

DP3 - Setpoint 6psi
 DP3 - Actual - 15psi

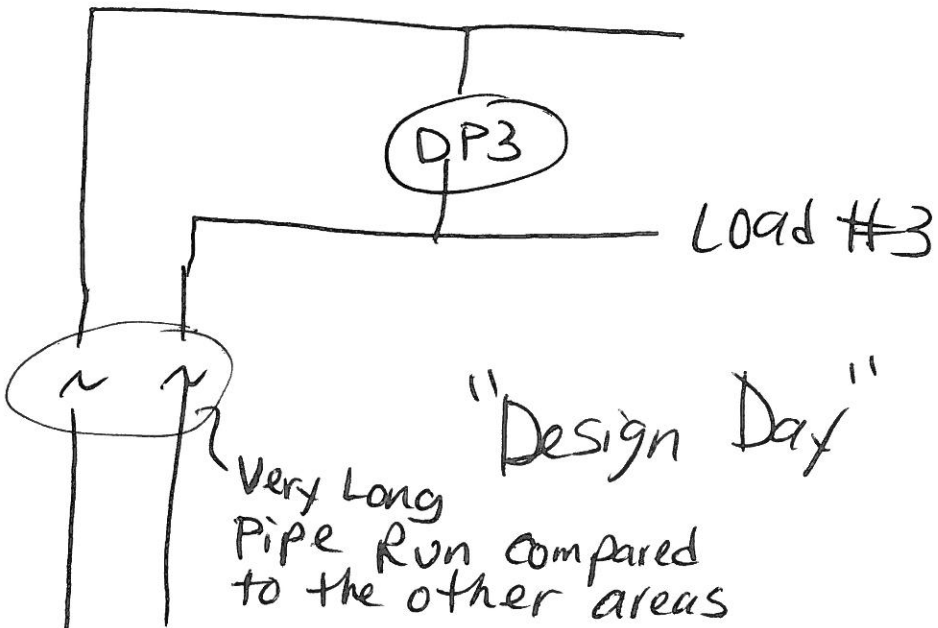
DP2 - Setpoint 20psi
 DP2 - Actual - 28psi

DPI - Setpoint 30psi
 DPI - Actual 30psi
 ↑ This DPI is the "driving" DP that runs the pumps. All other DP's are more than satisfied.

6 Secondary Pumps in Parallel (All with VFD's)

3 Pumps Running @ 60% VFD





DP3-Setpoint 6psi

DP3-Actual - 6psi

This DP3 "drives" the pumps causing elevated pressures in the other areas

"Design Day"
Very Long Pipe Run compared to the other areas

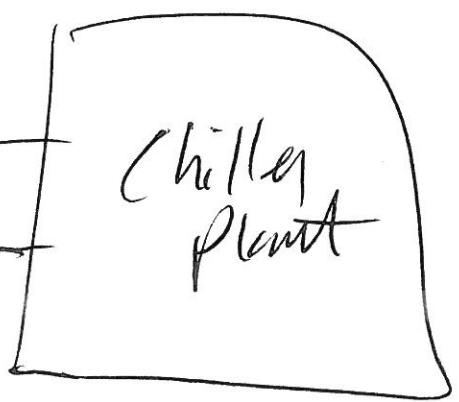
DP2-Setpoint 20psi

DP2-Actual - 48psi

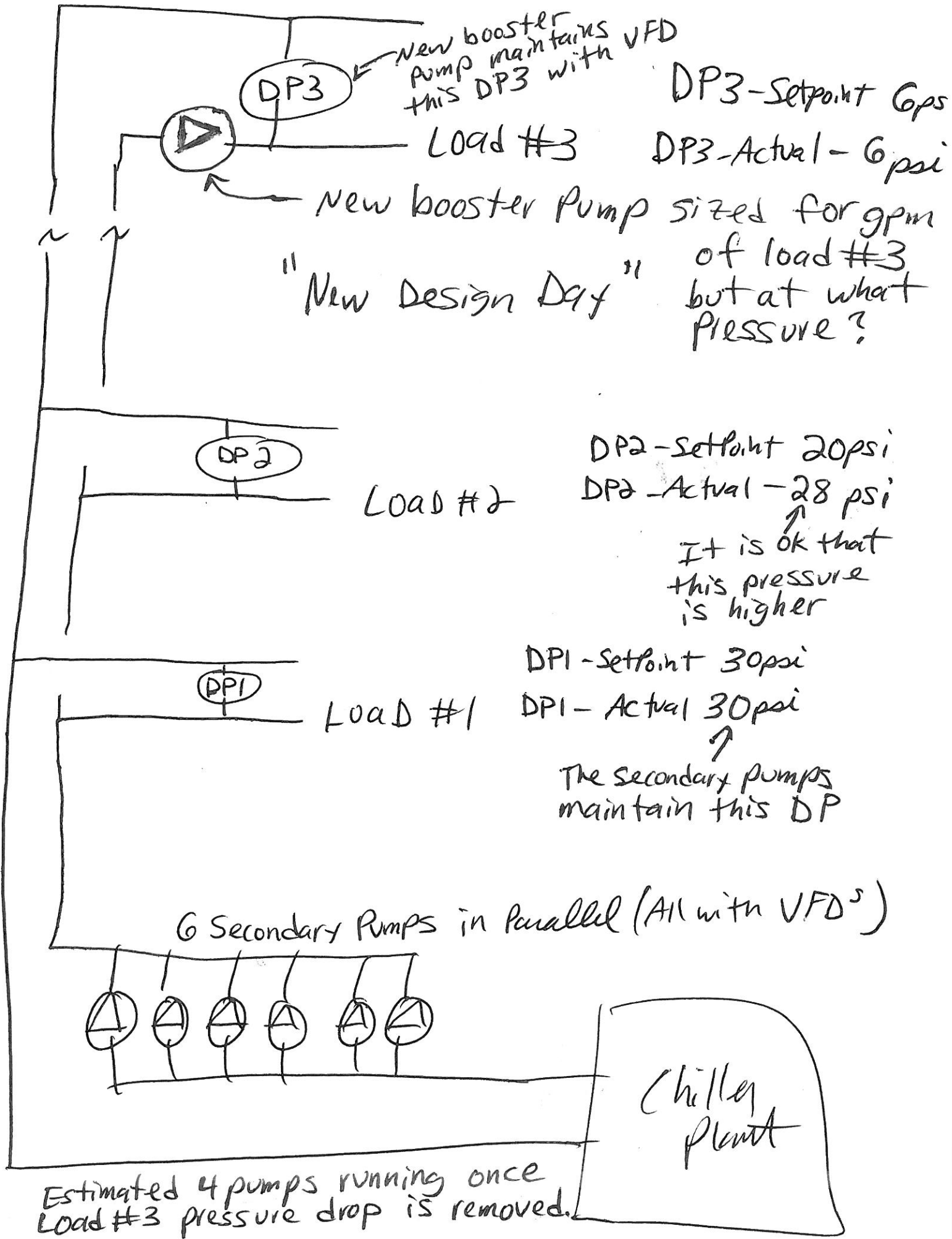
DP1-Setpoint 30psi

DP1-Actual 50psi

6 Secondary Pumps in Parallel (All with VFD's)



All 6 Pumps Running @ 100% VFD



New booster pump maintains this DP3 with VFD

DP3-Setpoint 6psi

Load #3

DP3-Actual - 6psi

New booster Pump sized for gpm of load #3
 "New Design Day" but at what pressure?

DP2

DP2-Setpoint 20psi

Load #2

DP2-Actual - 28 psi

It is ok that this pressure is higher

DP1

DP1-Setpoint 30psi

Load #1

DP1-Actual 30psi

The secondary pumps maintain this DP

6 Secondary Pumps in Parallel (All with VFD's)

Chiller plant

Estimated 4 pumps running once Load #3 pressure drop is removed.