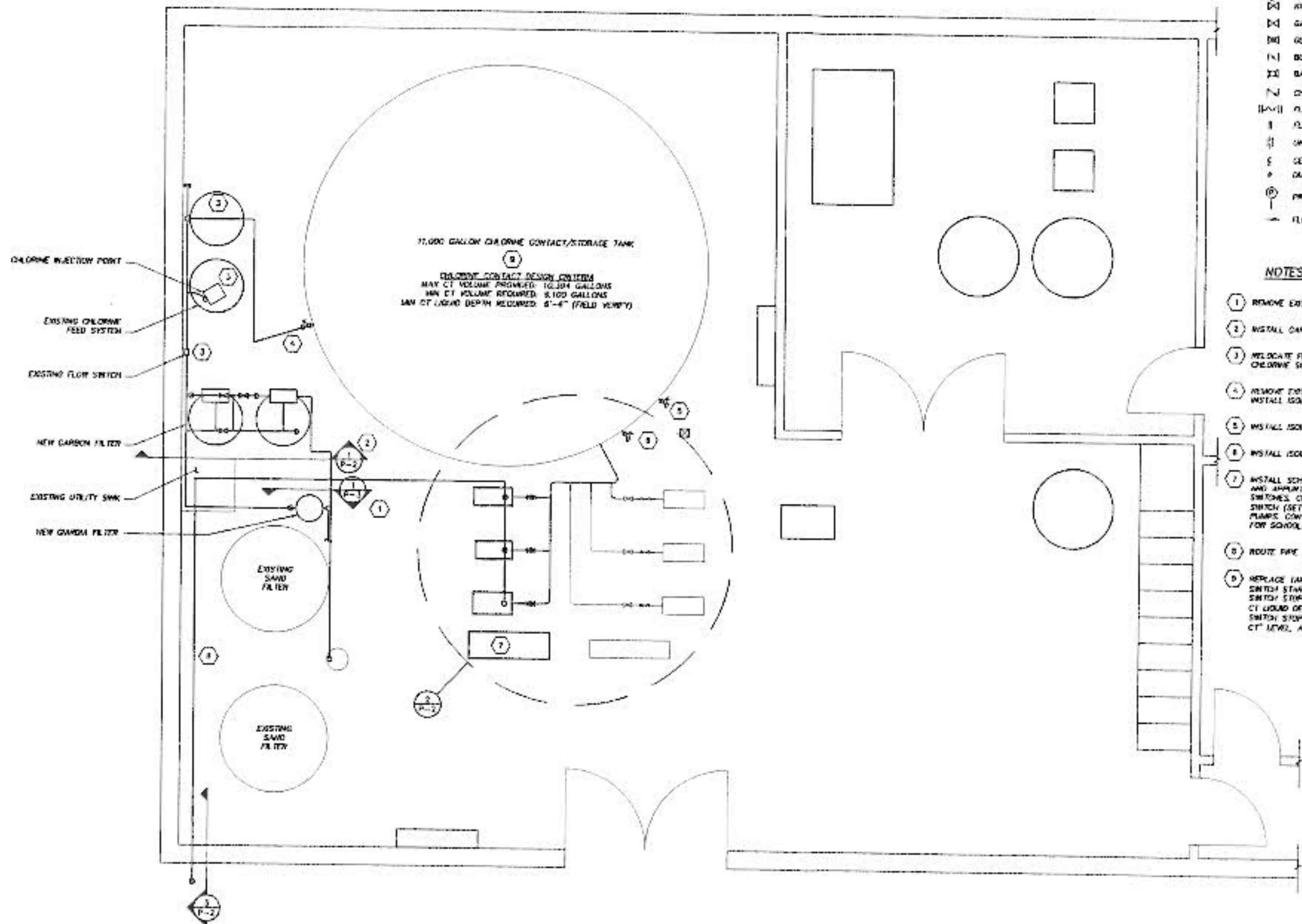


FIELD BOOK(S)
 PLOTTING DATE: 06/15/03 (08:52)
 AUTOCAD DRAWING NAME: WASHETERIA.DWG



1 WASHETERIA PLAN
 SCALE: 1/2" = 1'-0"

VALVES	ABBREVIATIONS
GV GATE VALVE	BV BUTTERFLY VALVE
GV GATE VALVE	BYP BYPASS
GV GLOBE VALVE	CL CHLORINE
GV BUTTERFLY VALVE	CPVC CHLORINATED POLYVINYL CHLORIDE
GV BALL VALVE	CT CHLORINE CONTACT TIME
GV CHECK VALVE	D, DR DRAIN
GV FLEX CONNECTION	FCV FLOW CONTROL VALVE
FL FLANGE	FF FINISHED FLOOR
UN UNION	GPM GALLON PER MINUTE
SC SCHEMATIC	HDP HIGH DENSITY POLYETHYLENE
GA GAUGE	HTS HOT TO SCALE
PR PRESSURE GAUGE	PLS PLACES
FD FLOW DIRECTION	MOD REDUCER
	SDH SCHEDULE
	TRP TYPICAL
	MG/L MEGAGRAM PER LITER

- NOTES
1. REMOVE EXISTING SAND FILTER AND REPLACE WITH NEW SAND FILTER.
 2. INSTALL CARBON FILTERS DOWNSTREAM OF NEW SAND FILTER.
 3. RELOCATE FLOW SWITCH, CHLORINE INJECTION POINT AND ASSOCIATED PIPING, CHLORINE SOLUTION TANK AND SPARE TANK.
 4. REMOVE EXISTING PIPING TO TANK. RELOCATE TANK INLET AS SHOWN. INSTALL ISOLATION VALVE.
 5. INSTALL ISOLATION VALVE AND BLIND FLANGE AT OLD TANK INLET.
 6. INSTALL ISOLATION VALVE. REMOVE AND REPLACE PUMP MANIFOLD PIPE.
 7. INSTALL SCHEDULE DISTRIBUTION SYSTEM PUMP VALVES, PIPING, FITTINGS AND APPURTENANCES. AND PUMP CONTROL PANEL AND PRESSURE SWITCHES. CONTROL PANEL SHALL RECEIVE CONTROL INPUT FROM LEVEL SWITCH (SET AT MINIMUM CT LIQUID DEPTH) TO SHUT OFF DISTRIBUTION PUMPS. CONTROL PANEL SHALL PROVIDE SIGNAL TO BUILDING ALARM PANEL FOR SCHOOL DISTRIBUTION SYSTEM LOW PRESSURE ALARM.
 8. ROUTE PIPE TO SCHOOLS BURIED DISTRIBUTION SYSTEM.
 9. REPLACE TANK LEVEL SWITCH. WHEN TANK DROPS BELOW "FULL" LEVEL, LEVEL SWITCH STARTS RAW WATER PUMP. WHEN TANK REACHES "FULL" LEVEL, LEVEL SWITCH STOPS RAW WATER PUMP. INSTALL SECOND LEVEL SWITCH AT MINIMUM CT LIQUID DEPTH. WHEN TANK LEVEL DROPS BELOW "MIN CT" LEVEL, LEVEL SWITCH STOPS ALL DISTRIBUTION PUMPS. WHEN TANK LEVEL REACHES "MIN CT" LEVEL, ALL DISTRIBUTION PUMPS ARE ALLOWED TO RUN IF CALLED ON.

HENRY HALLER
 THIS IS ONE SET OF
 ORIGINAL DRAWING
 COMMENCED AT
 8 NOT ONE EACH IN
 THIS SET. ADJUST
 SCALES ACCORDINGLY.



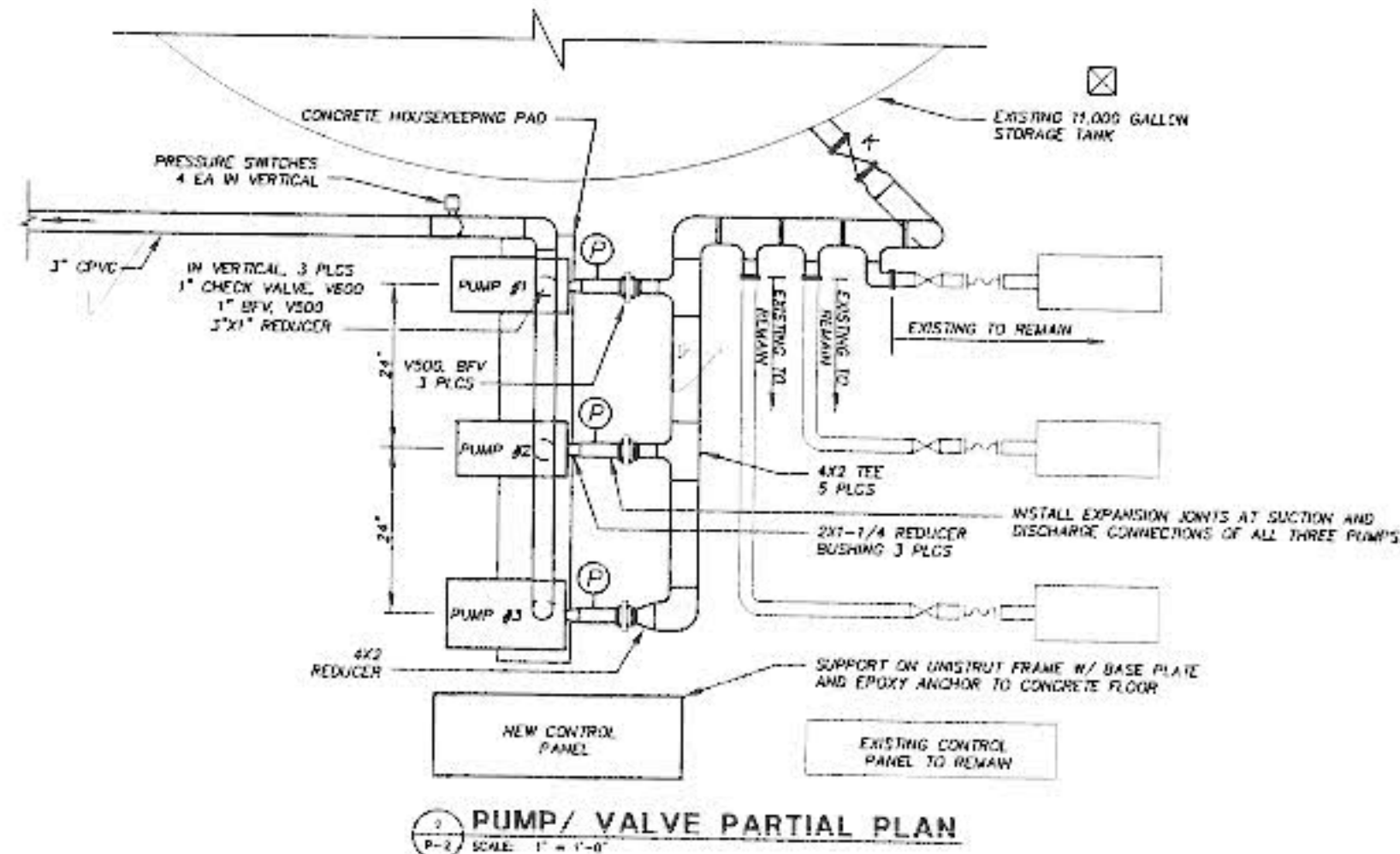
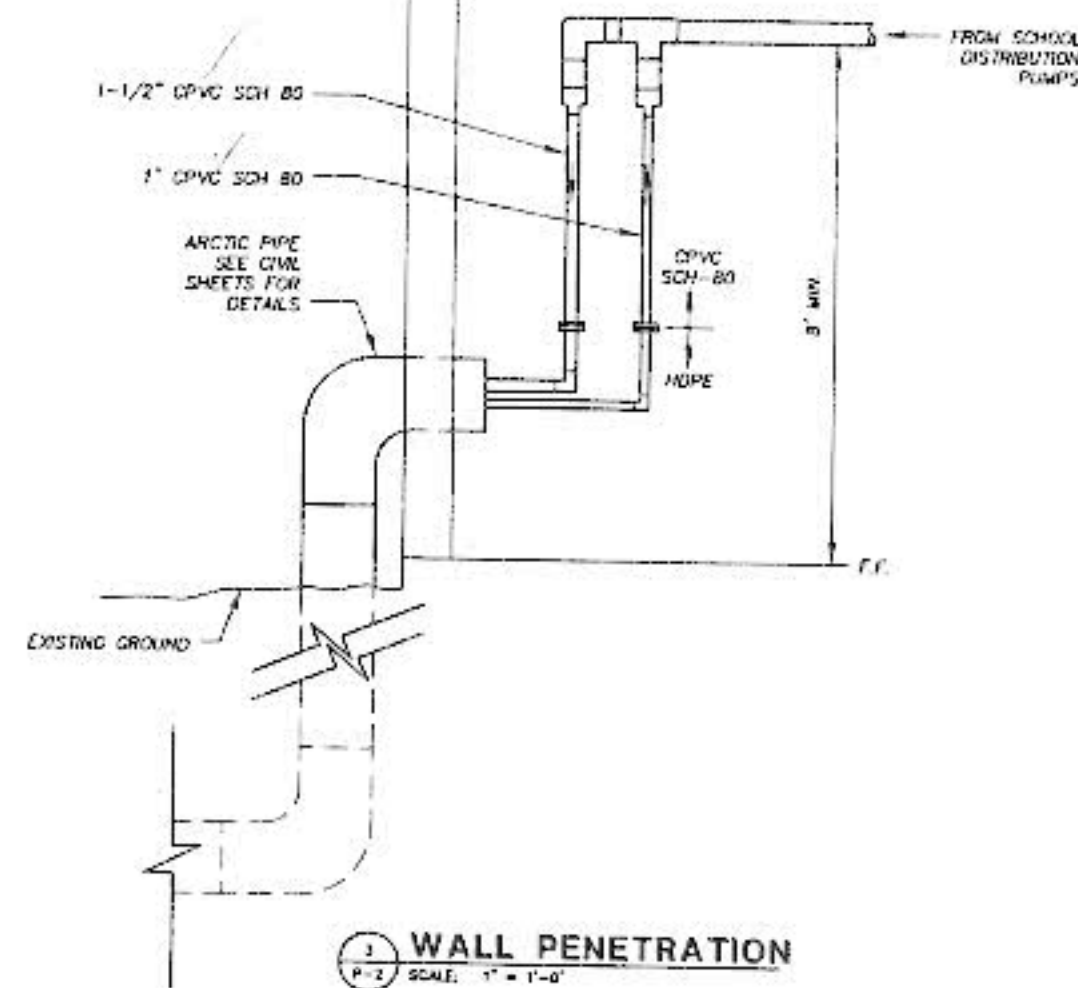
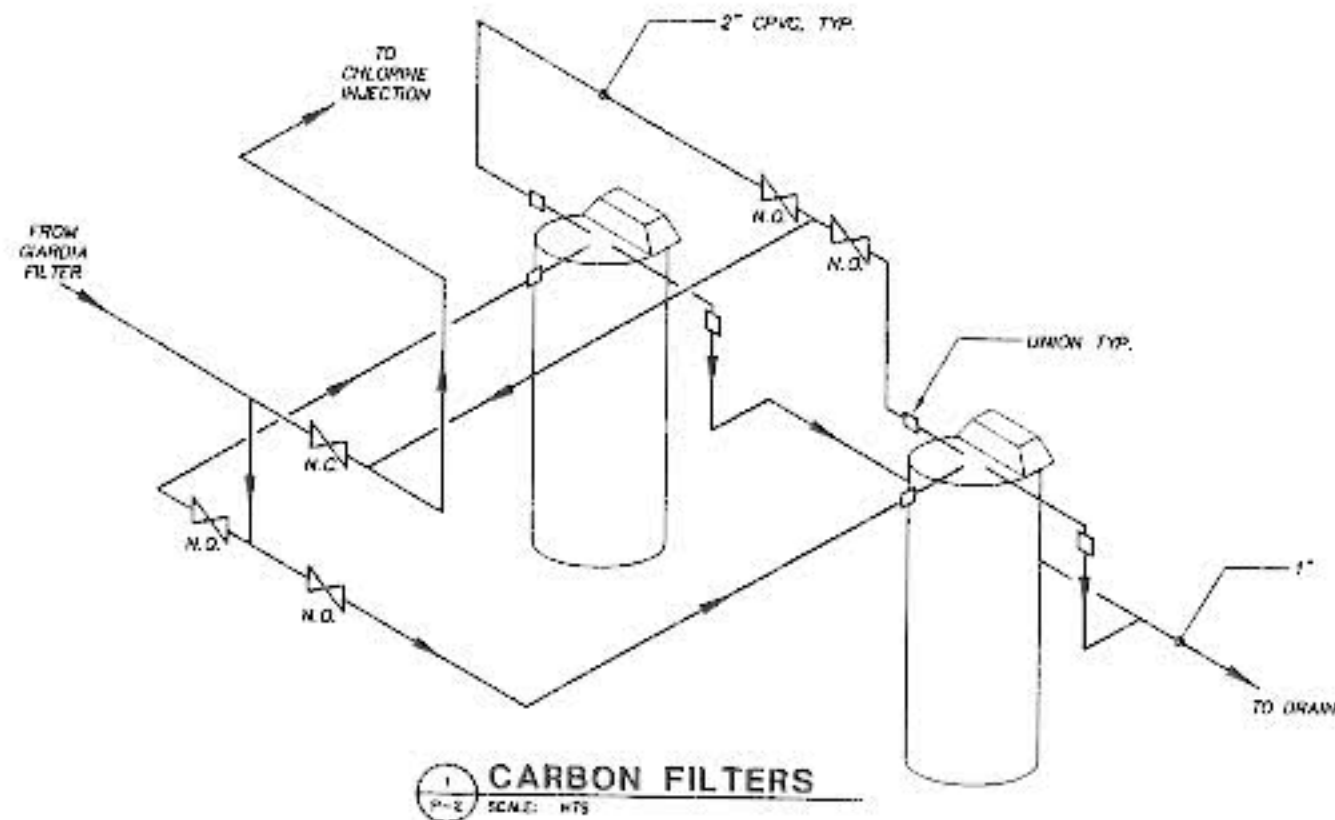
LCMF Incorporated
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WASHETERIA UPGRADES
 TACOTNA, ALASKA
 EQUIPMENT AND PIPING PLAN

GV Jones & Associates, Inc.
 State of Alaska Professional Engineer

CHECKED BY: LP
 DRAWN BY: PAR
 DATE: 7/9/03
 W.D. No: 02-013
 REVISION

DRAWING NO.
 P-1



LCMF Incorporated
 A Subsidiary of LCMF Engineering & Construction, Inc.
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WASHETERIA UPGRADES
TAKOTNA, ALASKA

EQUIPMENT PLAN AND DETAILS

GV Jones & Associates, Inc.
 1000 W. 10th Ave., Suite 100
 Anchorage, Alaska 99501
 (907) 273-8877

CHECKED BY: L.W.
 DRAWN BY: P.A.R.
 DATE: 7/8/02
 W.D. No: 02-013

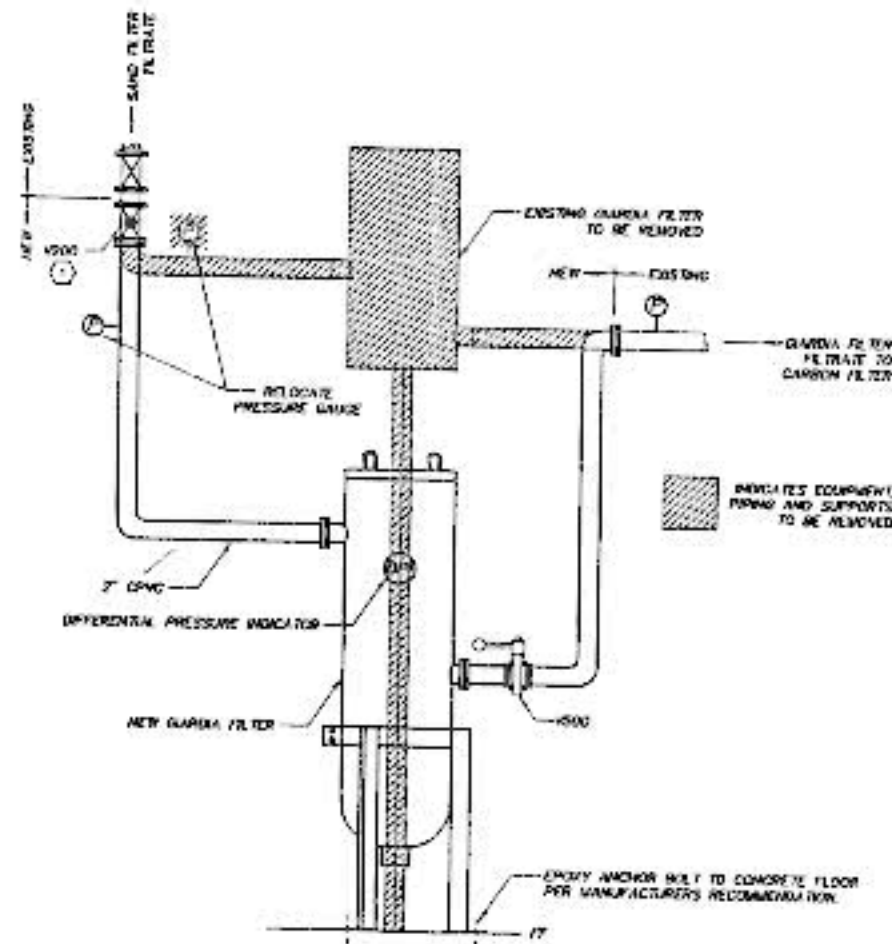
REVISION:

DRAWING NO:

P-2

FIELD SKETCHES
 DRAFTING DATE: 07/17/02 (14 DAY)
 AUTOCAD DRAWING NAME: NEW-WASHETERIA.DWG

UNIT SCALES
 1/2" = 1' ON ORIGINAL DRAWING
 1/4" = 1' ON THIS REVISION
 1/8" = 1' ON THIS REVISION
 1/16" = 1' ON THIS REVISION
 SCALES ACCORDING TO



1
 P-3
 SCALE: NTS
GIARDIA FILTER ELEVATION

NOTES

1. GLOBE VALVE SHALL BE ADJUSTED TO PRODUCE A FLOW TO THE CT TANK AS CALLED OUT ON SHEET P-4 "DESIGN FLOW CAPACITY (MAX)". IF TRATION SYSTEM FEED PUMP (RAW WATER PUMP) CAPACITY IS UNKNOWN AND SHALL BE VERIFIED PRIOR TO CONSTRUCTION AND REPORTED TO ENGINEER. GLOBE VALVE AND/OR RAW WATER PUMP SIZING MAY REQUIRE MODIFICATION IN THE FIELD TO ACHIEVE DESIRED FLOW TO CT TANK.

VERIFY SCALE
 1/8" = 1' OR 1/4" = 1' OR
 ORIGINAL DRAWING
 IF NOT ONE WITH THE
 SHEET, ADJUST
 SCALE ACCORDINGLY



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**WASHETERIA UPGRADES
 TAKOTNA, ALASKA**

GIARDIA FILTER ELEVATION

GV Jones & Associates, Inc.
 ENGINEERS AND ARCHITECTS
 1000 W. 10TH AVENUE, SUITE 100
 ANCHORAGE, ALASKA 99501

CHECKED BY: LVP
 DRAWN BY: PAB
 DATE: 7/9/02
 R.D. No 02-013
 REVISION:

DRAWING NO.

P-3

