

Riverflow Plumbing notes

Review the following plumbing installation overview prior to installing the Riverflow™ system.

- All elevation measurements should be referenced from the pool's normal water line.
- We recommend that ALL Riverflow components, pipe and fittings be present at the job site before plumbing begins. Complete plumbing layout prior to poured concrete, Gunitite or Shotcrete to verify angles and elevations.
- Large diameter PVC fittings vary in size and dimension. Measure fittings for actual dimensions.
- Use only primer and solvent cement rated for 10-in. diameter or larger PVC pipe. (IPS Weldon 717)
- To insure sound glue joints, all pipe ends should be beveled and fully seated in fittings.
- Riverflow suction run(s) are normally level from pool to pump. However, Riverflow suction fittings can be installed up to a minimum of 12-in. below water line.
- For lazy river applications, nozzles should be 10"- 12" from the water level to the top of the nozzle.
- For swim in place applications, nozzles should be 5" from the water level to the top of the nozzle
- Keep all plumbing runs from pump to pool as straight as possible. Always use 45° elbow(s) rather than 90° elbow when possible. Always use sweep (long radius) 90's where possible Spears # P-300-100 & P-300-120. If the return run exceeds three 45° elbows, contact Riverflow support at Current Systems Inc. PST 805-339-9292 or EST 954-889-0311.
- All trenching and excavations must be backfilled and compacted to meet industry standards to support the Riverflow pump, fittings and pipe.
- Upon completion of plumbing and prior to motor installation, a 24"x 24" x 3" concrete stabilizing collar should be poured around the pump housing, leaving 1-in. clearance below the pump head nuts. Keep dirt, standing water, and shrubs off the pump head.

NOTE: All wall penetrations edges should be back-cut while cement is wet. Dry pack with hydraulic cement or similar industry approved material before the application of finish plaster.



RIVERFLOW LAZY RIVER PLUMBING

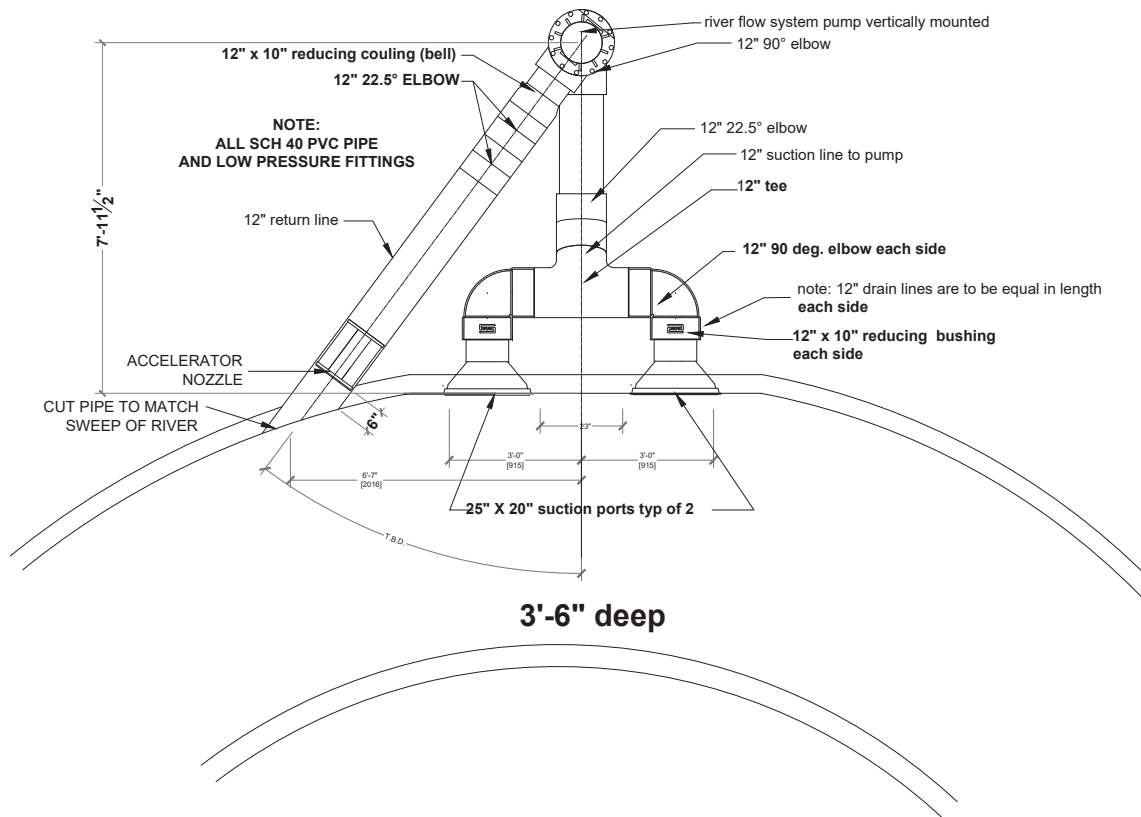
Current Systems, Inc.
West Coast 805-339-9292
East Coast 954-889-0311

www.riverflowpumps.com

-2-

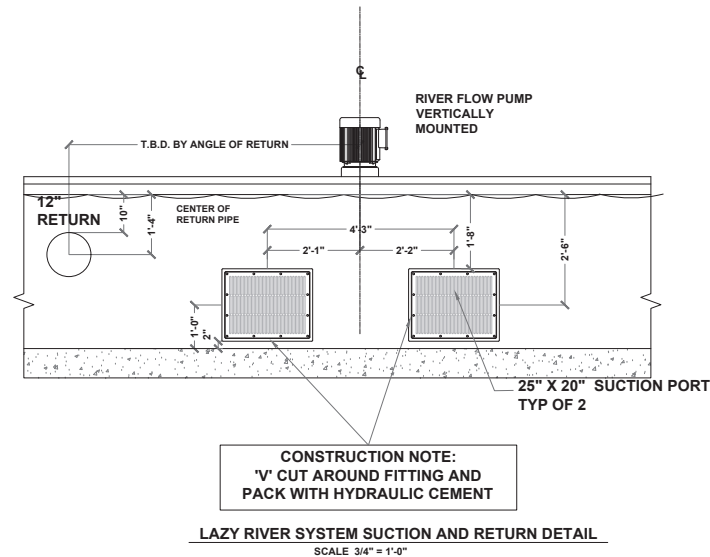
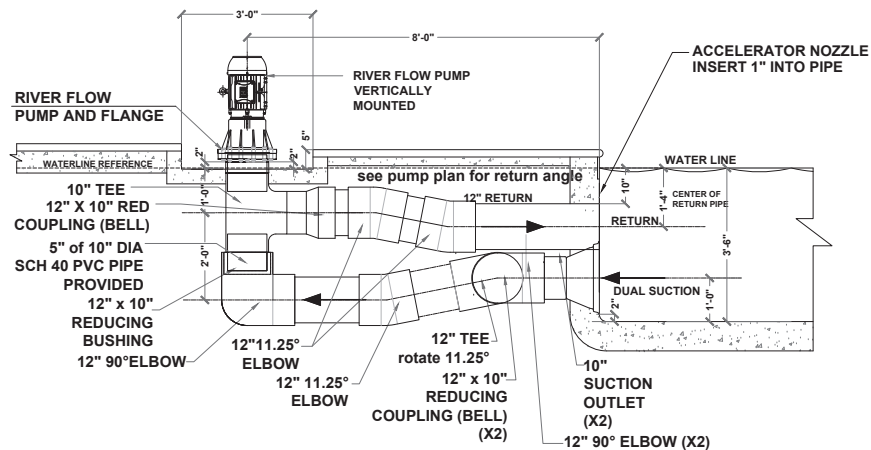


Certified to ANSI/APSP/ICC-16 2017 and NSF/ANSI Standard 50



LAZY RIVER PUMP LAYOUT

SCALE 3/4" = 1'-0"



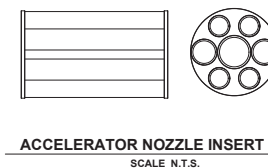
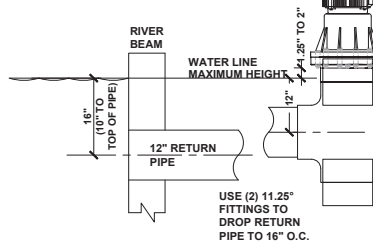
PARTS LIST: LAZY RIVER SYSTEM		
	1 x	PUMP MOTOR
	1 x	VARIABLE FREQUENCY DRIVE
	1 x	RIVERFLOW PUMP
	2 x	DUAL SUCTION BOX
	1 x	ACCELERATOR NOZZLE
	1 x	12" 90° ELBOW
	3 x	12" 11.25° ELBOW
	1 x	12" TEE
	1 x	12" X 10" REDUCING COUPLING (BELL)
	3 x	12" X 10" REDUCING BUSHING

BOX
DENOTES
COMPONENTS
INCLUDED IN
RIVERFLOW
SYSTEM

ADDITIONAL
REQUIRED
ITEMS NOT
INCLUDED

CRITICAL NOTE:
THIS SYSTEM IS A FLOODED SUCTION SYSTEM. TO MAINTAIN FLOODED SUCTION PUMP INSTALLATION MUST ADHERE TO MAXIMUM HEIGHT IN RELATION TO WATER LINE.

VERTICAL INSTALLATION:
PUMP FLANGE GASKET MUST MEET MAXIMUM HEIGHT AT WATER LINE OR LOWER. PIPE FITTINGS ARE REQUIRED TO MAINTAIN RETURN @ 18" BELOW WATER LEVEL. REFER TO SECTIONS AND PLANS FOR PUMP ELEVATION AND REQUIRED FITTINGS AS PER PROJECT APPLICATION.



SYSTEM COMPONENTS INCLUDED:

- (1) Riverflow Pump RF 104 2400 GPM
- (2) Suction Boxes and VGB Grates
- (1) Accelerator Nozzle 12 Inch
- (1) Electric Motor 7.5 HP
- (1) ABB NEMA 4 X 7.5 480 Volt VFD
- (1) Motor Mounting Hardware
- (1) Outdoor Cover Box over Vault
- (1) Motor Spacer
- (1) Plumbing Fittings Package based on PART SCHEDULE B PAGE 2

SYSTEM COMPONENTS NOT INCLUDED:

- **Provided by Others**
- (1) Cover Box Breaker Panel
- (1) Cover Box Disconnect
- (1) 110 Volt Outlet
- (1) 4 Inch Drainage
- (1) Concrete Vault
- (1) 12" Press Seal Waterstop #630.1275 Panel & Other Components Racks
- 10 Inch and 12 Inch Pipe & Fittings
- All Primer/ Glue and Applicators

PART SCHEDULE "B"

SHEET TITLE
SYSTEM DETAILS

LAZY RIVER
3'-6" DEPTH

PROJECT NAME:

888-443-4113 Toll Free
954-885-0311 Direct
Riverflow
Your Moving Water Solution™
& Manufacturer of VGB Grates
www.current-systems.com



REVISION DATE(S)

1
2
3
4
5
6
7
8
9
10
11
12

JOB #
SCALE
AS NOTED
CHECKED BY
DRAWN BY
MICK

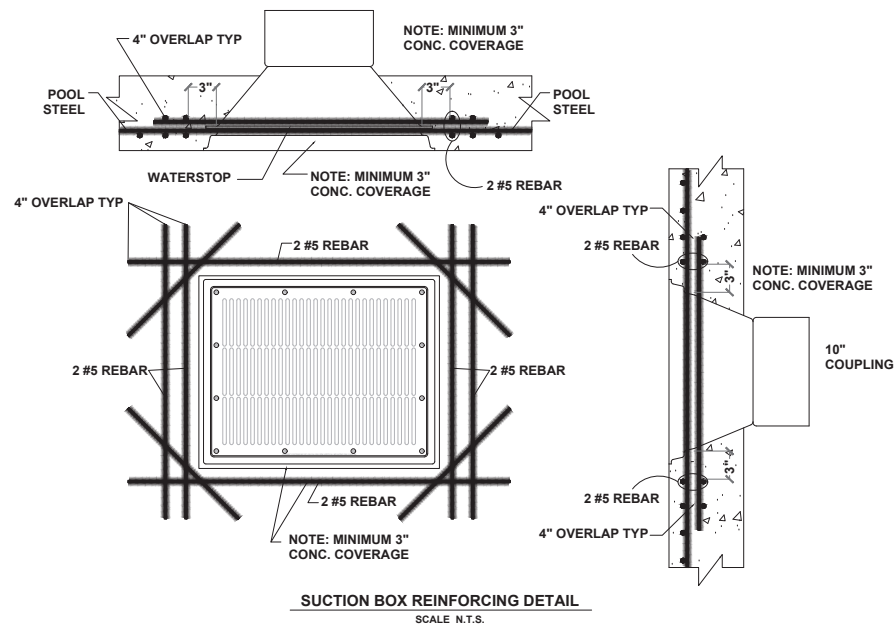
02 / 03 / 2022

SHEET NO.

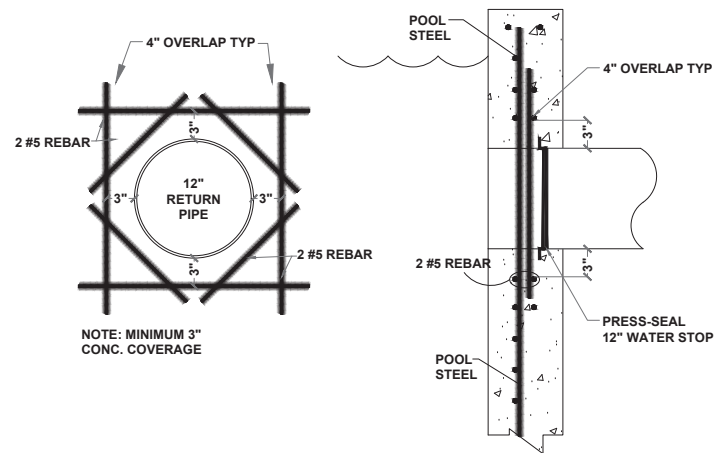
PAGE 4

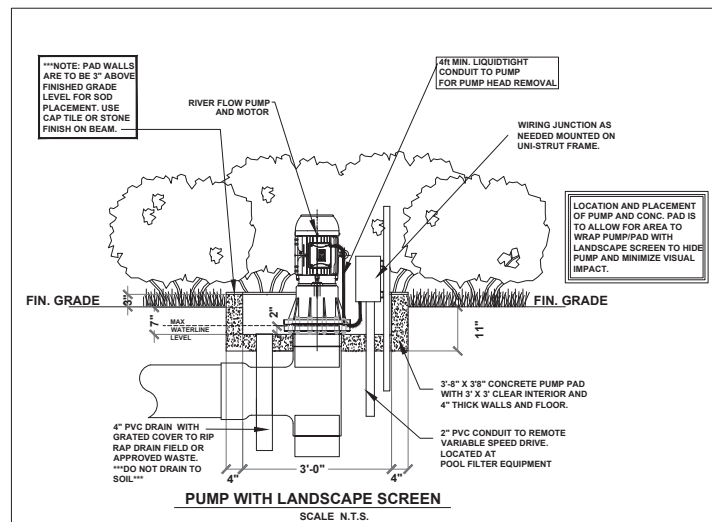
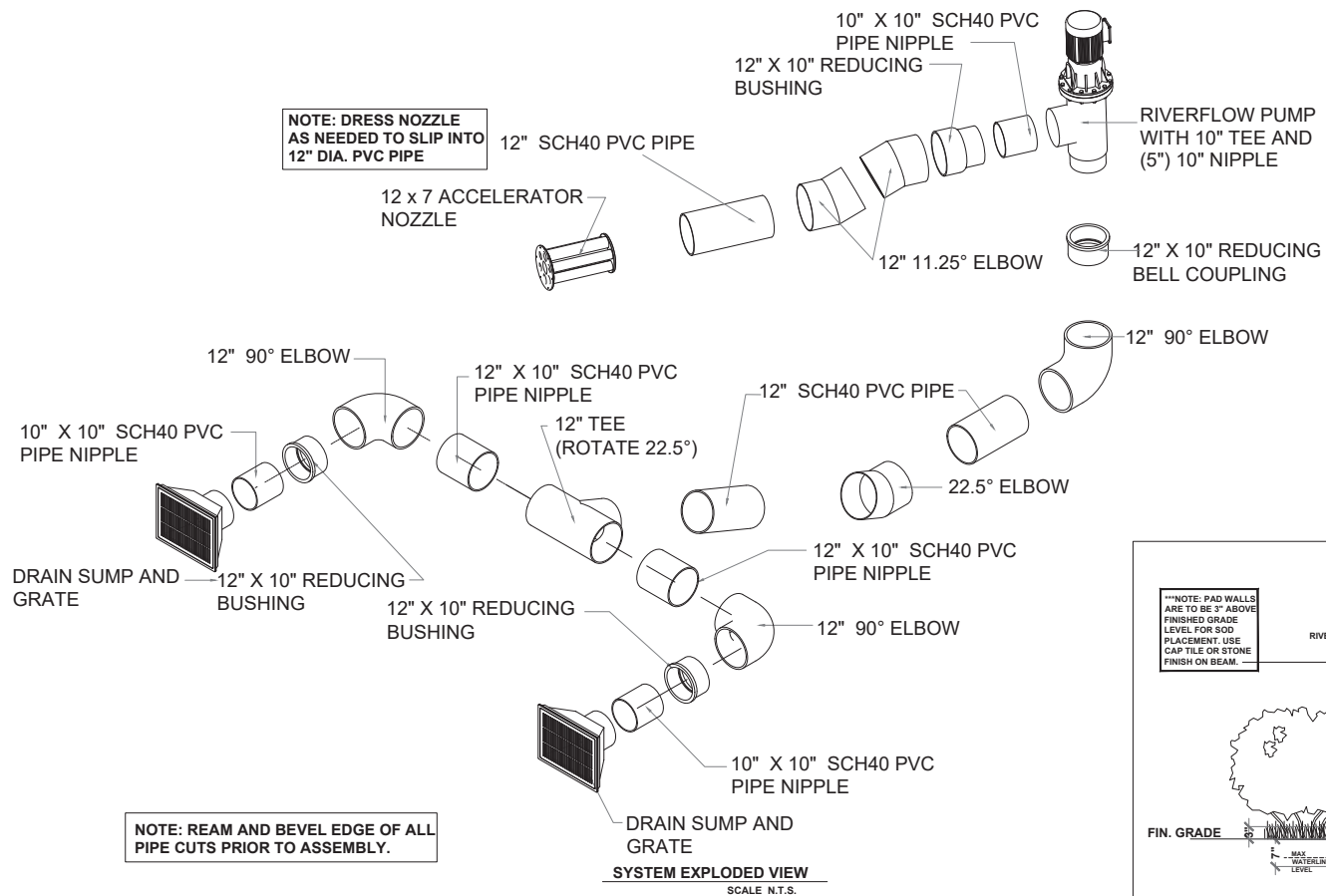


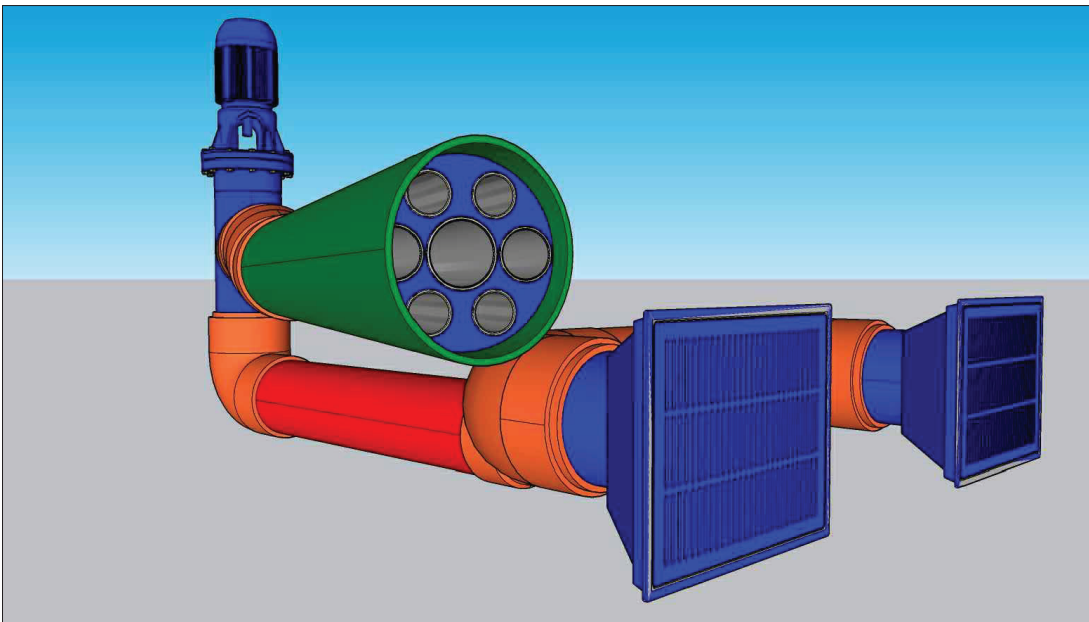
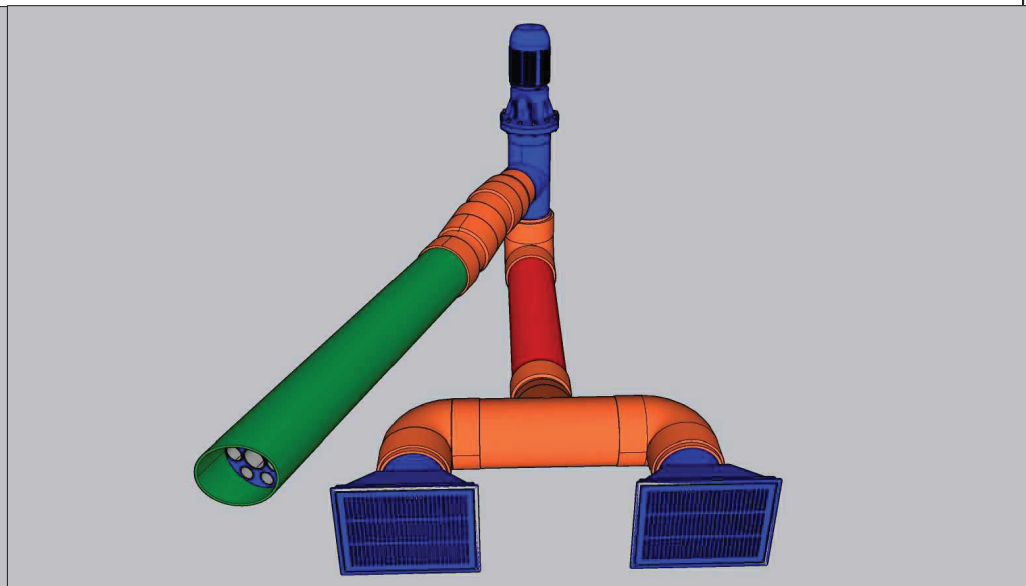
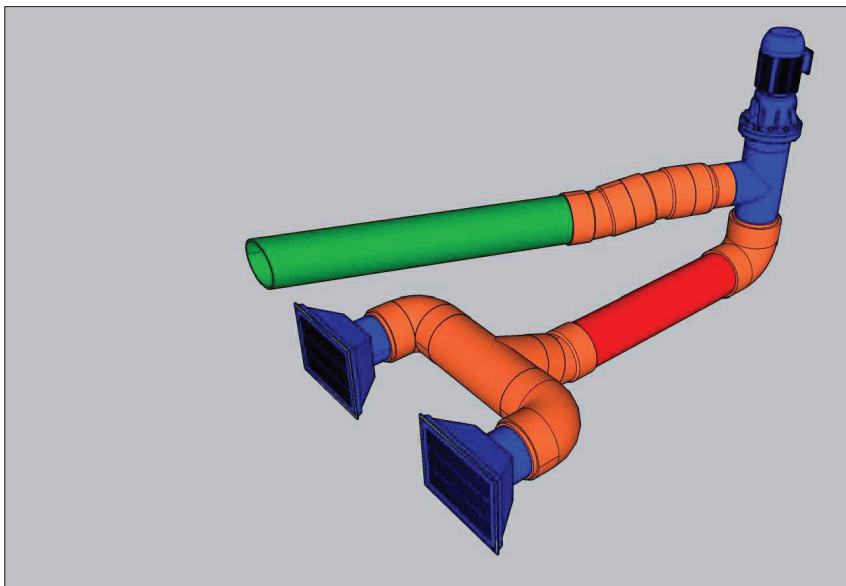
REVISION DATE(S)
▲
▲
▲
▲
▲
JOB #:
SCALE: AS NOTED
CHECKED BY:
DRAWN BY: MCK
02 / 03 / 2022
SHEET NO.:
PAGE 5



12" RETURN PIPE REINFORCING DETAIL
SCALE N.T.S.







-  12" SCH 40 PVC PIPE
PUMP SUCTION LINE
-  12" SCH 40 PVC PIPE
PUMP RETURN LINE
-  COMPONENTS INCLUDED
WITH RIVERFLOW CURRENT
SYSTEM.
-  12" DWV FITTINGS FOR
ASSEMBLY SOLD
SEPARATELY



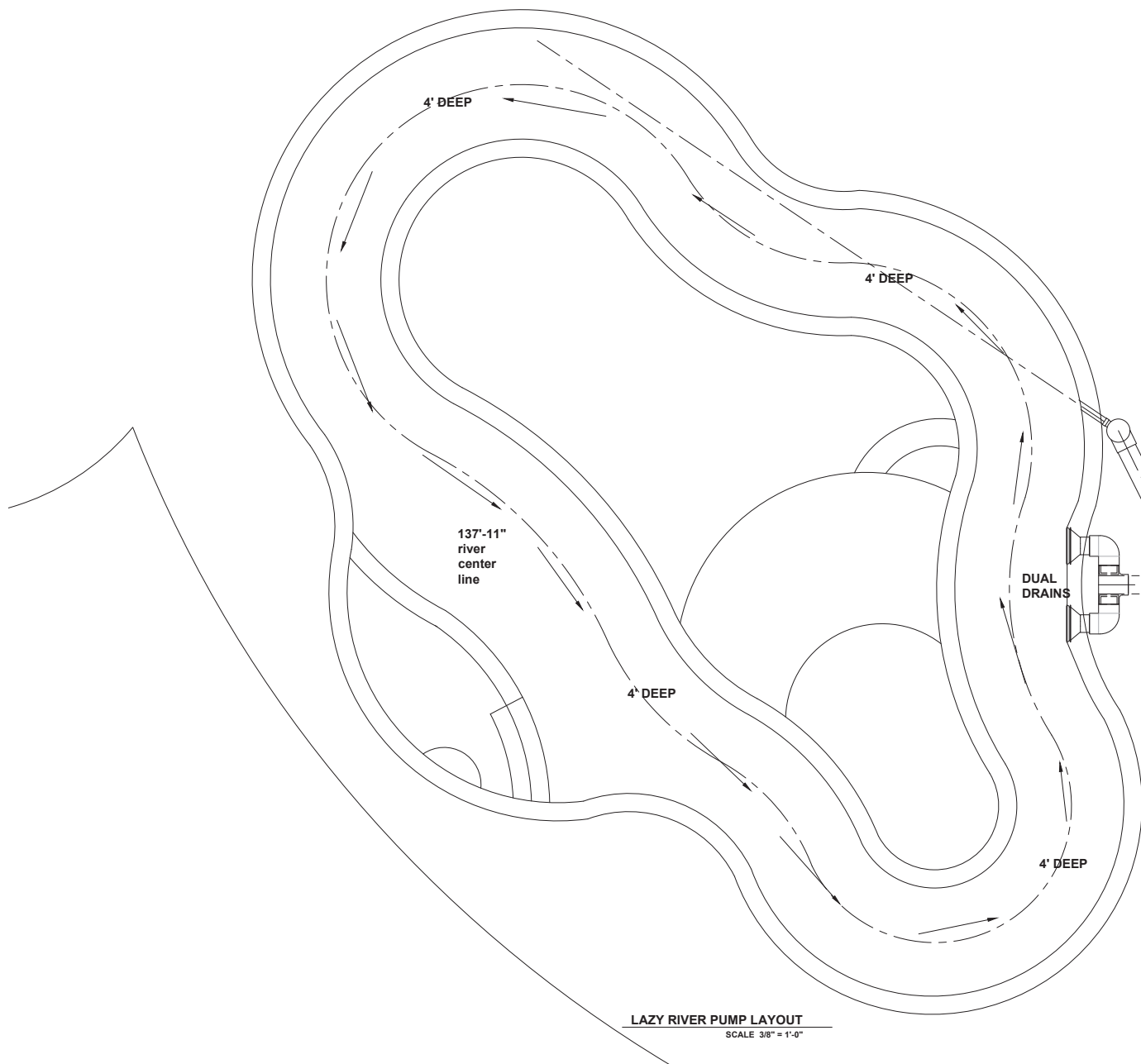
VARIABLE SPEED DRIVE INCLUDED

COLOR CODE
3D IMAGES

**LAZY RIVER
3'-6" DEPTH**

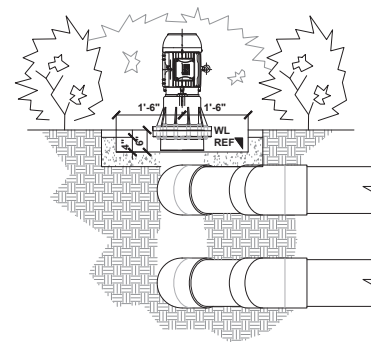
888-443-4113 Toll Free
954-885-0311 Direct
www.current-systems.com
"Your Moving Water Solution"
& Manufacturer of VGB Grates

REVISION DATE/	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
JOB #	
SCALE	
AS NOTED	
CHECKED BY	
DESIGNED BY	
MCK	
02 / 03 / 2022	
SHEET NO.	
PAGE 7	



LAZY RIVER PUMP LAYOUT
SCALE 3/8" = 1'-0"

LANDSCAPE SCREEN AROUND PUMP
LEAVE OPENING FOR ACCESS OUT OF VIEW



PUMP LANDSCAPE SCREEN
SCALE 3/4" = 1'-0"

TEE BOOSTER

DUAL DRAINS

PUMP

**NOTE: HIDE PUMP WITH LANDSCAPE
SCREEN AROUND PUMP
WITH OPEN AREA FOR PUMP
MAINTENANCE**

SHEET TITLE
**LAZY RIVER / PUMP
LAYOUT**

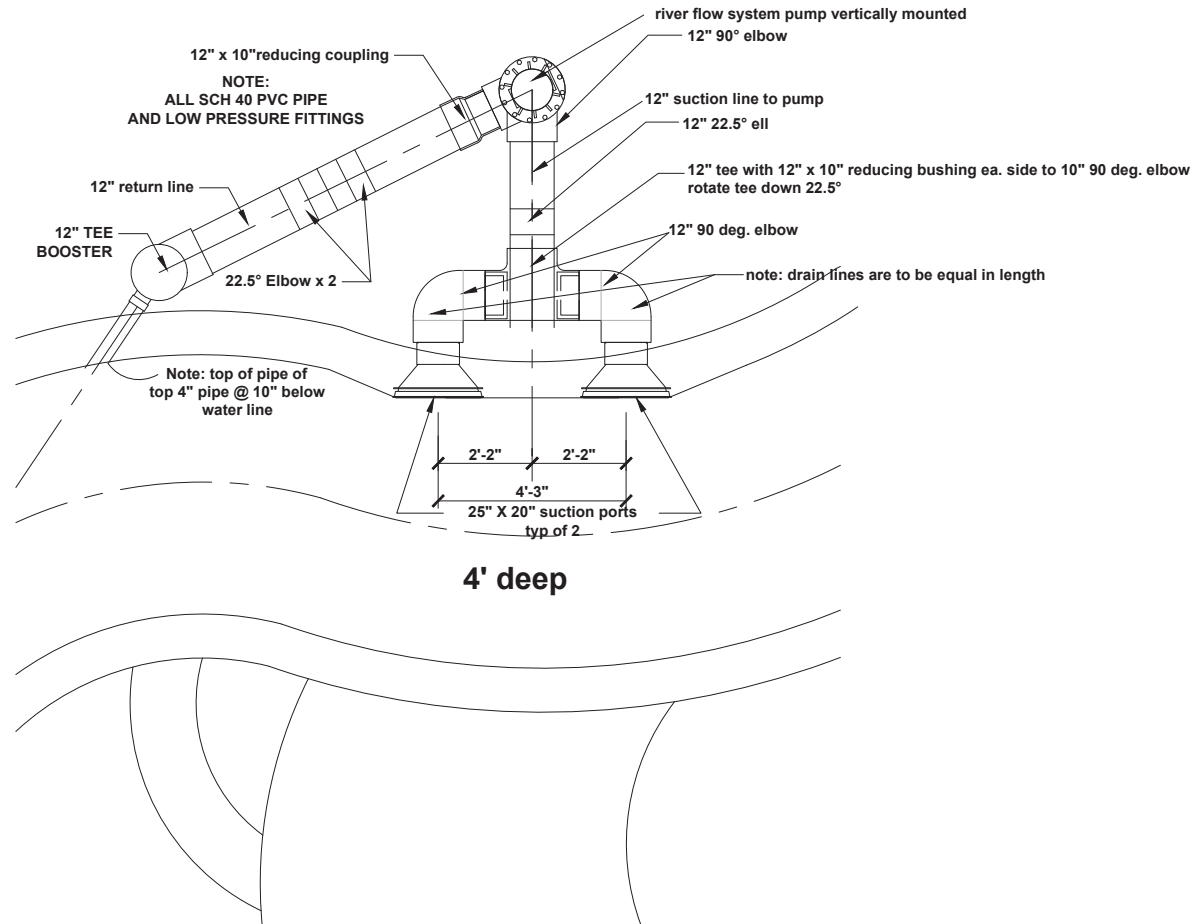
PROJECT NAME
**SYLVAN / PICKETT
RIVERFLOW PUMP
4FT DEEP LAZY RIVER**

888-443-4113 Toll Free
954-885-0311 Direct
Your Moving Water Solution™
& Manufacturer of VGB Grates
www.current-systems.com



REVISION DATE(s)	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
JOB #	
SCALE	AS NOTED
CHECKED BY	
DRAWN BY	MICK
DATE	08 / 25 / 2020
SHEET NO.	PAGE 8

**RIVER FLOW PUMP WITH
FLOODED SUCTION
OPERATING PRESSURE
LESS THAN 5 PSI**



LAZY RIVER PUMP LAYOUT
SCALE 3/4" = 1'-0"

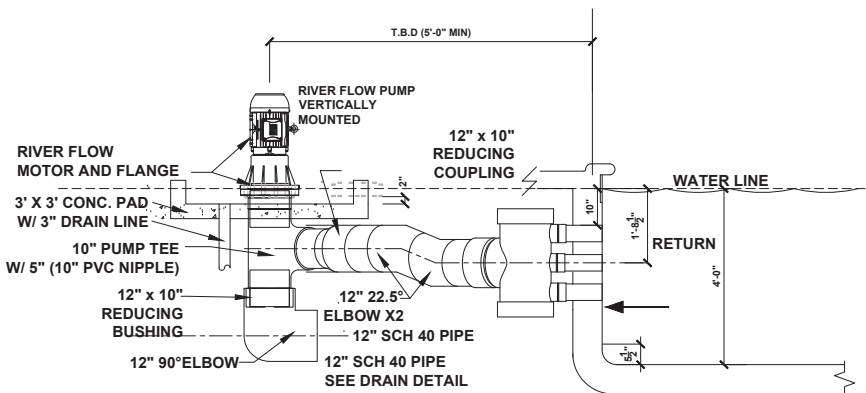
SHEET TITLE
PUMP LAYOUT

PROJECT NAME
**SYLVAN / PICKETT
RIVERFLOW PUMP
4FT DEEP LAZY RIVER**

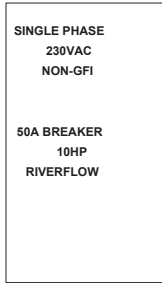
888-443-4113 Toll Free
954-885-0311 Direct
Your Moving Water Solution™
& Manufacturer of VGB Grates
www.current-systems.com

Riverflow

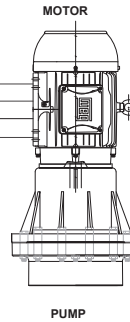
REVISION DATE/	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
JOB #	
SCALE	AS NOTED
CHECKED BY	
DRAWN BY	MICK
DATE	08 / 25 / 2020
SHEET NO.	PAGE 9



MAINTENANCE
OR SUB-PANEL



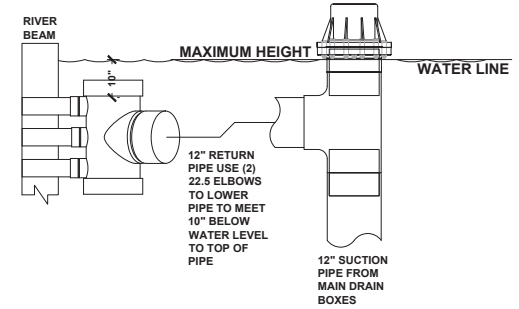
DISCONNECT
NON-FUSED
(IF REQUIRED)



SINGLE PHASE TO THREE PHASE WIRING DIAGRAM

CRITICAL NOTE:
THIS SYSTEM IS A FLOODED
SUCTION SYSTEM. TO MAINTAIN
FLOODED SUCTION
PUMP INSTALLATION MUST
ADHERE TO MAXIMUM HEIGHT
IN RELATION TO WATER LINE.

VERTICAL INSTALLATION:
PUMP FLANGE GASKET MUST
MEET MAXIMUM HEIGHT AT
WATER LINE OR LOWER. PIPE
FITTINGS ARE REQUIRED TO
MAINTAIN RETURN @ 10"
BELOW WATER LEVEL. REFER
TO SECTIONS AND PLANS FOR
PUMP ELEVATION AND
REQUIRED FITTINGS AS PER
PROJECT APPLICATION.



VERTICAL PUMP INSTALLATION
SCALE N.T.S.

PARTS LIST: LAZY RIVER SYSTEM

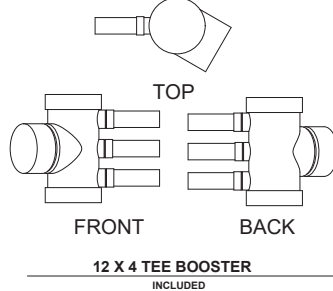
	1 x	10HP PUMP MOTOR
	1 x	RIVERFLOW PUMP
	2 x	DUAL SUCTION BOX
	1 x	12 X 4 TEE BOOSTER
	1 x	(VFD) VARIABLE FREQUENCY DRIVE
	1 x	(VFD) VARIABLE FREQUENCY DRIVE WEATHER PROOF COVER
	3 x	12" 90° ELBOW
	3x	12" 22.5° ELBOW
	1x	12" X 10" RED. COUPLING
	1 x	12" TEE
	3 x	12" X 10" REDUCING BUSHING

BOX
DENOTES
COMPONENTS
INCLUDED IN
RIVERFLOW
SYSTEM

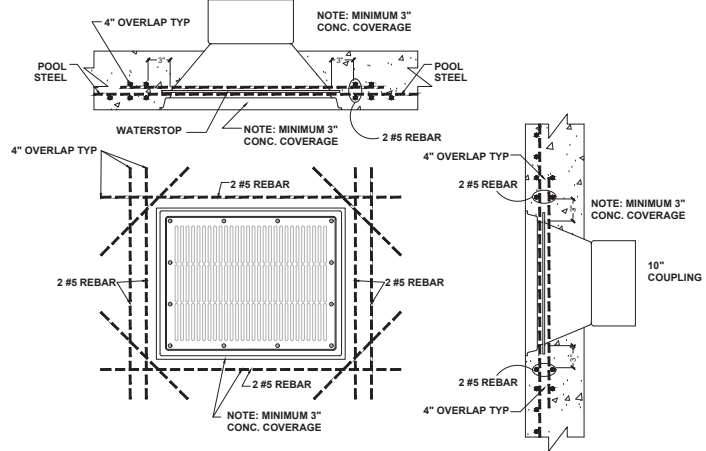
ADDITIONAL
REQUIRED
ITEMS NOT
INCLUDED



(VFD) VARIABLE FREQUENCY DRIVE
INCLUDED



12 X 4 TEE BOOSTER
INCLUDED



SUCTION BOX REINFORCING DETAIL
SCALE N.T.S.

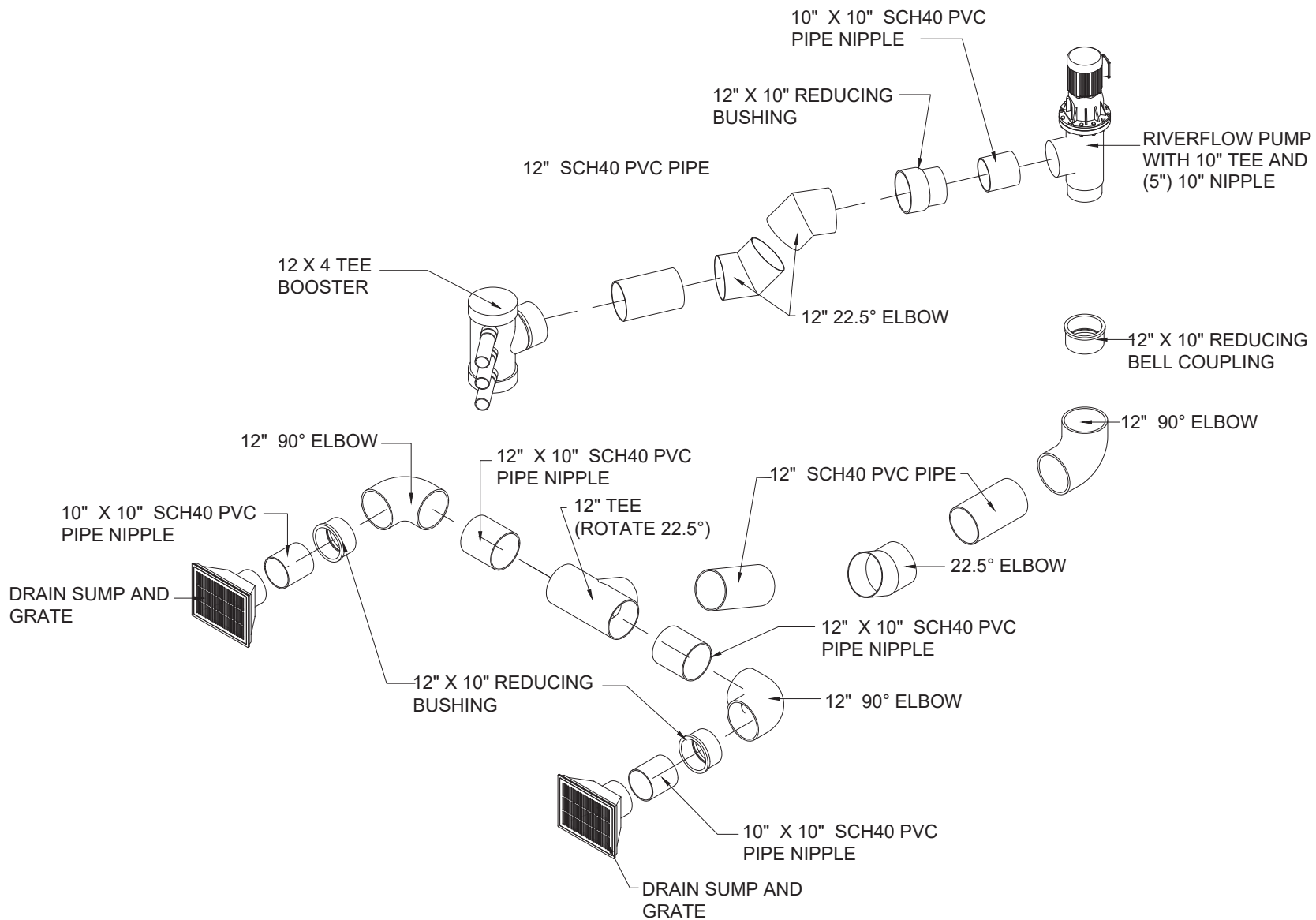
SHEET TITLE
SYSTEM DETAILS (2)

PROJECT NAME
SYLVAN / PICKETT
RIVERFLOW PUMP
4FT DEEP LAZY RIVER

888-443-4113 Toll Free
954-889-0311 Direct
www.current-systems.com
Your Moving Water Solution™
& Manufacturer of VGB Grates

REVISION DATE/0/

JOB #	
SCALE	AS NOTED
CHECKED BY	
DRAWN BY	MICK
08 / 25 / 2020	
SHEET NO.	PAGE 11



SHEET TITLE
SYSTEM EXPLODED
VIEW

PROJECT NAME
**SYLVAN / PICKETT
RIVERFLOW PUMP
4FT DEEP LAZY RIVER**

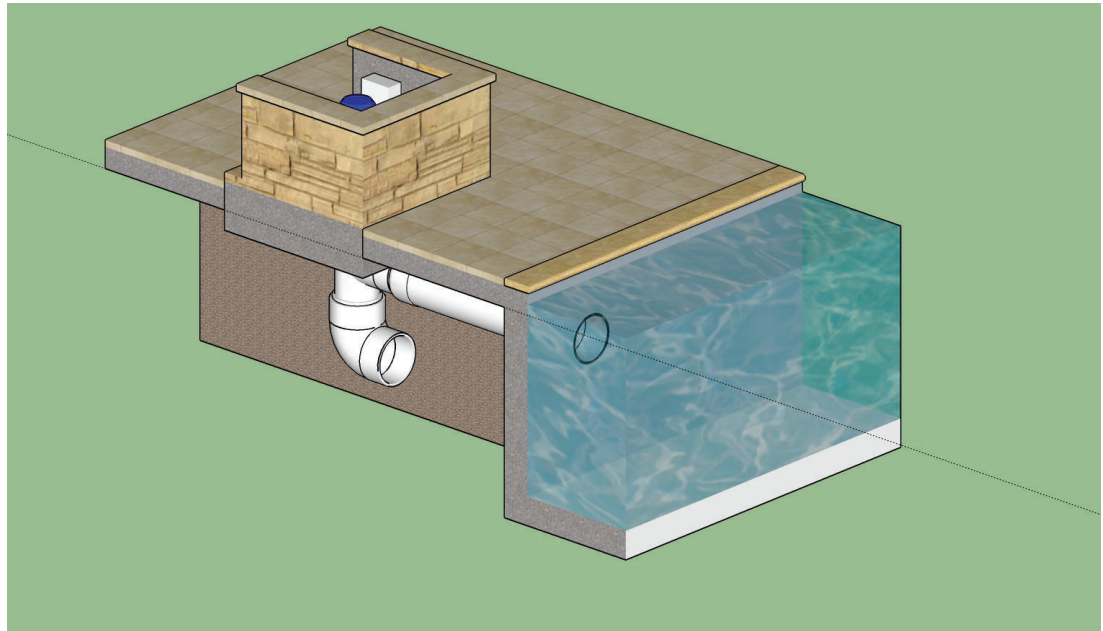
888-443-4113 Toll Free
954-885-0311 Direct
Your Moving Water Solution™
& Manufacturer of VGB Grates
www.current-systems.com

Riverflow

REVISION DATE(S)
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

JOB #
 SCALE
 AS NOTED
 CHECKED BY
 DRAWN BY
 MICK
 08 / 25 / 2020
 SHEET NO.
 PAGE 12

WAYS TO CONCEAL MOTOR



- BRICK WALL
- LANDSCAPING

REVISION
IMAGE
REFERENCES

RIVERFLOW
SWIM CURRENT
SYSTEM

PROJECT NAME:

Current Systems Inc. Manufacturer of
Riverflow Systems
805-339-9292 Peter Davidson
California
954-888-0311 Phil de Tournillon
Florida
www.riverflowpumps.com



By Current Systems Inc.

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

REVISION DATE: 6/

06 / 02 / 2020

SHEET NO.

PAGE 13