

SECONDARY SOFTENER

DIMENSIONS	: 9'-0" DIA. X 6'-6" S,S
DESIGN PRESSURE	: 115 PSIG (BOT)/110 PSIG (TOP)
LINED WITH	: FNGARD 482
RESIN CAPACITY	: 243 FT3
DESIGN TEMP	: 250°F
CAPACITY	: 604 FT3

TYPICAL INSTRUMENT SCHEMATIC

The diagram illustrates the electrical control system for a softener, organized under a **PACKAGE LIMIT**.

Central Component: The **SOFTENER MAIN PANEL** is the core unit, featuring three indicator lamps: **XI** (Service Time), **SPAH** (Valves Open), and **YQAH** (Valves Close). It also includes **W51** and **W52** terminals and a **(TIP. 12)** terminal.

Control Panels:

- PRIMARY SOFTENER SOLENOID PANEL:** Connected to the Softener Main Panel and the Package Limit. It includes a **CV** (Control Valve) and a **SOV** (Solenoid Valve) for **VALVE OPEN POSITION SWITCH (TYPICAL)**. Typical valves listed are CV.1235A,B,C,D ETC, FCV.1227, CV.1228, CV.1229, CV.1234, and CV.1254.
- SECONDARY SOFTENER SOLENOID PANEL:** Also connected to the Softener Main Panel and the Package Limit. It includes a **CV** and a **SOV** for **VALVE OPEN POSITION SWITCH (TYPICAL)**. Typical valves listed are CV.1230A,B,C,D ETC, FCV.1232, FCV.1236, CV.1237, CV.1233, FCV.1235, and FCV.1250.

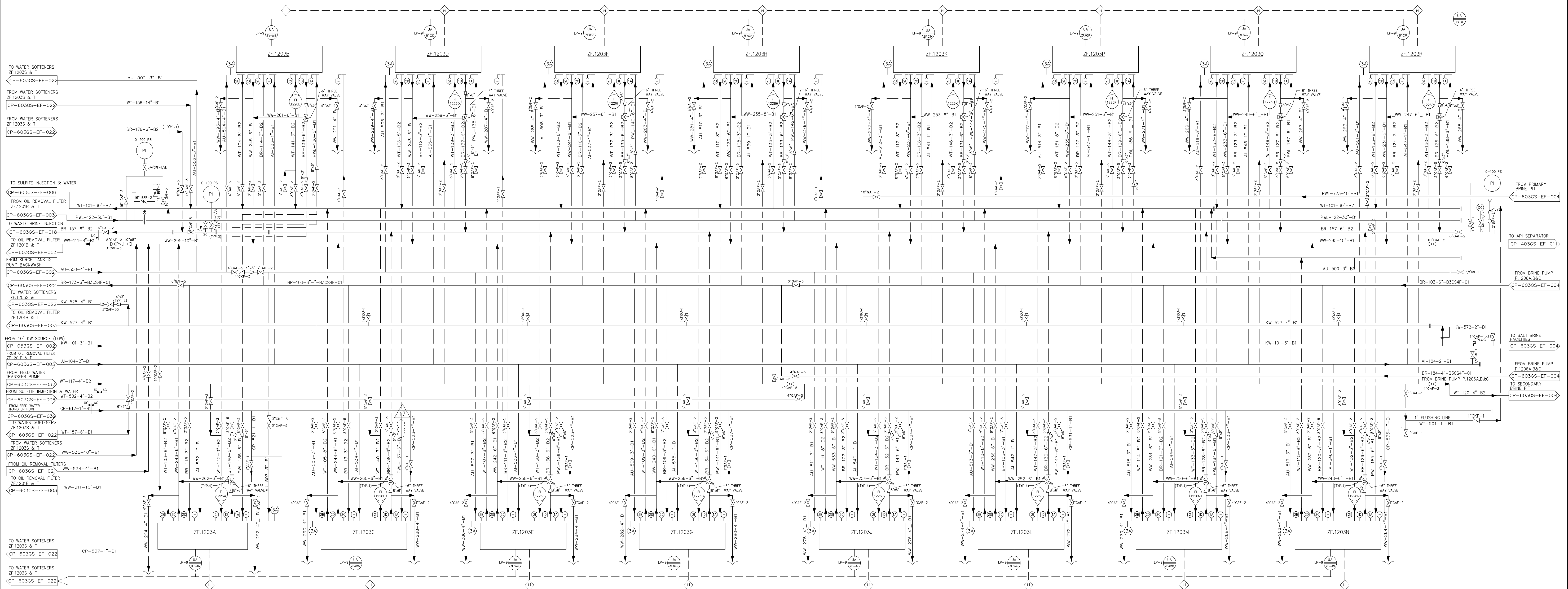
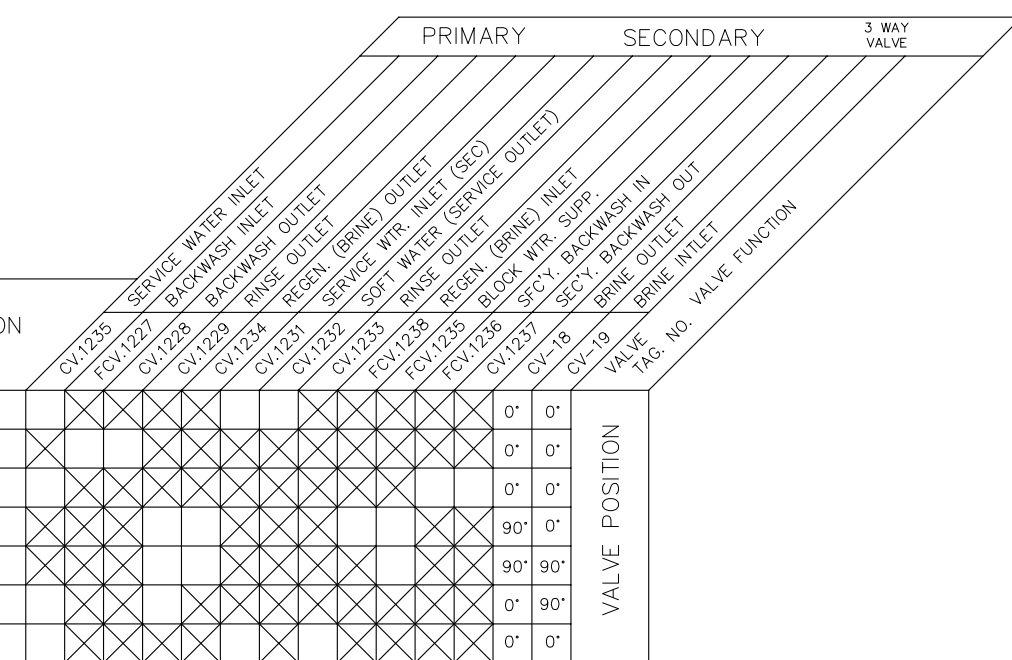
Indicator and Control Elements:

- Valves Open/Close Indicator Lamps:** Four lamps labeled **R** (Red) and **G** (Green) are shown. A note indicates **RED : CLOSED** and **GREEN : OPEN**.
- Interlock Panel:** Connected to the Softener Main Panel.
- Batch Panels:** Two **BATCH PANEL** units are shown, connected to the Softener Main Panel and the Package Limit. One is labeled **FROM FTS FOR BRINE & SERVICE WATER**.

Limit and Safety: The entire system is governed by a **PACKAGE LIMIT**, which is connected to the Softener Main Panel and the Primary Solenoid Panel. A **1A** fuse is indicated on the left side of the Package Limit line.

OPERATION STEP	SOFTENER FUNCTION MODE
6	NORMAL SERVICE
1	BACKWASH (PRIMARY)
REF	BACKWASH (SECONDARY)
2	REGENERATION (BRINE INTRO)
3	BRINE DISPLACEMENT (PRIM'Y)
4	RINSE (PRIMARY)
5	RINSE (SECONDARY)

8037.ZF. 1203 A
WATER SOFTENERS



1. ALL EQUIPMENT, INSTRUMENT AND LINE NUMBERS ON THIS DRAWING HAVE THE PREFIX 8033 UNLESS OTHERWISE NOTED.	4. BACKWASH OF SECONDARY SOFTENERS TO BE CARRIED OUT AUTOMATICALLY BY PUSH BUTTON FURNISHED ON THE PANEL.	6. THE PDI ON ZF-1203A HAS BEEN DEMOLISHED
2. THE LETTERS 'Y' & 'O' ARE NOT USED IN THE EQUIPMENT NUMBERING SYSTEM.	5. PWS'S FOR SOFTENING PACKAGE UNITS ZF-1203B THRU ZF-1203K TO BE TAGGED 1212B, 1212C,.....1212K FOR PRIMARY SOFTENER A & 1213B, 1213C,.....1213K FOR SECONDARY SOFTENER.	7. THE N4 ON ZF-1203A IS BUNDLED ONLY
3. FOR STANDARD PAID LEGEND SEE THE FOLLOWING DRAWINGS: - FOR PIPING & EQUIPMENT : DWG. NO. CP-0500N-FF-002 - FOR INSTRUMENTATION : DWG. NO. CP-0500N-FF-003		8. THE FIT-1230 # ON ZF-1203A HAS BEEN DEMOLISHED

1. ONLY 2 PACKAGED SOFTENER UNITS ARE TO BE IN "REGENERATION" AT A TIME

[illegible]

REFERENCE DRAWINGS

DRAWN	MST. 06/09/86
CHECKED	WW. 31/10/86
DESIGN ENG'R.	INP. 13/09/86
DESIGN TEAM LEADER	
PROJECT ENG'R.	IHR. 22/10/86 OK 23/10/86
OPR'G DEPT.	

PIPING & INSTRUMENT DIAGRAM
WATER SOFTENERS
WATER TREATMENT PLANT
CENTRAL GATHERING STATION
DURI AREA-3

ITC NO. 21/0E-PMF/RP/2011 21/0E-PMF/2011
SCALE : NTS
SIZE :
DRAWING NO. CB 607

CP-603GS-EF-005-17

CAD

NEVER CHANGE THE
DRAWING BY HAND

