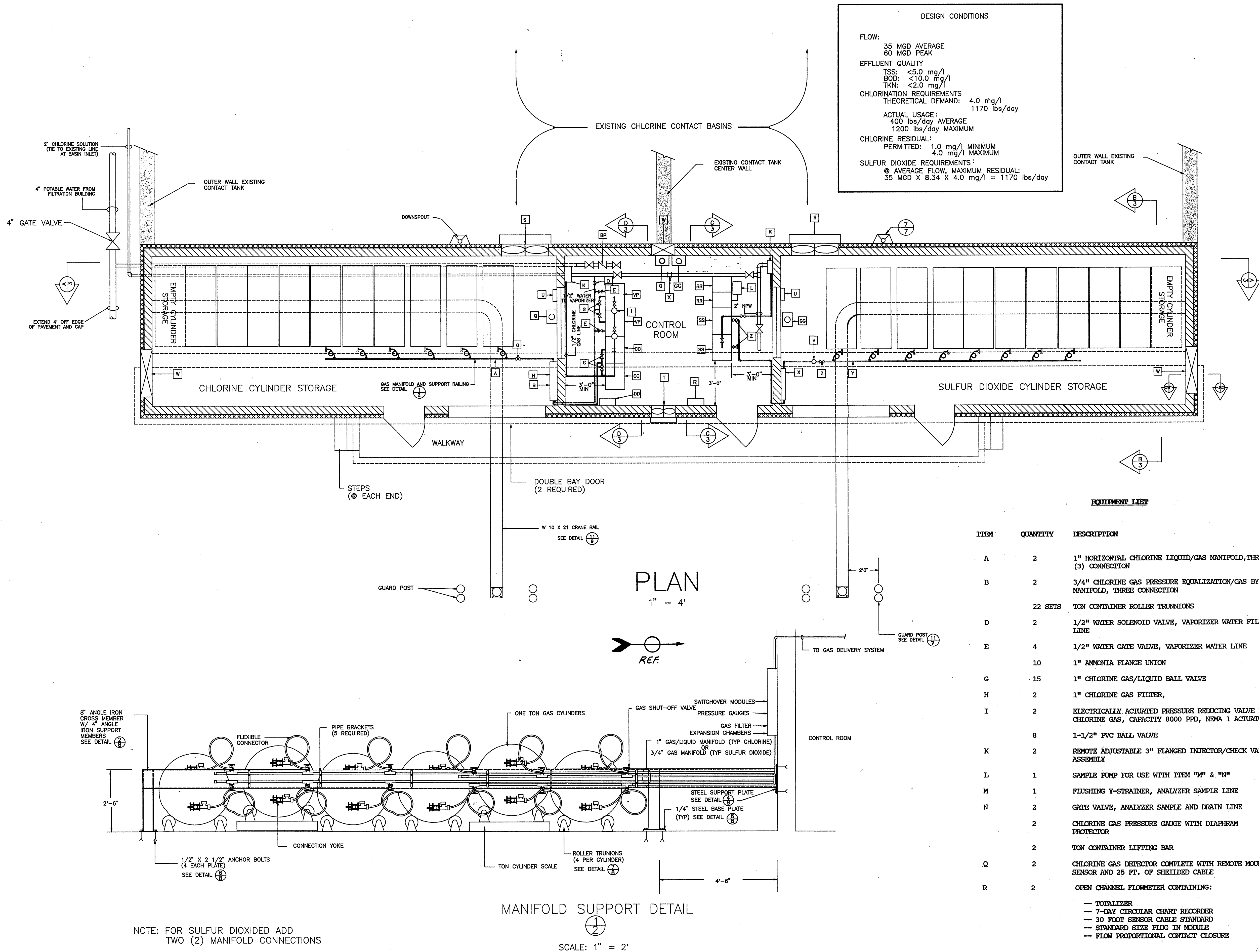
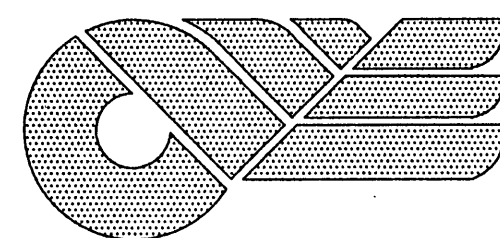




ITEM	QUANTITY	DESCRIPTION
A	2	1" HORIZONTAL CHLORINE LIQUID/GAS MANIFOLD, THREE (3) CONNECTION
B	2	3/4" CHLORINE GAS PRESSURE EQUALIZATION/GAS BYPASS MANIFOLD, THREE CONNECTION
	22 SETS	TON CONTAINER ROLLER TRUNNIONS
D	2	1/2" WATER SOLENOID VALVE, VAPORIZER WATER FILL LINE
E	4	1/2" WATER GATE VALVE, VAPORIZER WATER LINE
	10	1" AMMONIA FLANGE UNION
G	15	1" CHLORINE GAS/LIQUID BALL VALVE
H	2	1" CHLORINE GAS FILTER,
I	2	ELECTRICALLY ACTUATED PRESSURE REDUCING VALVE FOR CHLORINE GAS, CAPACITY 8000 PPD, NEMA 1 ACTUATOR
K	2	REMOTE ADJUSTABLE 3" FLANGED INJECTOR/CHECK VALVE ASSEMBLY
L	1	SAMPLE PUMP FOR USE WITH ITEM "M" & "N"
M	1	FLUSHING Y-STRAINER, ANALYZER SAMPLE LINE
N	2	GATE VALVE, ANALYZER SAMPLE AND DRAIN LINE
	2	CHLORINE GAS PRESSURE GAUGE WITH DIAPHRAM PROTECTOR
	2	TON CONTAINER LIFTING BAR
Q	2	CHLORINE GAS DETECTOR COMPLETE WITH REMOTE MOUNTED SENSOR AND 25 FT. OF SHEILDED CABLE
R	2	OPEN CHANNEL FLOWMETER CONTAINING:
		--- TOTALIZER
		--- 7-DAY CIRCULAR CHART RECORDER
		--- 30 FOOT SENSOR CABLE STANDARD
		--- STANDARD SIZE PLUG IN MODULE
		--- FLOW PROPORTIONAL CONTACT CLOSURE

S	2	GREENHECK SPF-24-5 4700 CFM PROPELLER FAN 1/2 HP WITH A WALL MOUNTED COLLAR, GRAVITY DAMPER, TEFC MOTOR AND HERESITE COATING ON ALL PARTS OF THE FAN OR AN APPROVED EQUAL.
T	1	GREENHECK SDE-20-32-C 2260 CFM PROPELLER FAN 1/4 HP WITH A WALL MOUNTED COLLAR, GRAVITY DAMPER, TEFC MOTOR AND HERESITE COATING ON ALL PARTS OF THE FAN OR AN APPROVED EQUAL.
U	4	ONE (1) TON CYLINDER SCALES AS MANUFACTURED BY TELEDIO SCALES OR AN APPROVED EQUAL WITH: --- NEMA 4X LED ELECTRONIC READOUT --- ELECTRONIC TEMPERATURE STRAIN GAUGE TRANSDUCER --- EPOXY FINISHED FRAME
V	2	3/4" SULFUR DIOXIDE GAS FILTER
W	3	RUSKIN MODEL L745 STEEL OPERABLE LOUVERS WITH BLADE AND EDGE SEALS, BIRDSCREEN, 120 VOLT ELECTRIC OPERATOR, OPERATOR LINKAGE, AND HERESITE COATING ON FRAME AND BLADES OR AN APPROVED EQUAL.
	2	GAS VACUUM SWITCHOVER SYSTEM, CONSISTING OF: --- TWO (2) PANEL MOUNTED VACUUM REGULATORS COMPLETE WITH INDICATING ROTOMETER, GAS INLET PRESSURE GAUGE AND DRIP LEG WITH HEATERS --- ONE (1) AUTOMATIC SWITCHOVER MODULE, WALL MOUNTED
X	1	3/4" STANDARD HOSE BIBB
Y	2	3/4" HORIZONTAL SULFUR DIOXIDE GAS MANIFOLD, TWO CONNECTIONS COMPLETE WITH MANIFOLD VALVES, ISOLATING VALVES, FLEXIBLE CONNECTORS, HEADER PIPING, DRIP LEG PIPING AND HEATERS.
Z	4	3/4" SULFUR DIOXIDE GAS BALL VALVE.
	4	3/4" AMMONIA FLANGE UNION.
SS	2	GAS SULFONATOR, FEED FORWARD CONTROL, CAPACITY 3000 PPD, CONSISTING OF: FLOOR MOUNTED CONTROL CABINET WITH CABINET MOUNTED: --- SULFUR DIOXIDE FLOW METER, 3000 PPD --- DIFFERENTIAL PRESSURE REGULATOR --- AUTOMATIC CONTROL VALVE --- MANUAL FEED CONTROL WITH BYPASS OF AUTOMATIC VALVE --- FEED FORWARD CONTROLLER
RR	2	INSTRUMENT CABINET, FLOOR MOUNTED, PRE-PIPED AND WIRED CONTAINING: --- CHLORINE RESIDUAL ANALYZER WITH DIGITAL INDICATOR --- CIRCULAR CHART RECORDER
DD	2	MULTIPLIER, WALL MOUNTED, INPUT SIGNALS: 4-20 mA DC LINEAR FLOW SIGNAL, 4-20 mA DC CHLORINE RESIDUAL SIGNAL; OUTPUT SIGNAL: 4-20 mA DC FEED FORWARD SIGNAL
	6	1" PVC BALL VALVE.
	1	2" X 7'-0" LONG HORIZONTAL CHANNEL DIFFUSER
GG	1	SULFUR DIOXIDE GAS DETECTOR COMPLETE WITH REMOTE MOUNTED SENSOR AND SHEILDED CABLE
BP	1	BACKFLOW PREVENTION DEVICE
	4	VAPOR EXPANSION CHAMBER
	10	DIAPHRAM PRESSURE GAUGES
		OWNER SUPPLIED EQUIPMENT
CC	2	WALLACE AND TEIRNAN SERIES V800 3000 PPD CHLORINATORS
VP	2	WALLACE AND TEIRNAN SERIES 50.202 6000 PPD VAPORIZERS
		SPARE PARTS LIST
	2	EJECTOR DIAPHRAM ASSEMBLIES.
	1	SAMPLE PUMP.
	2	1" PVC BALL VALVE.
	2	DIAPHRAM PRESSURE GAUGE.
	2	GAS FILTERS.

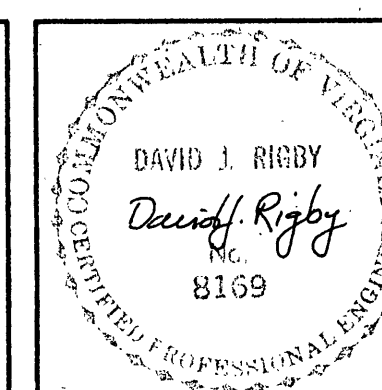


CLEAN WATER ENGINEERS, INC.

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FINCASTLE, VIRGINIA 24090

**ROANOKE POLLUTION CONTROL FACILITY
CHLORINATION/DECHLORINATION FACILITIES
BUILDING PLAN**



REVISIONS			DESIGNED:	SHEET:
			WGP	2 OF 10
NO.	DATE	BY	DRAWN:	SCALE:
1	4/21/89	WGP	CAD	AS SHOWN
2	5/9/89	DJR	CHECKED:	DATE:
3	5/31/89	DJR	DJR	APRIL, 89
			APPROVED:	PROJECT:
			DJR	87025