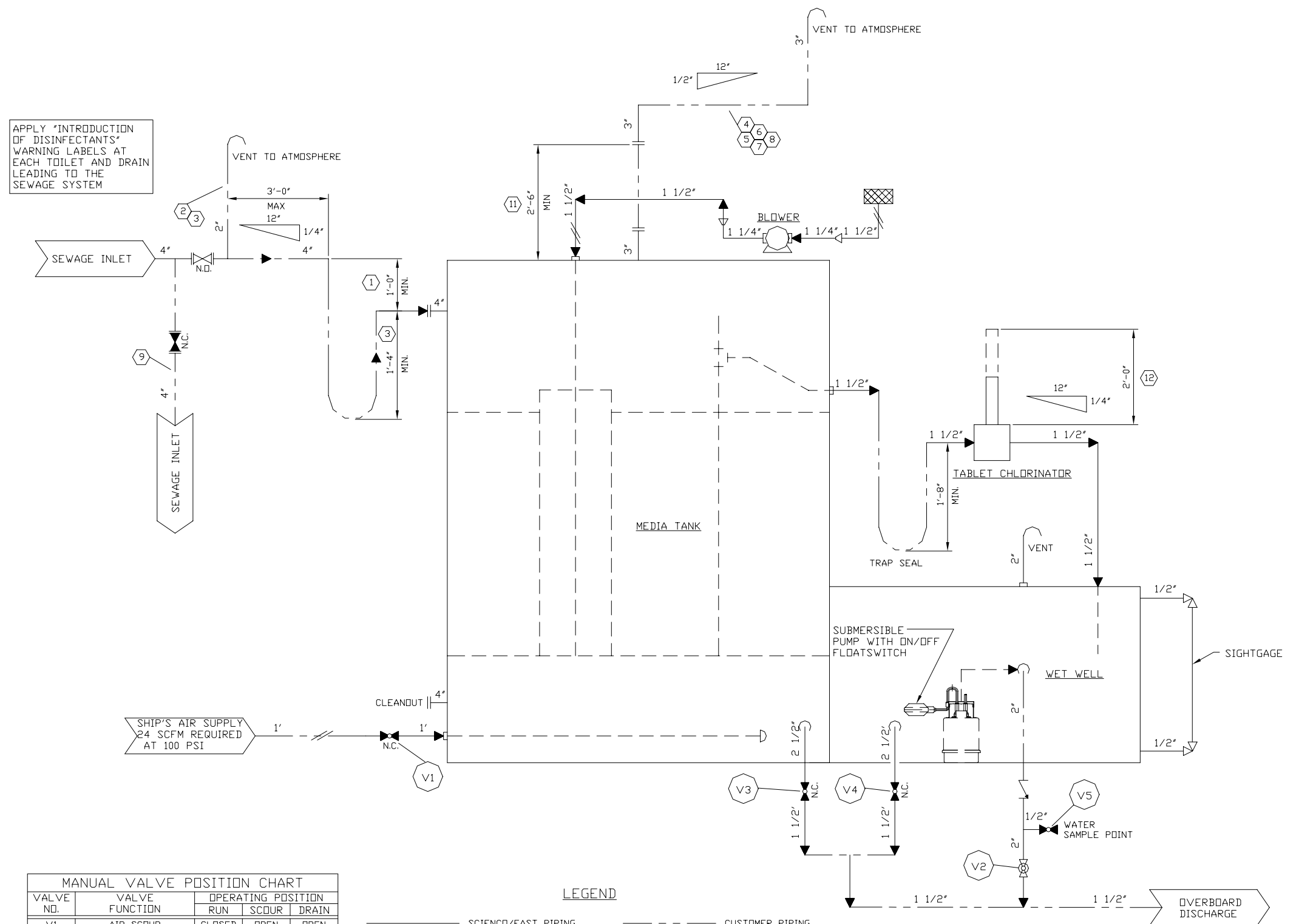


APPLY "INTRODUCTION OF DISINFECTANTS" WARNING LABELS AT EACH TOILET AND DRAIN LEADING TO THE SEWAGE SYSTEM



- NOTES:**
- CRITICAL HEIGHTS:**
- 1 CENTERLINE OF SOIL LINE TRAP INLET TO BE NOT LESS THAN 12 INCHES HIGHER THAN CENTERLINE OF MEDIA TANK INLET FLANGE.
- GRAVITY FLOW PIPING:**
- 2 GRAVITY SOIL PIPING LEADING TO MEDIA TANK TO SLOPE NOT LESS THAN 1/4" INCH PER FOOT AND BE EQUIPPED WITH PROPERLY VENTED TRAP AS SHOWN.
  - 3 TRAP DEPTH AND TRAP VENT SHOWN FOR 4 INCH SOIL PIPE. IF 6 INCH PIPE USED, INCREASE TRAP DEPTH TO 18 INCHES AND TRAP VENT PIPE TO 3 INCHES.
- MEDIA TANK VENT PIPING:**
- 4 DO NOT COMBINE MEDIA TANK VENT WITH ANY OTHER VENT.
  - 5 VENT TO TERMINATE NOT LESS THAN 10 FEET ABOVE WEATHER DECK, FROM ANY SOURCE OF IGNITION, AND FROM ANY VENTILATION AIR INLET.
  - 6 VENT TO TERMINATE HIGH RATHER THAN LOW, SINCE RISEN AIR IS WARMER THAN SURROUNDING AIR AND WILL RISE.
  - 7 HORIZONTAL OFFSETS IN MEDIA TANK VENT PIPING MUST BE SLOPED NOT LESS THAN 1/2 INCH PER FOOT SO THAT CONDENSATE WILL DRAIN TO MEDIA TANK.
  - 8 FLAME SCREEN IS NOT RECOMMENDED. IT WILL PLUG WITH LINT AND REQUIRE FREQUENT CLEANING. IF A FLAME SCREEN MUST BE USED, SCREEN TO BE TWO PIPE SIZES LARGER THAN VENT PIPE.
- EMERGENCY OVERBOARD BYPASS:**
- 9 AN EMERGENCY OVERBOARD BYPASS IS REQUIRED TO PROVIDE THE USE OF SANITARY FACILITIES IN CASE OF EQUIPMENT MALFUNCTION.
  - 10 MOUNT SEWAGE INLET GATE VALVE AND EMERGENCY BYPASS GATE VALVES WITH STEMS IN AN UPRIGHT VERTICAL POSITION.
- MAINTENANCE AND CLEARANCE REQUIREMENTS:**
- 11 ALLOW AT LEAST 30 INCHES CLEARANCE ABOVE MEDIA TANK COVER TO VENT SPDDL FLANGED CONNECTION TO PERMIT REMOVAL OF COVER FOR INTERNAL MAINTENANCE.
  - 12 ALLOW 24 INCHES CLEARANCE ABOVE CHLORINATOR FOR REMOVAL OF CHLORINE TABLET REFILL TUBES.
- GENERAL PIPING REQUIREMENTS:**
- 13 CONNECTING PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE REGULATORY BODIES.
  - 14 RECOMMENDED MATERIAL IS SCHEDULE 40 STEEL.

**MANUAL VALVE POSITION CHART**

VALVE NO.	VALVE FUNCTION	OPERATING POSITION		
		RUN	SCOUR	DRAIN
V1	AIR SCOUR	CLOSED	OPEN	OPEN
V2	WET WELL DISCHARGE	OPEN	OPEN	OPEN
V3	MEDIA TANK DRAIN	CLOSED	CLOSED	OPEN
V4	WET WELL DRAIN	CLOSED	CLOSED	OPEN
V5	WATER SAMPLE POINT	CLOSED	CLOSED	CLOSED

**LEGEND**

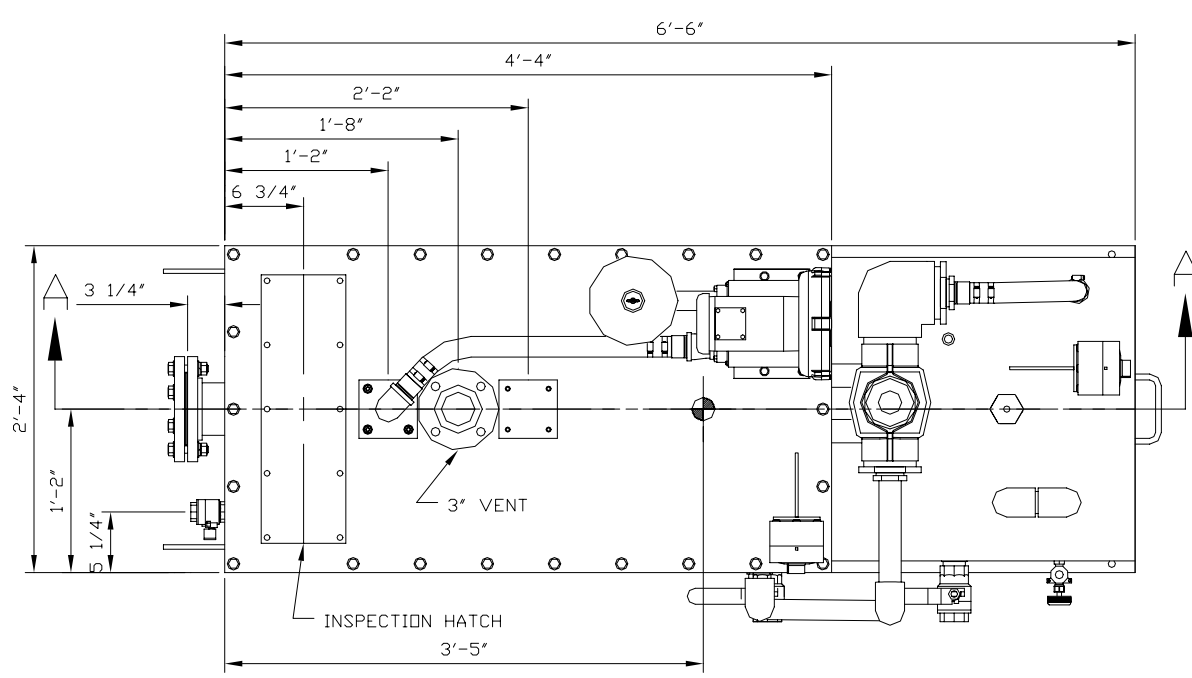
SCIENCO/FAST PIPING	CUSTOMER PIPING
NORMALLY OPEN	NORMALLY CLOSED
GATE VALVE- FLANGED	BALL VALVE- SCREWED
SWING CHECK VALVE	REDUCER
INLET FILTER	FLANGED CONNECTION
3 WAY BALL VALVE	CUSTOMER SUPPLIED VALVE

**BLOWER & PUMP OPERATION**

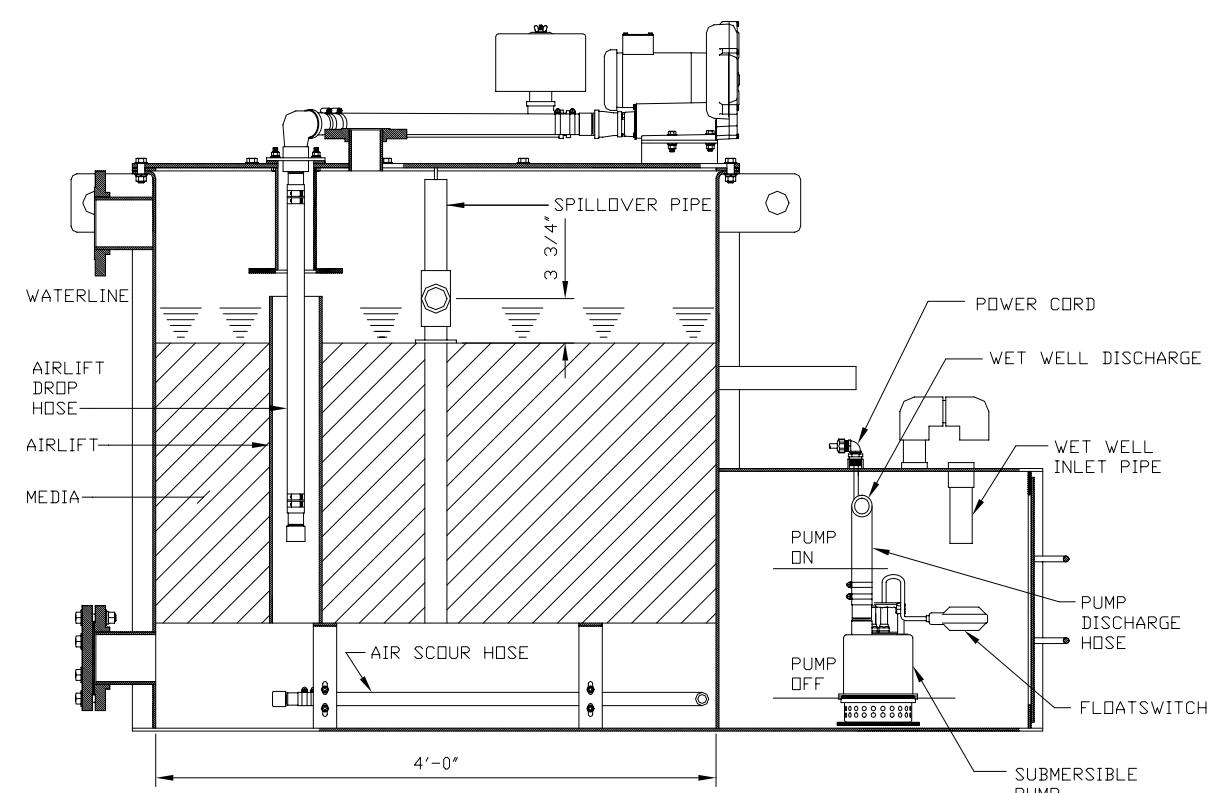
MOTOR CALLOUT	OPERATING POSITION	
	RUN	SCOUR / DRAIN
BLOWER	ON	OFF
PUMP	ON	OFF

NOTE: DRAWING DEPICTS SYSTEM IN NORMAL RUN OPERATION.

REV	DESCRIPTION	BY	DATE
<p><b>SCIENCO/FAST</b><sup>®</sup> 8229 BRENTWOOD INDUSTRIAL DRIVE BRENTWOOD, MO 63144-2814 U.S.A. PHONE: 314-645-6540 FAX: 314-645-6131</p>			
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SYSTEM		FAST SEWAGE TREATMENT	
CUSTOMER		GREEN MARINE (INGRAM BARGE)	
<b>TITLE</b> SYSTEM PIPING DIAGRAM & INSTALLATION DATA			
SCALE	DRAWN	CHECKED	APPROVED
SCALE	CEG		
SIZE	PREV. ASSY.	PLOT SCALE	DATE
D		1:1	10/24/03
CONTRACT NO.	MODEL NO.	DRAWING NO.	SHEET NO.
J-1306	MX2	11	1 OF 1
			REV
			0



PLAN VIEW



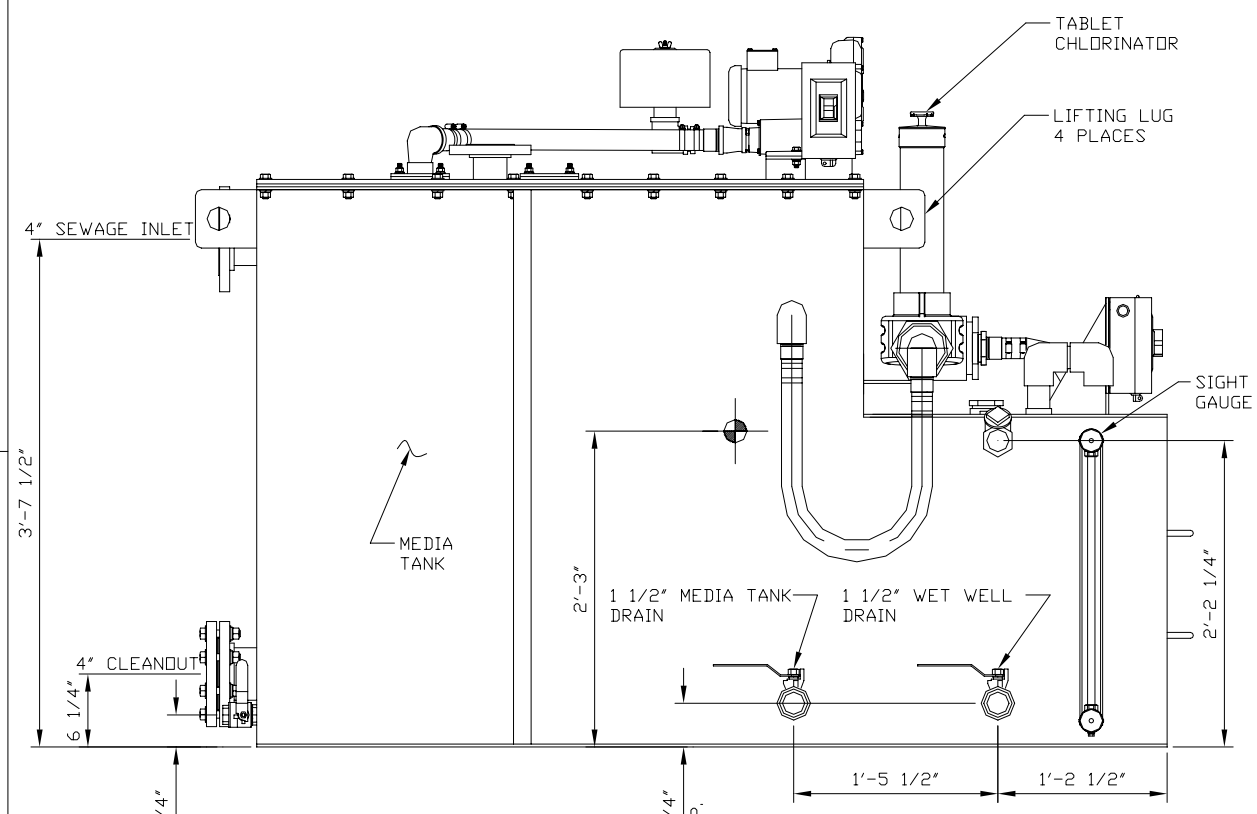
SECTION A-A

BLOWER WIRING SCHEMATIC

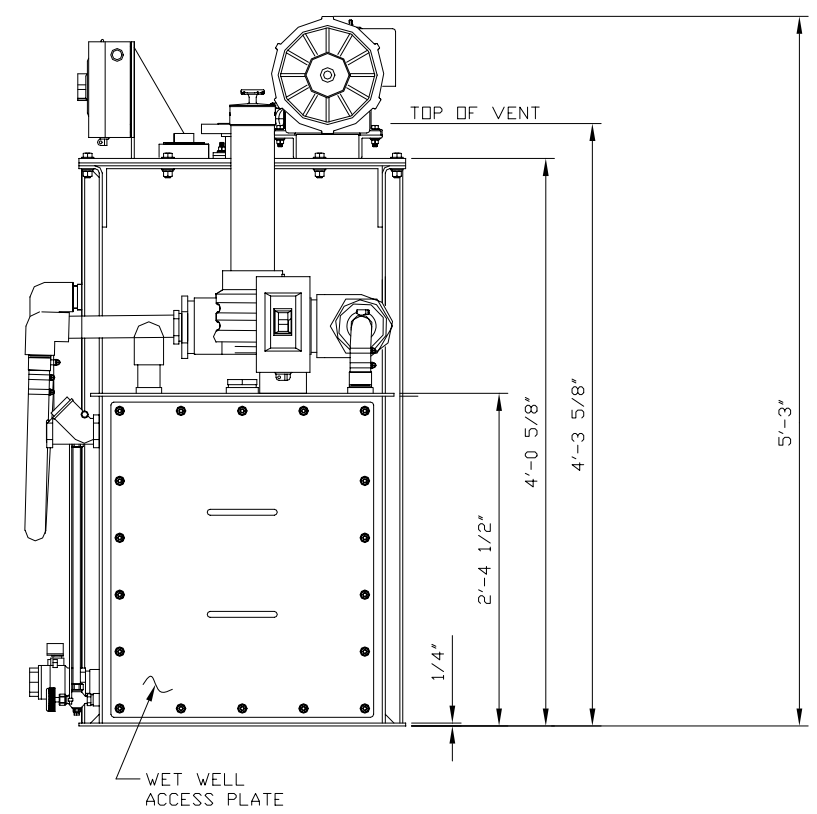
PUMP WIRING SCHEMATIC

NOTES:


1. TANK MAY BE INSTALLED EITHER FORE AND AFT OR ATHWARTSHIPS.
2. SUPPORT TANK BEDPLATE ALL AROUND ON FLAT SUPPORTING SURFACES NOT LESS THAN 3" WIDE. SECURE IN PLACE WITH 3/16" FILLET WELDS ALL AROUND, 3" ON 12" PER ABS REQUIREMENTS.
3. ESTIMATED WEIGHTS:  
SHIPPING: 1,600 LBS.  
OPERATING: 4,500 LBS.
4. ALL FLANGED CONNECTIONS ARE 150 LB., RAISED FACE, FORGED STEEL, ASTM A-105.
5. SEE DWG. MX2-CU000 FOR ADDITIONAL INSTALLATION REQUIREMENTS.



FRONT ELEVATION



WET WELL END VIEW

REV	DESCRIPTION	BY	DATE
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SYSTEM		FAST SEWAGE TREATMENT	
CUSTOMER		GULF MARINE BARGES	
TITLE			
FINAL ASSEMBLY			
SCALE	DRAWN	CHECKED	APPROVED
1 1/2"=1'-0"	CEG		
SIZE	PREV. ASSY.	PLOT SCALE	DATE
D		1:1	10/24/03
CONTRACT NO.	MODEL NO.	DRAWING NO.	SHEET NO.
J-1306	MX2	CU001	1 OF 1
			REV
			0