HAVE A SLIP RESISTANT FINISH TYPICAL.
8. POOL WALL DEPTH MARKERS & NO DIVING SYMBOLS ARE TO HAVE A SMOOTH FINISH.



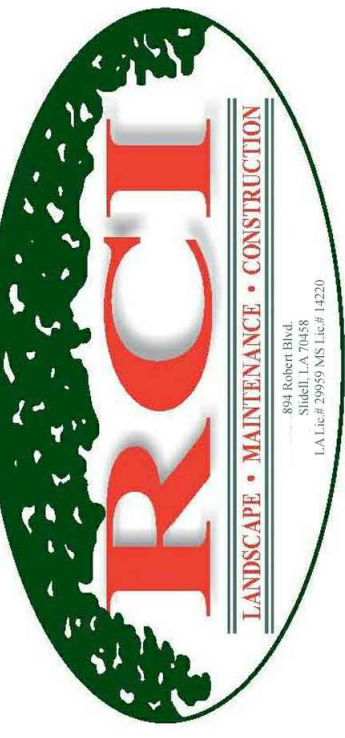
04 TRIM TILE DETAIL
PL-1.2 SCALE: NOT TO SCALE



07 TYP ADA HANDICAPPED LIFT
PL-1.2 SCALE: NOT TO SCALE



06 POOL CROSS SECTION
PL-1.2 SCALE: 1/2" = 1'-0"



894 ROBERT BOULEVARD
SLIDELL, LOUISIANA 70458
PH: 985-643-2427
FAX 985-643-2691
PROTOL@PROTOLCONSULTANTS.COM

APARTMENT HOMES BY TONTI
PATIO VILLA POOL RENOVATION
3340 NORTH ARNOULT ROAD, METAIRIE, LA

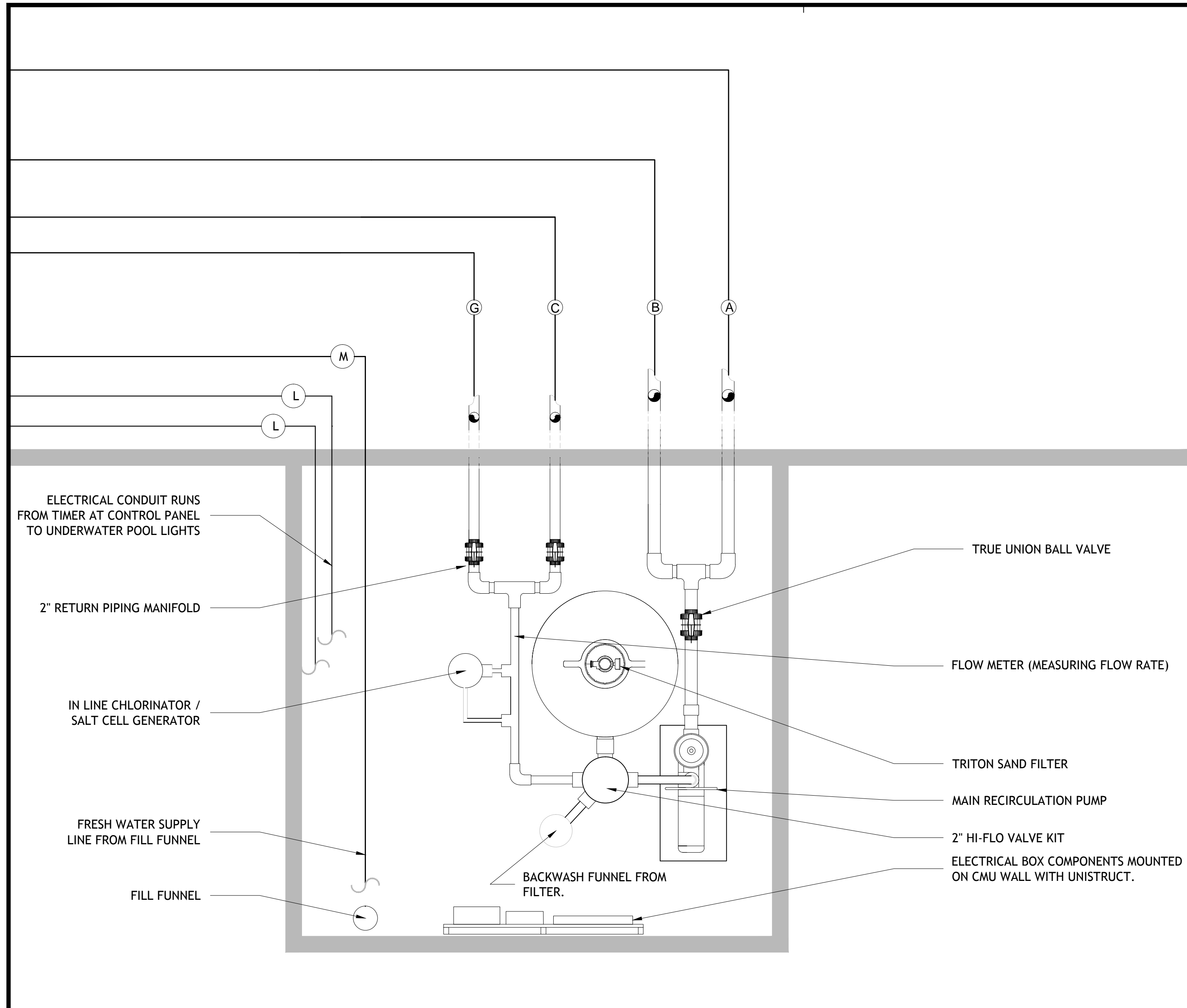
Copyright 2016 Rotolo Consultants Inc.
These drawings or parts thereof, may not be reproduced in any form, by any method, for any purpose, without prior written consent from Rotolo Consultants Inc.
Contact: Rod Rotolo 985-643-2427
Project No:

Revisions:		
No.	Date	Description
REV 1	6/14/16	COMMENT LTR REVS.
REV 2	7/29/16	COMMENT LTR REVS.

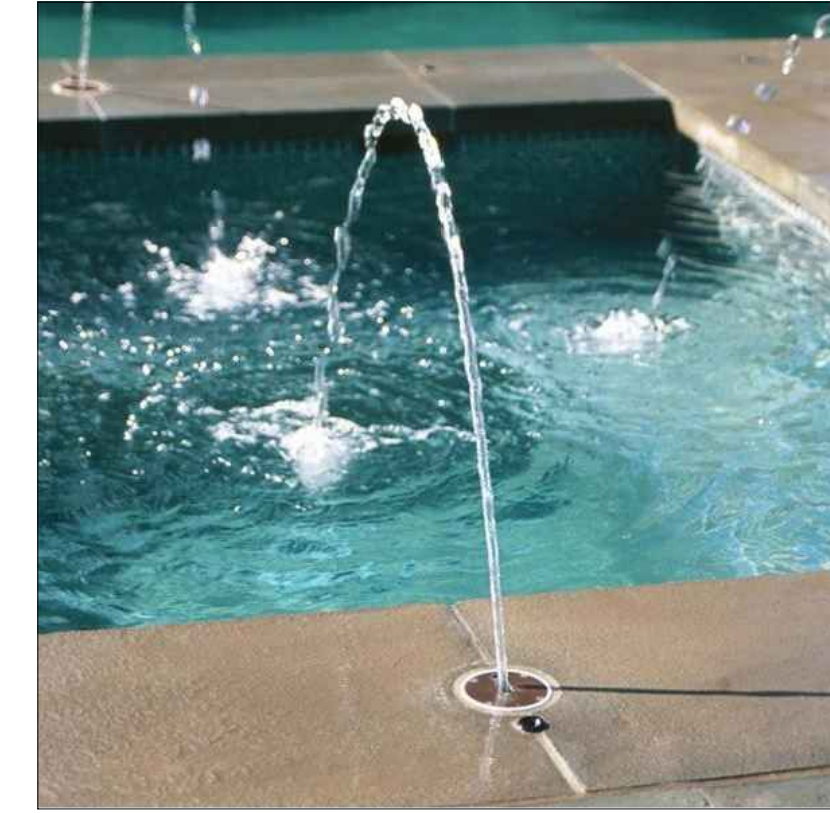
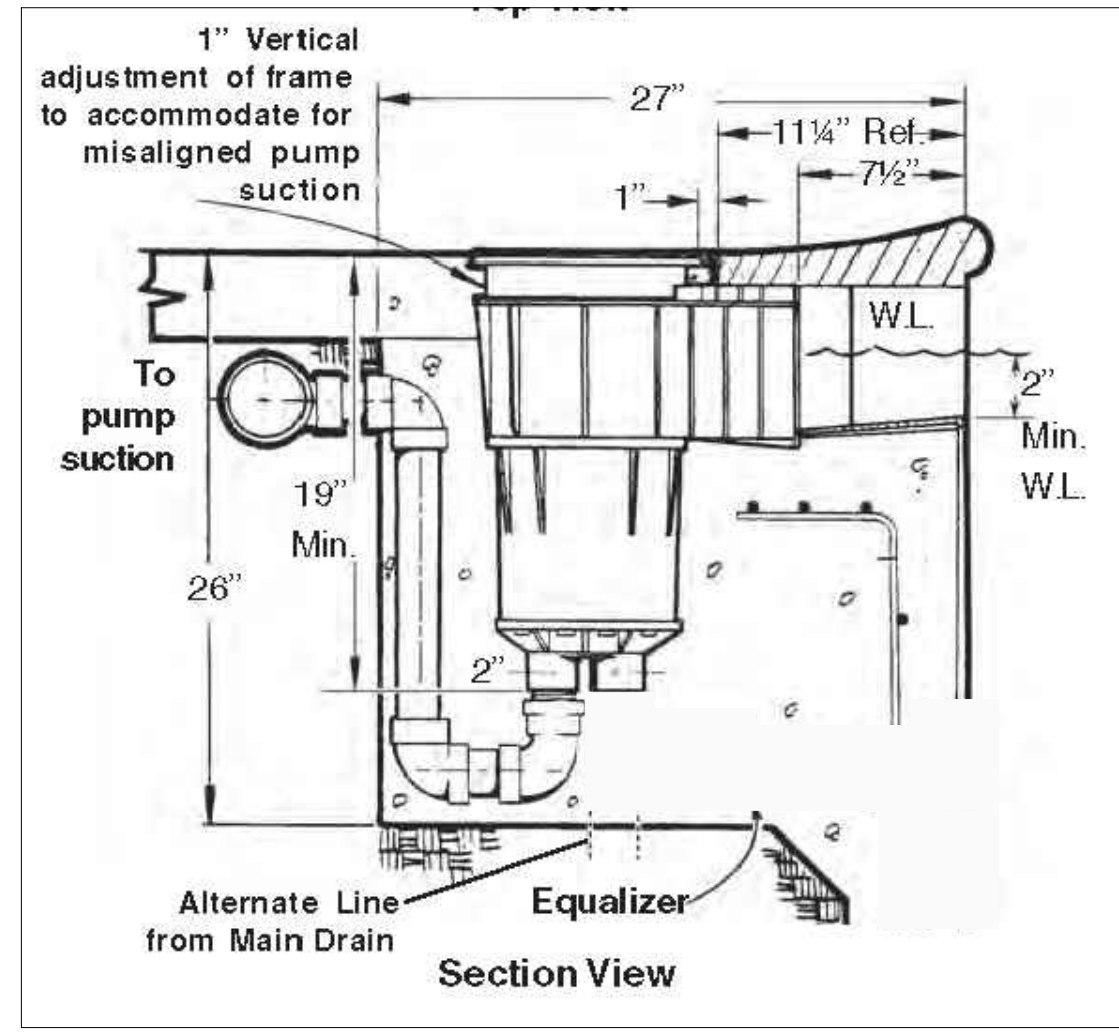
Date: 3/30/2016
Drawn: TJH
Checked: MR
Sheet Title:

POOL SECTIONS & TYPICAL DETAILS

Drawing No.
PL-1.2
5 of 7



02 TYP. SKIMMER DETAIL
SCALE: NTS



NOTE: PIC ABOVE IS SHOWS PRODUCT TO BE FLUSH MOUNTED WITH THE TOP OF POOL DECK. FOR ACTUAL LOCATIONS OF ALL FOUR DECK JETS, REFERENCE PLAN LAYOUT.

DECK JETS
PART# JDJ2004

Jandy Deck Jets add pleasure and amusement to your pool & spa experience. Jandy Deck Jets create shimmering arcs of water from your deck into your pool or spa. The jets can be installed in almost any combination, and since they can be adjusted 360°, the dazzling effects they create can be changed again and again to meet your mood. The Jets come with a bronze deck coverplate giving the deck a rich finish.

Typical Deck Jet Installation

DECK JET WATER VOLUME & PRESSURE CHART

	3.0	4.0	5.0
Gallons (US GPM)	3.0	4.0	5.0
Feet of Head	3.9	7.9	11.0
Height of Jet	3.0	6.6	10.0

Multiple Jet Setup

Number of Deck Jets at rate of 5 gpm (gallons per minute)	Recommended Pipe Size within 25' of Equipment			
	A	B	C	D
2	1 1/2"	1"	3/4"	1 1/2"
3	1 1/2"	1"	3/4"	1 1/2"
4	1 1/2"	1 1/2"	3/4"	1 1/2"
5	1 1/2"	1 1/2"	3/4"	1 1/2"
6	2"	1 1/2"	3/4"	2"

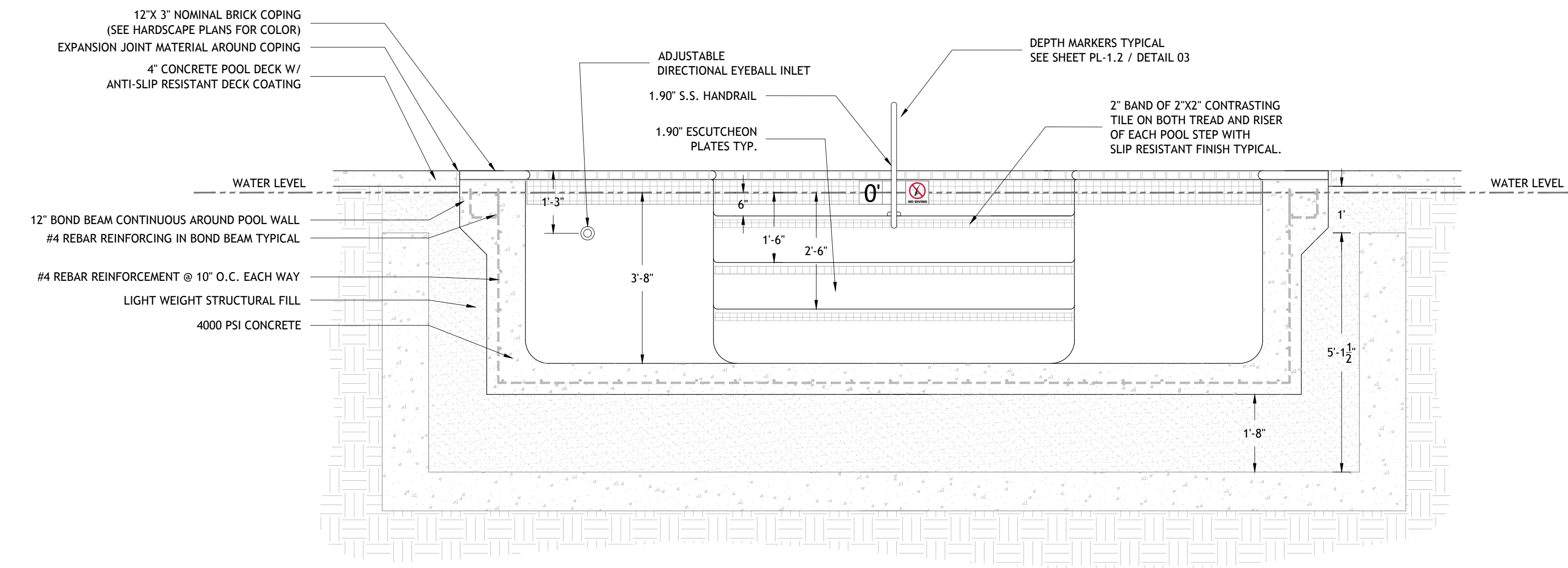
Dimensions

Labels include: 2 1/2"; 6"; 3"; *C* - Inlet Lines to Deck Jet Deck Box (Maximum 6 Lines per Plumbing Loop); Isolation Valves; *B* - Plumbing Loop; *A* - Main Feed Line; Check Valve; Jandy 3-Port Valve (PIN 4717); *D* - Bypass/Bleed Off Line.

05 JANDY DECK JET FEATURE
SCALE: NTS

01 EQUIPMENT ROOM TYP. LAYOUT
SCALE: NTS

NOTE: THE EQUIPMENT ROOM IS EXISTING, AND IS INDOORS. THE EXISTING EQUIPMENT ROOM IS AND WILL CONTINUE TO BE EXHAUSTED DIRECTLY TO THE ATMOSPHERE, IN FULL ACCORDANCE WITH THE LAC TITLE 51 SWIMMING POOL CODE.



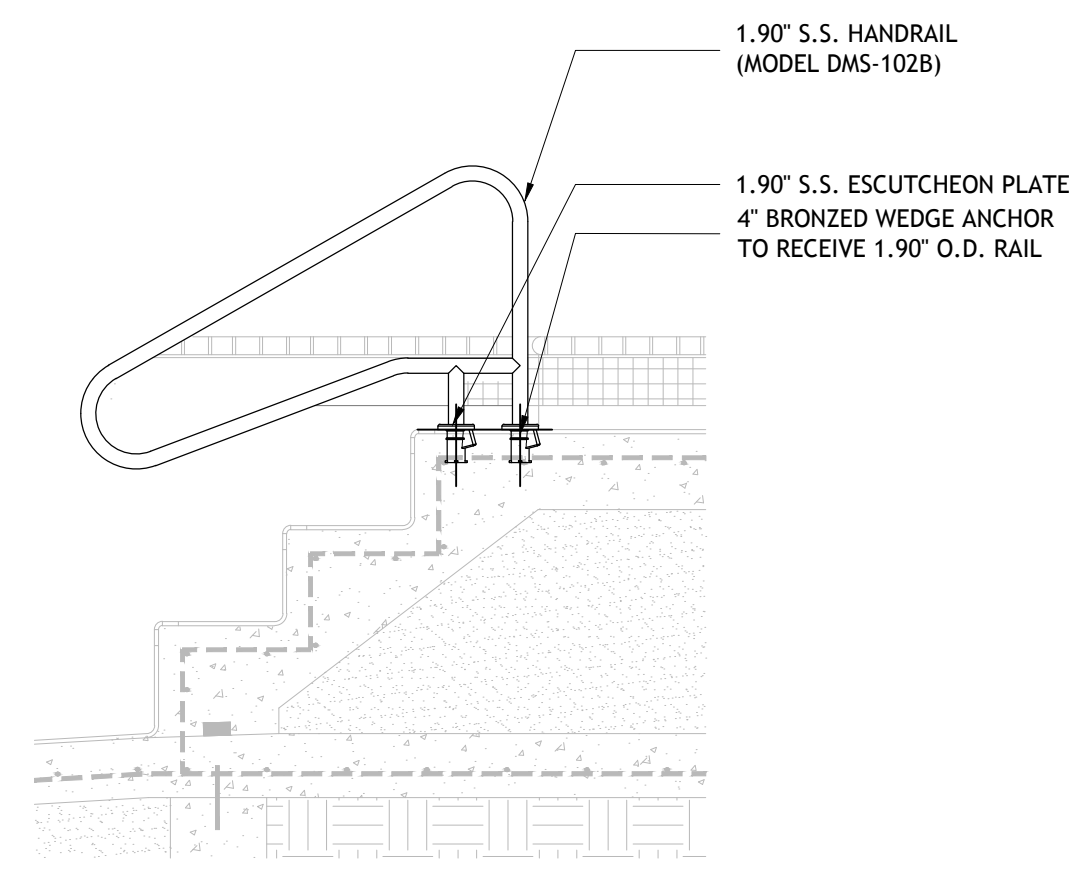
03 POOL CROSS SECTION
SCALE: 1/2" = 1'-0"

Hand & Stair Rails

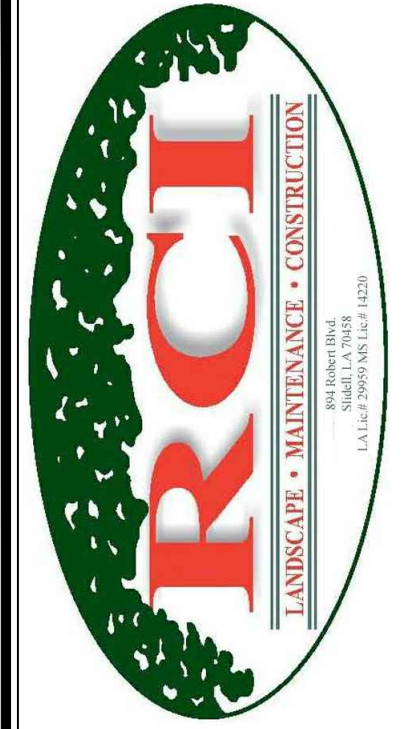
- Tubing: 1.90" OD
- Wall Thickness: .049" or .065"
- Stainless Steel: 304 or 316L Marine Grade** (add -MG to part number)
- Bends: 6" Radius
- Options: Powder-coating and SealedSteel Salt Friendly
- Recommended Anchors: AS-100P or AS-100B (order separately)
- Recommended Escutcheon: EP-100F (order separately)
- Sold as a single rail
- * Minimum rail thickness is .065 for Commercial
- ** Minimum requirement for salt pools is 316L Marine Grade

DMS-102

Model No.	Description	Weight	Length	Width	Height
DMS-102A	54" Center Grab Rail, .049"	15 lbs / 7 kg	19 lbs / 9kg	59" / 150cm	39" / 99cm
DMS-102B	54" Center Grab Rail, .065"	15 lbs / 7 kg	19 lbs / 9kg	59" / 150cm	39" / 99cm
DMS-102P	54" Center Grab Rail, .049" welded mounting plate	15 lbs / 7 kg	19 lbs / 9kg	59" / 150cm	39" / 99cm



04 HAND RAIL DETAIL
SCALE: 1-1/2" = 1'-0"



894 ROBERT BOULEVARD
SLIDELL, LOUISIANA 70458
PH: 985-643-2427
FAX: 985-643-2691
ROTOLO@ROTOLOCONSULTANTS.COM

APARTMENT HOMES BY TONTI
PATIO VILLA POOL RENOVATION
3340 NORTH ARNOULT ROAD, METAIRIE, LA

Copyright 2016 Rotolo Consultants Inc. These drawings or parts thereof, may not be reproduced in any form, by any method, for any purpose, without prior written consent from Rotolo Consultants Inc. Contact: Rod Rotolo 985-643-2427 Project No:

Revisions:

No.	Date:	Description:
REV 1	6/14/16	COMMENT LTR REVS.
REV 2	7/29/16	COMMENT LTR REVS.

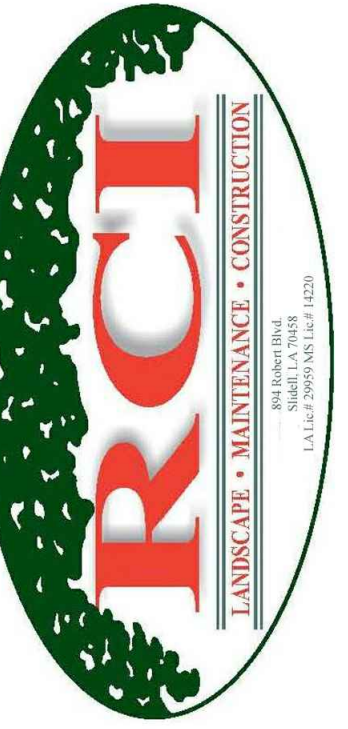
Date: 3/30/2016
Drawn: TJH
Checked: MR

Sheet Title:
POOL SECTIONS & TYPICAL DETAILS

Drawing No.

PL-1.3

Sheet No. 6 of 7



894 ROBERT BOULEVARD
SLIDELL, LOUISIANA 70458
PH: 985-643-2427
FAX: 985-643-2691
ROTOLO@ROTOLOCONSULTANTS.COM

APARTMENT HOMES BY TONTI
PATIO VILLA POOL RENOVATION
3340 NORTH ARNOULT ROAD, METAIRIE, LA

Copyright 2016 Rotolo Consultants Inc.
These drawings or parts thereof, may not be reproduced in any form, by any method, for any purpose, without prior written consent from Rotolo Consultants Inc.
Contact: Rod Rotolo 985-643-2427
Project No:

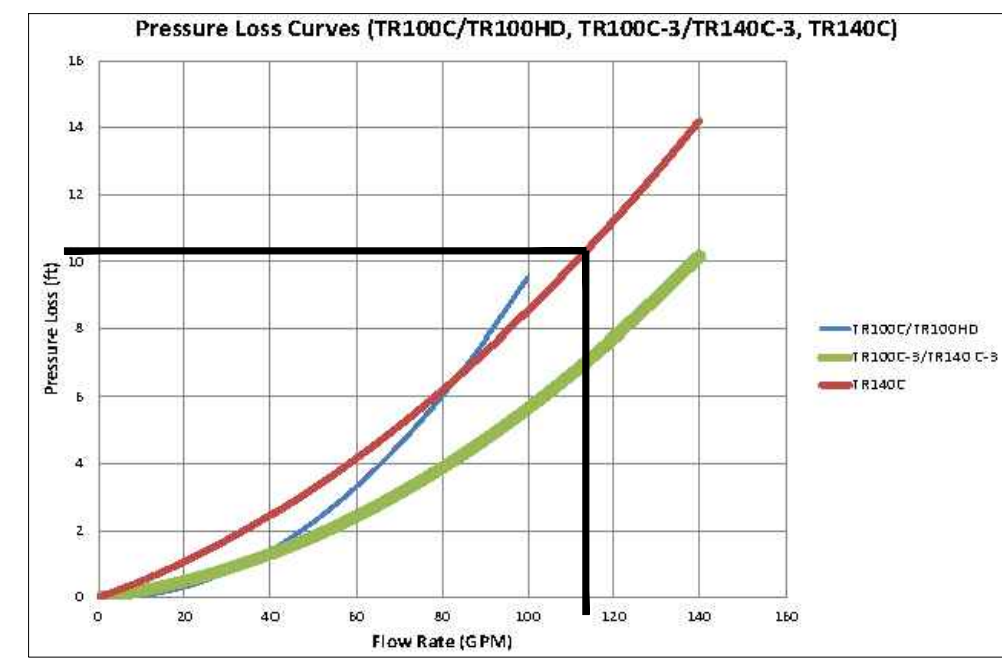
Revisions:		
No.	Date:	Description:
REV 1	6/14/16	COMMENT LTR REV.
REV 2	7/29/16	COMMENT LTR REV.

Date: 3/30/2016
Drawn: TJH
Checked: MR
Sheet Title:

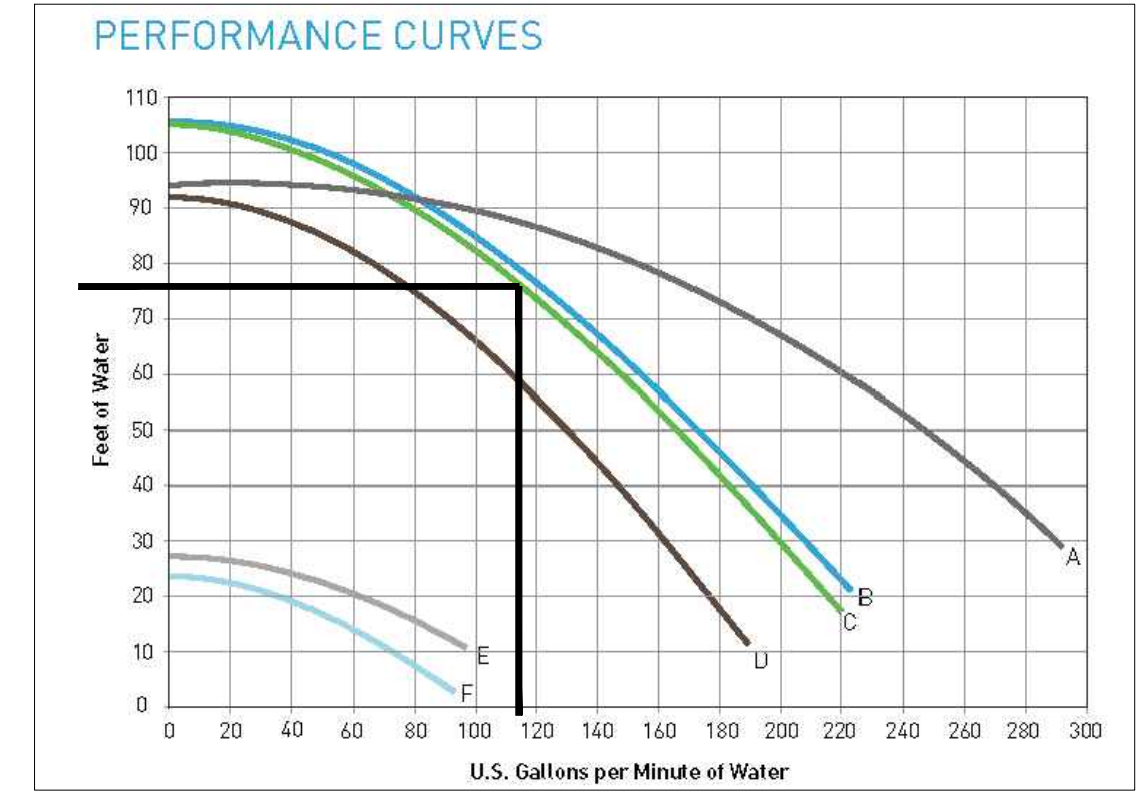
EQUIPMENT
DATA
&
PIPING
SCHEMATIC

Drawing No.

PL-1.4



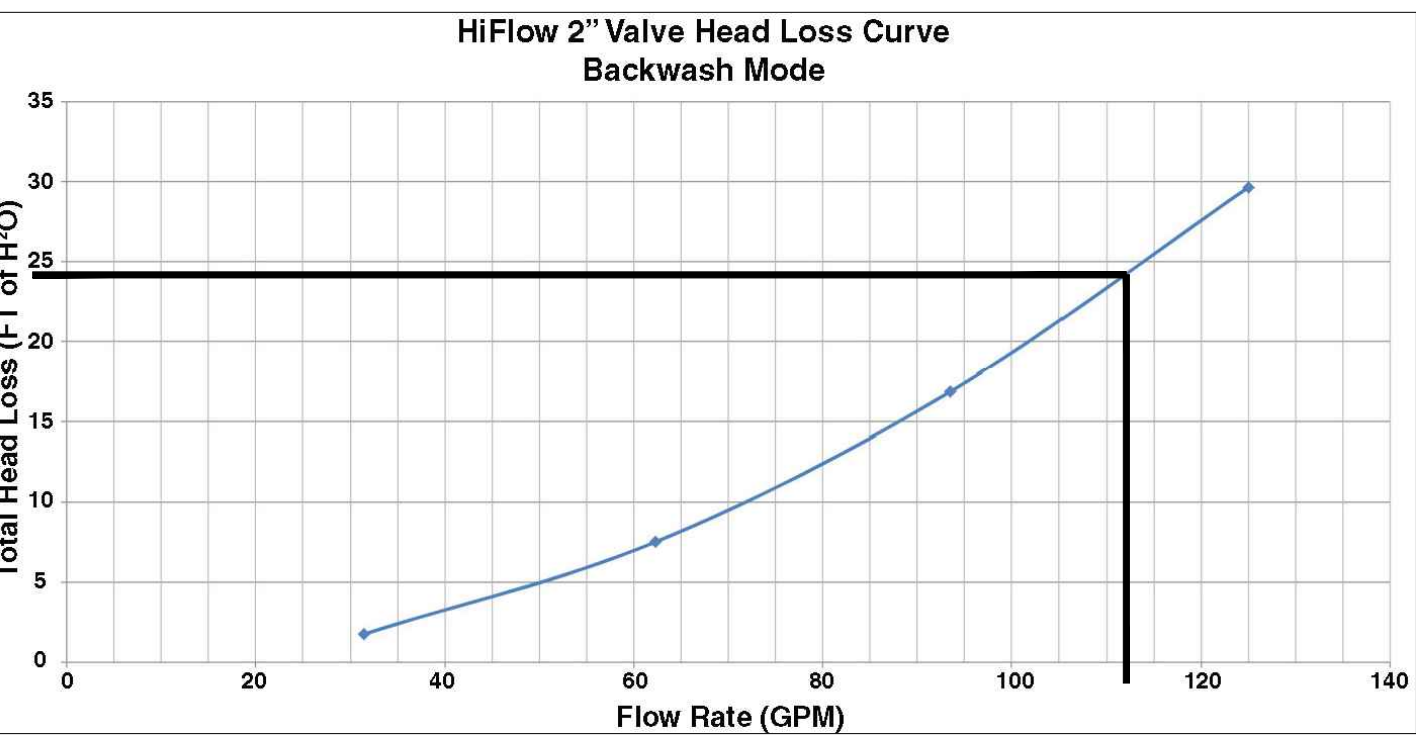
03 SAND FILTER PERFORMANCE CURVE
PL-1.4 SCALE: NOT TO SCALE



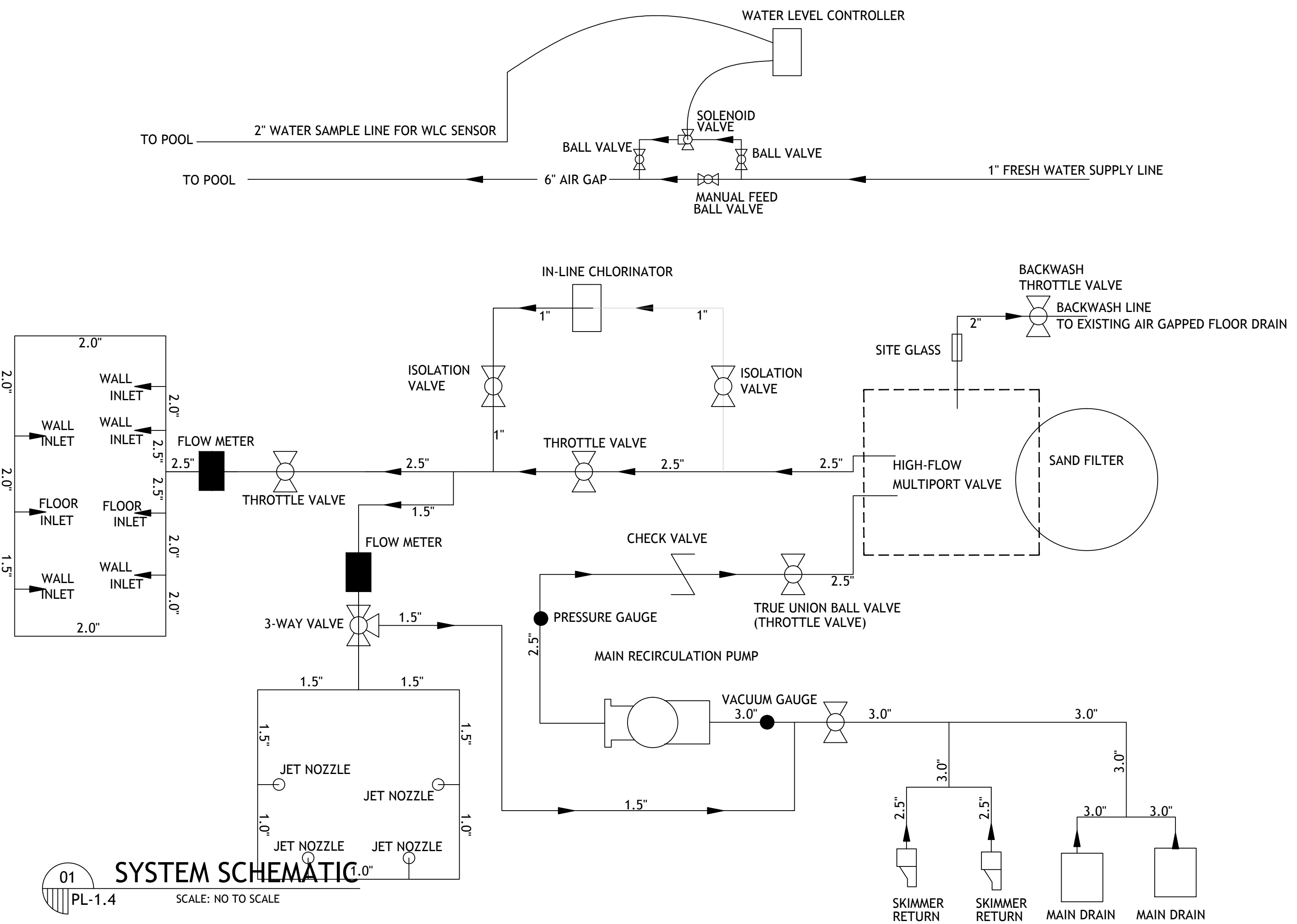
04 RECIRCULATION PUMP PERFORMANCE CURVE
PL-1.4 SCALE: NOT TO SCALE

POOL EQUIPMENT LEGEND

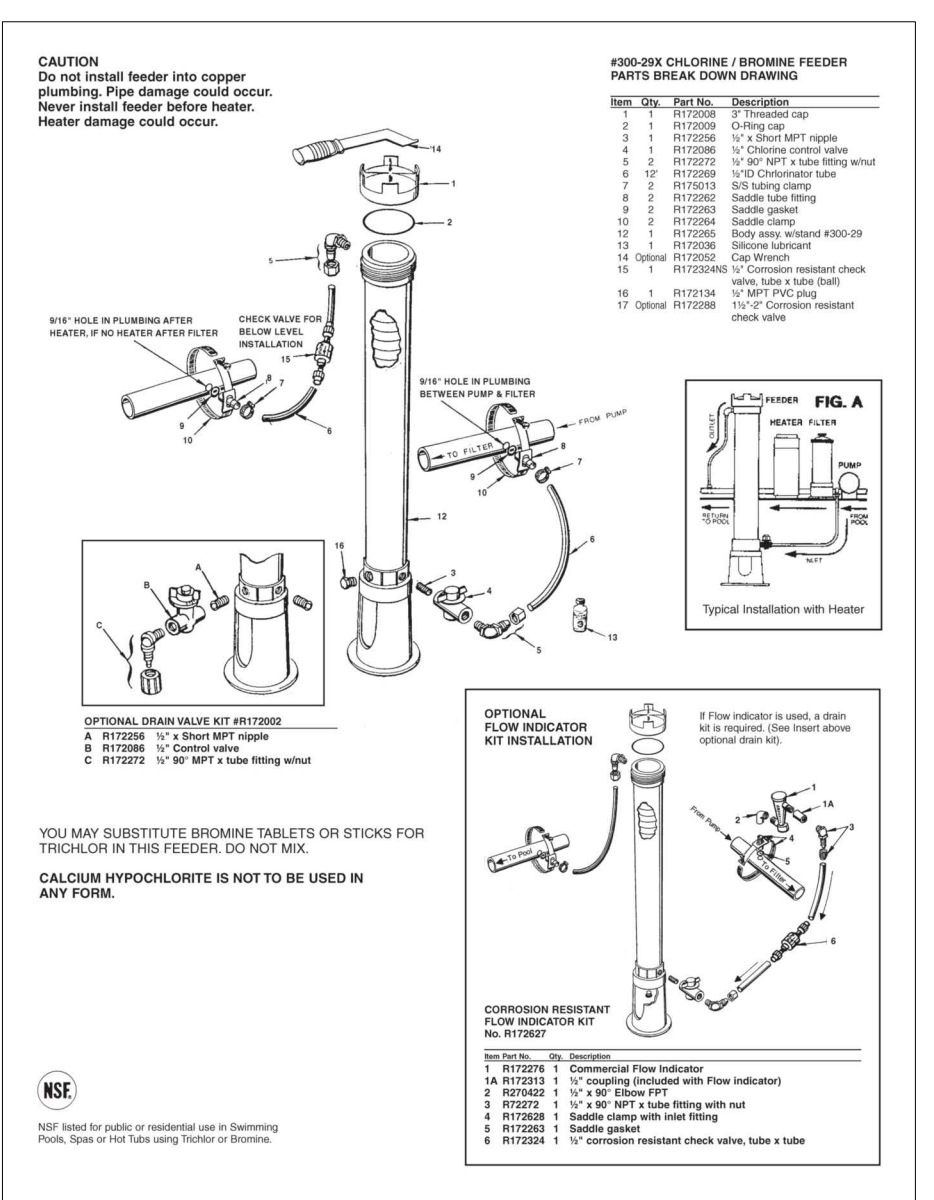
QTY	DESCRIPTION
1	TR140 C SAND FILTER BY PENTAIR
1	WHISPERFLO XF HIGH STANDARD 3HP PUMP
1	HI-FLO MULTI-PORT VALVE (TO ACCEPT 3" PIPING)
2	9" MAIN DRAIN SUMP AND GRATE ASSEMBLY
2	3.0" BLUE-WHITE IMPACT FLOW METER (ONE FOR DECK JETS AND ONE FOR POOL RETURNS)
6	SP1419D HAYWARD 3/4" DIRECTIONAL EYEBALL
8	HAY-25-1504 SP1022S INLET SLIP FITTING
2	STA-RITE ADJUSTABLE FLOOR INLET RETURN ASSEMBLY (WHITE)
2	HAY-25-1507 SP1026 GRATE INSERT (FOR SKIMMER EQ LINES)
1	HAY-25-1500 SP1019 GUTTER DRAIN (FOR OVERFLOW INLET) 1
1	POOL MISER AUTO WATER LEVELER
4	JANDY DECK JETS
2	UNDERWATER POOL LIGHT LED COLOR - 120V - 150" CORD W/ S.S. LIGHT NICHE
1	PRESSURE GAUGE WITH SNUBBER AND GAUGE COCK
1	VACUUM GAUGE WITH SNUBBER AND GAUGE COCK
8	TRUE-UNION BALL VALVES
1	SCH 40 PVC PIPE FOR ALL SUCTION, RETURN, AND EQUIPMENT ROOM PIPING
1	CUSTOM 1.90" O.D. HANDRAIL DMS-102 DECK MOUNTED
1	TAYLOR TEST KIT K-2006 (DPD METHOD OF TESTING FOR CHLORINE RESIDUALS)
4	4" 1.50" WEDGE ANCHORS FOR HANDRAIL
4	1.90" O.D. ESCUTCHEONS FOR HANDRAIL
1	1"X1" WATERLINE TILE (SEE HARDSCAPE PLAN FOR COLOR AND STYLE)
1	2X2 KEYSTONE TILE FOR STEPS AND UNDERWATER BENCHES (SEE HARDSCAPE PLAN)
1	6X6 DEPTH MARKERS, 4" BLACK LETTERING ON WHITE BACKGROUND (SLIP RESISTANT FINISH)
1	6X6 INTERNATIONAL "NO DIVING" SYMBOL
1	WHITE PLASTER



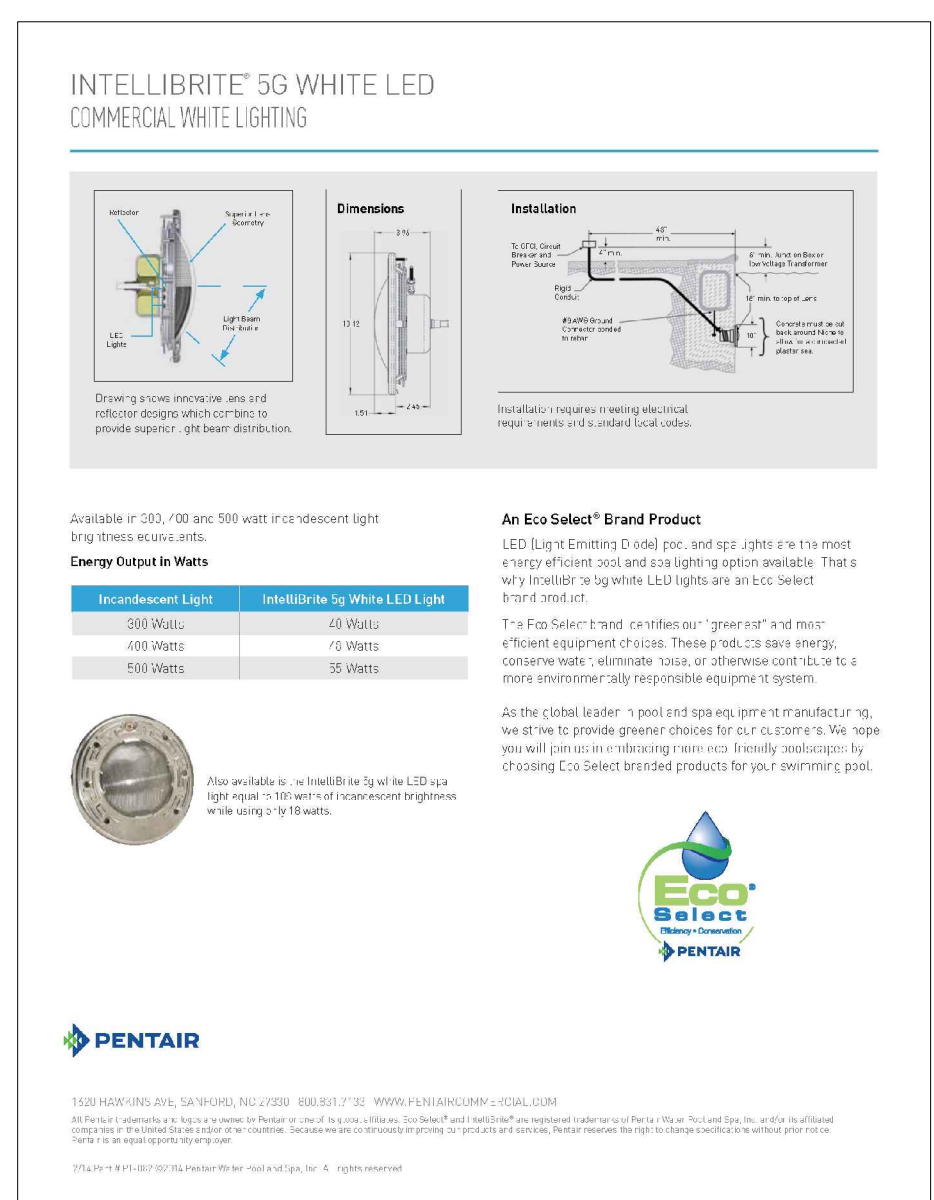
02 HI-FLO VALVE HEADLOSS CURVE
PL-1.4 SCALE: NOT TO SCALE



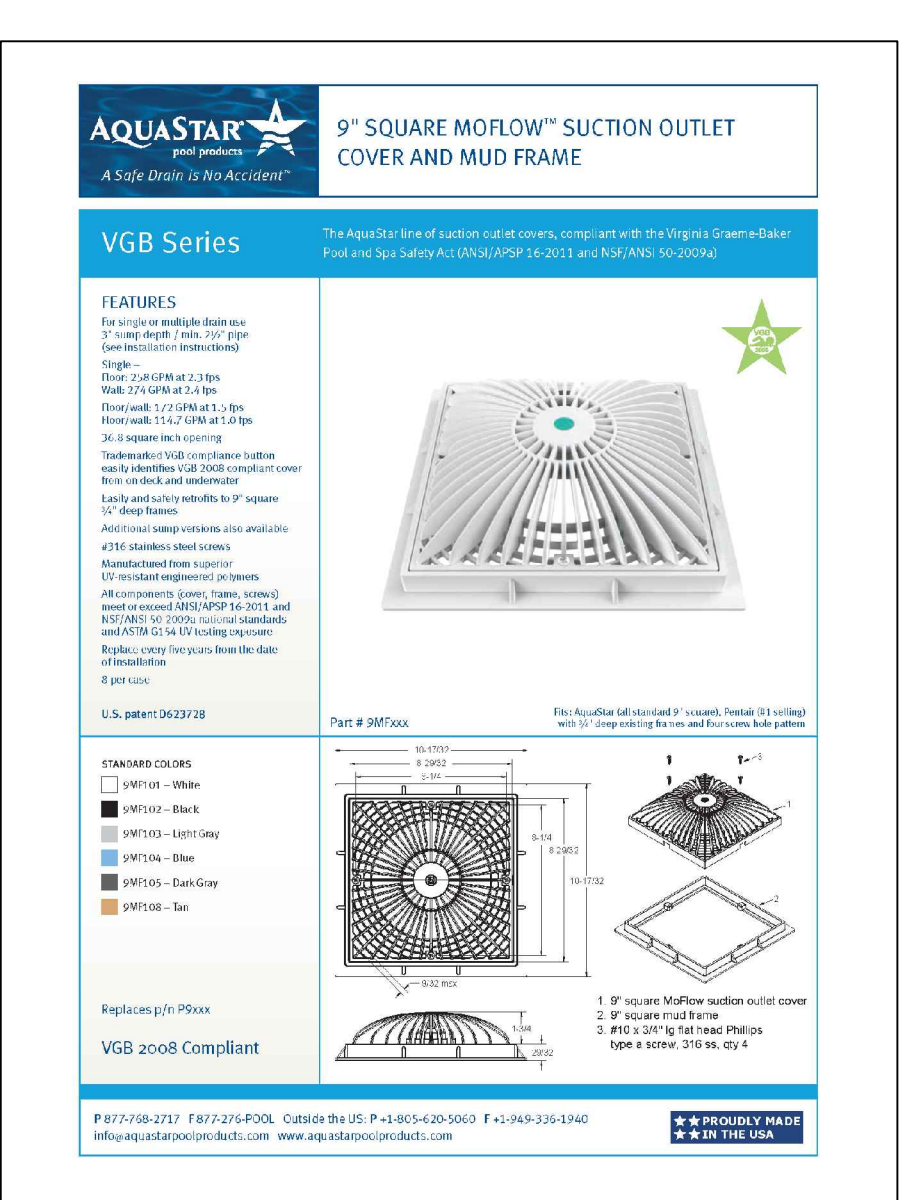
01 SYSTEM SCHEMATIC
PL-1.4 SCALE: NOT TO SCALE



05 RAINBOW CHLORINATOR
PL-1.4 SCALE: NOT TO SCALE



06 UNDERWATER POOL LIGHT
PL-1.4 SCALE: NOT TO SCALE



07 MAIN DRAIN SUCTION COVER
PL-1.4 SCALE: NOT TO SCALE