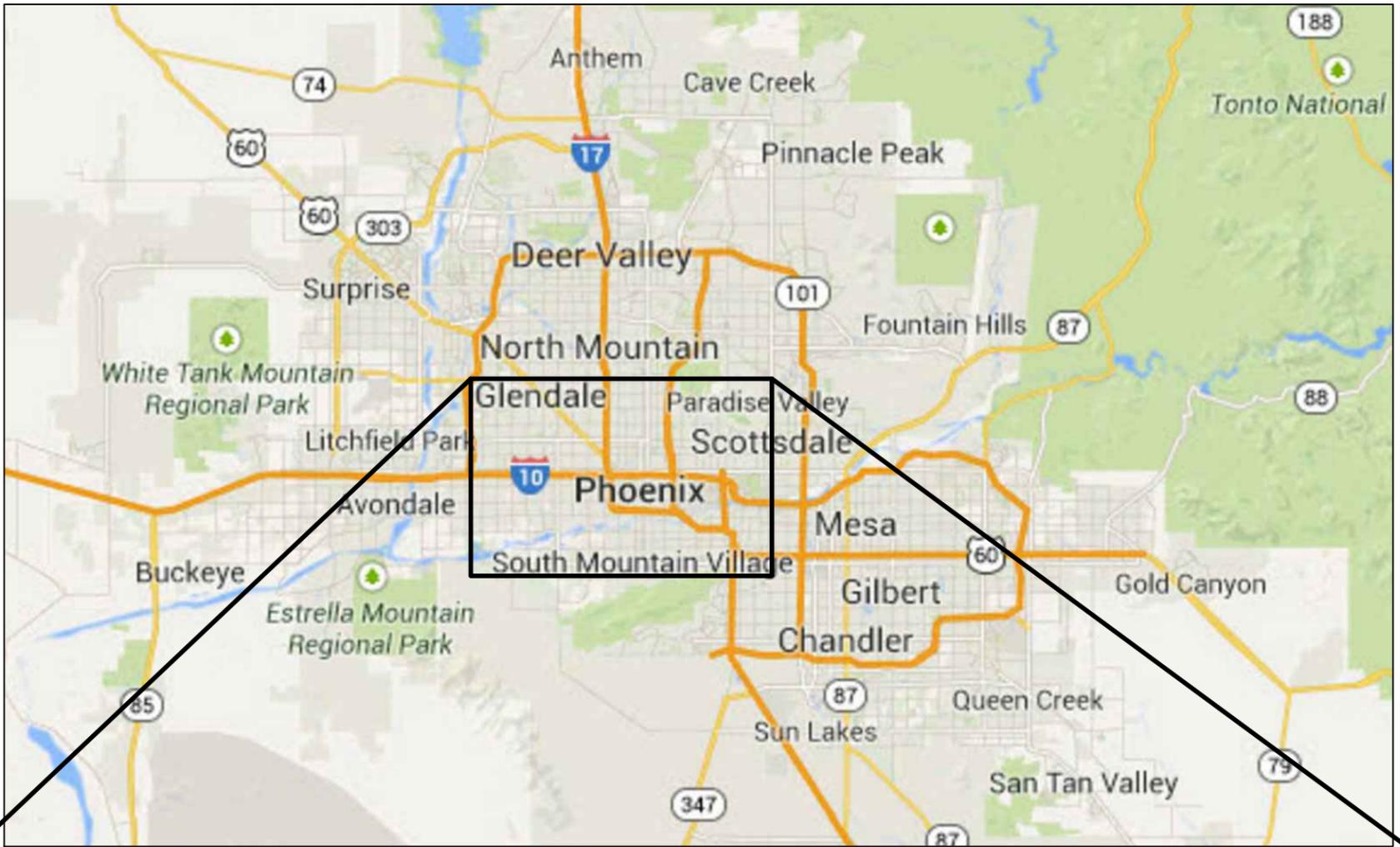
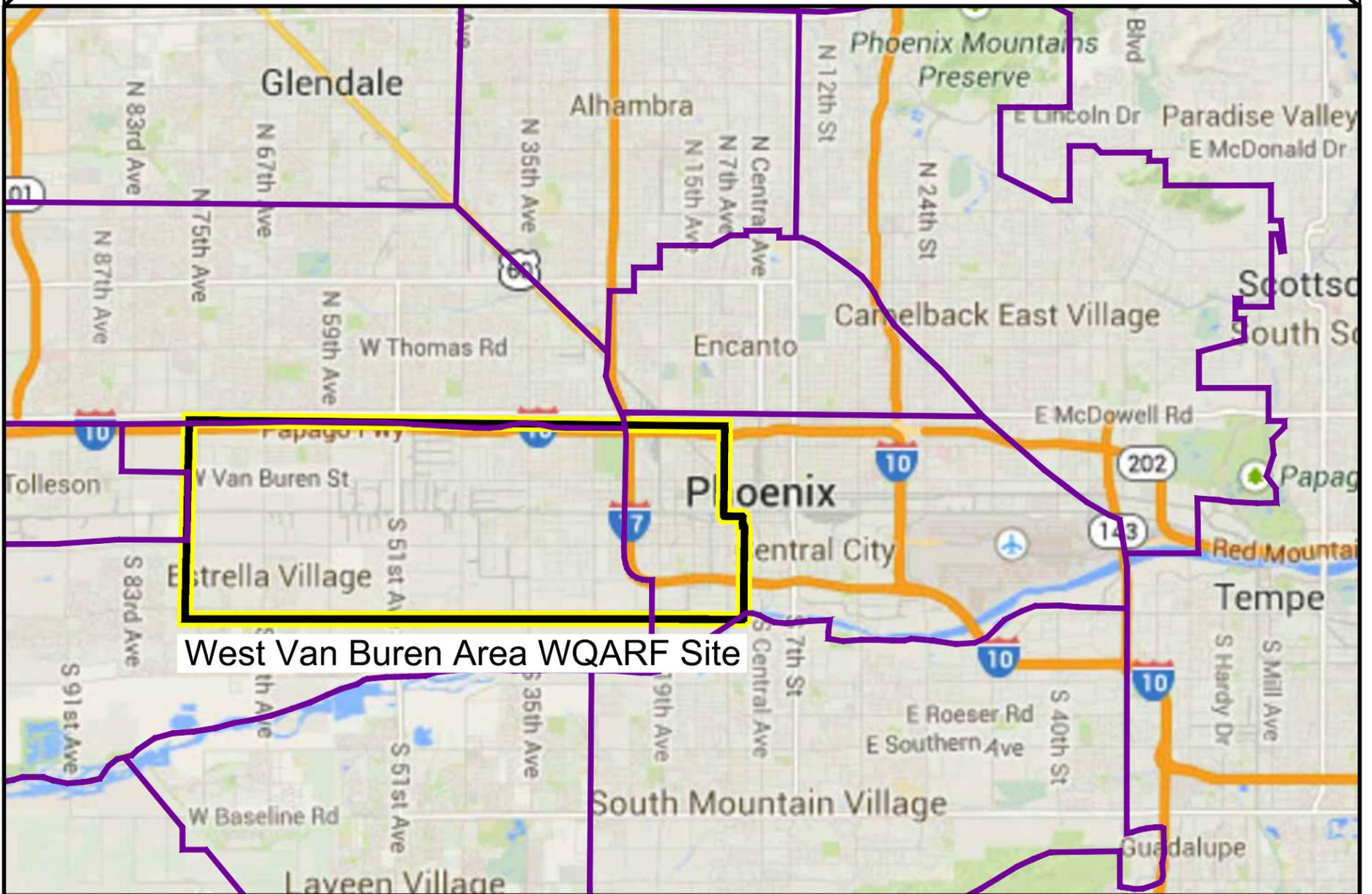


FIGURES



NOT TO SCALE



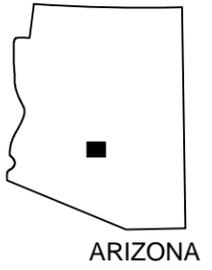
West Van Buren Area WQARF Site



EXPLANATION

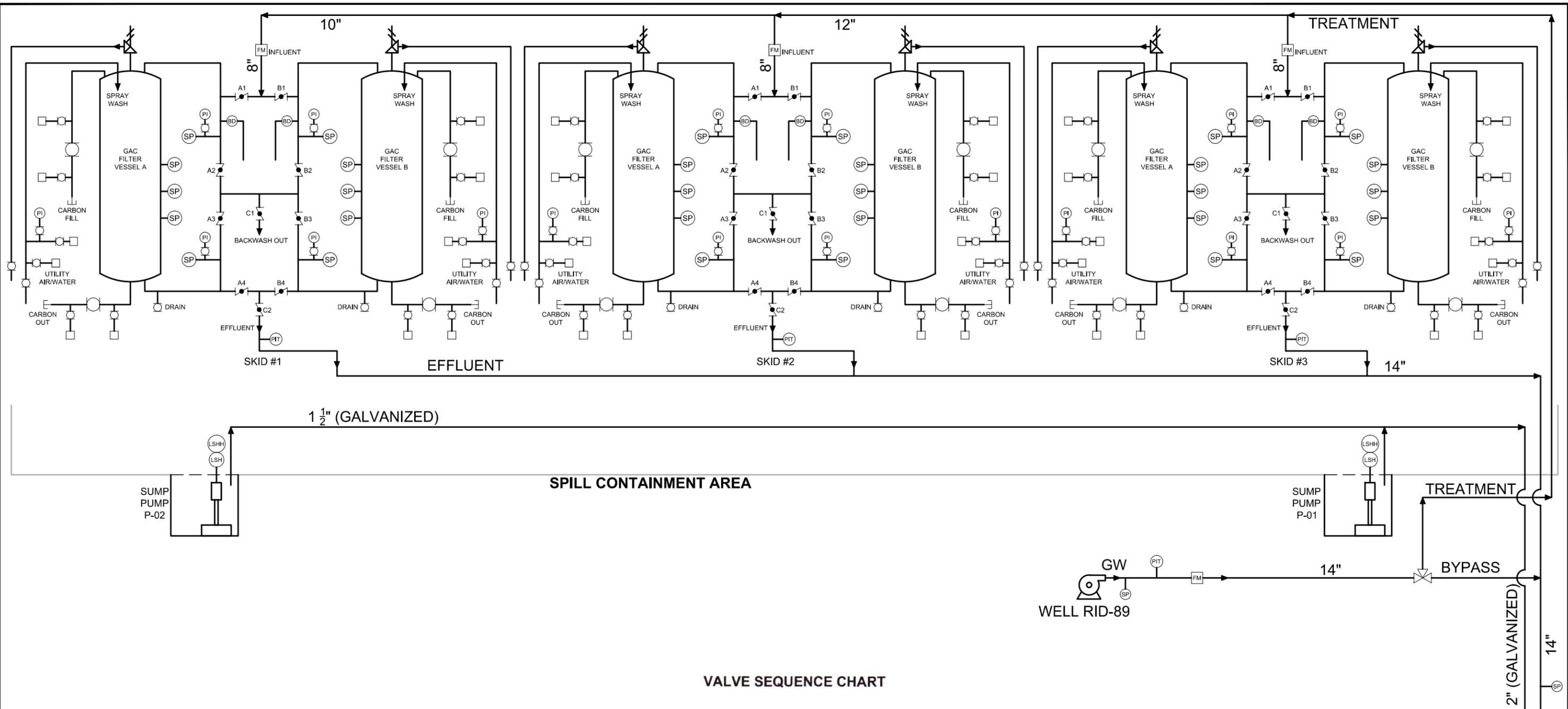
 Site Boundary

 Approximate Urban Village Boundary



ARIZONA

SITE LOCATION MAP			
Roosevelt Irrigation District West Van Buren Area WQARF Site			
By: LD	Date: 09/17/14	Project No. 804.90	
		10645 N. Tatum Blvd. Suite 200-437 Phoenix, AZ 85028 602-430-2785	
			Figure 1



VALVE SEQUENCE CHART

VALVE SEQUENCE CHART: 3-TIER SYSTEM MANIFOLD									
OPERATION	VALVE NUMBER								
	A1	A2	A3	A4	B1	B2	B3	B4	C1
SERVICE: SERIES 'A' TO 'B'	O	X	O	X	X	O	X	O	X
SERVICE: SERIES 'B' TO 'A'	X	O	X	O	O	X	O	X	X
SERVICE: 'A' ONLY	O	X	X	O	X	X	X	X	X
SERVICE: 'B' ONLY	X	X	X	X	O	X	X	O	X
SERVICE: PARALLEL 'A' AND 'B'	O	X	X	O	O	X	X	O	X
BACKWASH: 'A' ONLY	X	O	X	O	X	X	X	X	O
BACKWASH: 'B' ONLY	X	X	X	X	X	O	X	O	O
BACKWASH 'A' FROM SERVICE 'B' ¹	X	O	X	O	O	X	X	O	O
BACKWASH 'B' FROM SERVICE 'A' ¹	O	X	X	O	X	O	X	O	O
BACKWASH: PARALLEL 'A' AND 'B'	X	O	X	O	X	O	X	O	O

¹ REQUIRES VALVE ON EFFLUENT WATER PIPE TO BE CLOSED.

- EXPLANATION**
- CHICAGO FITTING
 - BALL VALVE
 - 3-WAY VALVE
 - BUTTERFLY VALVE
 - VACUUM/AIR RELIEF
 - CAM LOCK (MALE)
 - WELL PUMP
 - PRESSURE INDICATOR
 - BURST DISK
 - SAMPLE PORT
 - FLOW METER
 - (PIT) PRESSURE TRANSMITTER
 - (LSH) HIGH LEVEL SWITCH
 - (LSHH) HIGH-HIGH LEVEL SWITCH



**PIPING AND INSTRUMENTATION DIAGRAM
RID-89 WELLHEAD TREATMENT SYSTEM**

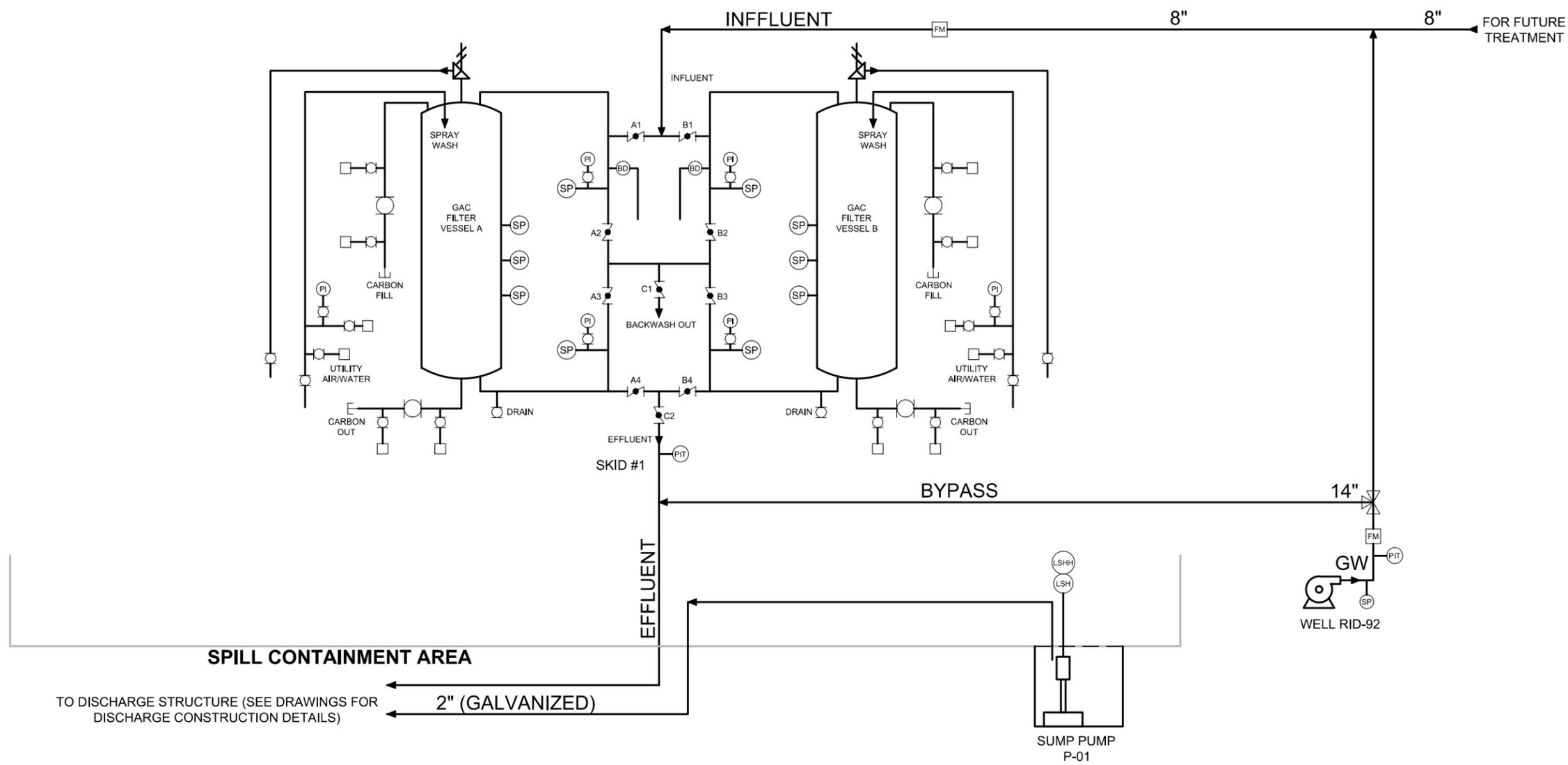
Roosevelt Irrigation District
West Van Buren Area

By: LD	Date: 10/07/14	Project No. 802.40
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10645 N. Tatum Blvd.
Suite 200-437
Phoenix, AZ 85028
602-430-2785

Figure **3**

Plot Date: 10/07/14 - 6:00pm. Plotted by: Luke
 Drawing Path: N:\Synergy\A\A\RID-89 P&ID\RID-89 P&ID.dwg



VALVE SEQUENCE CHART

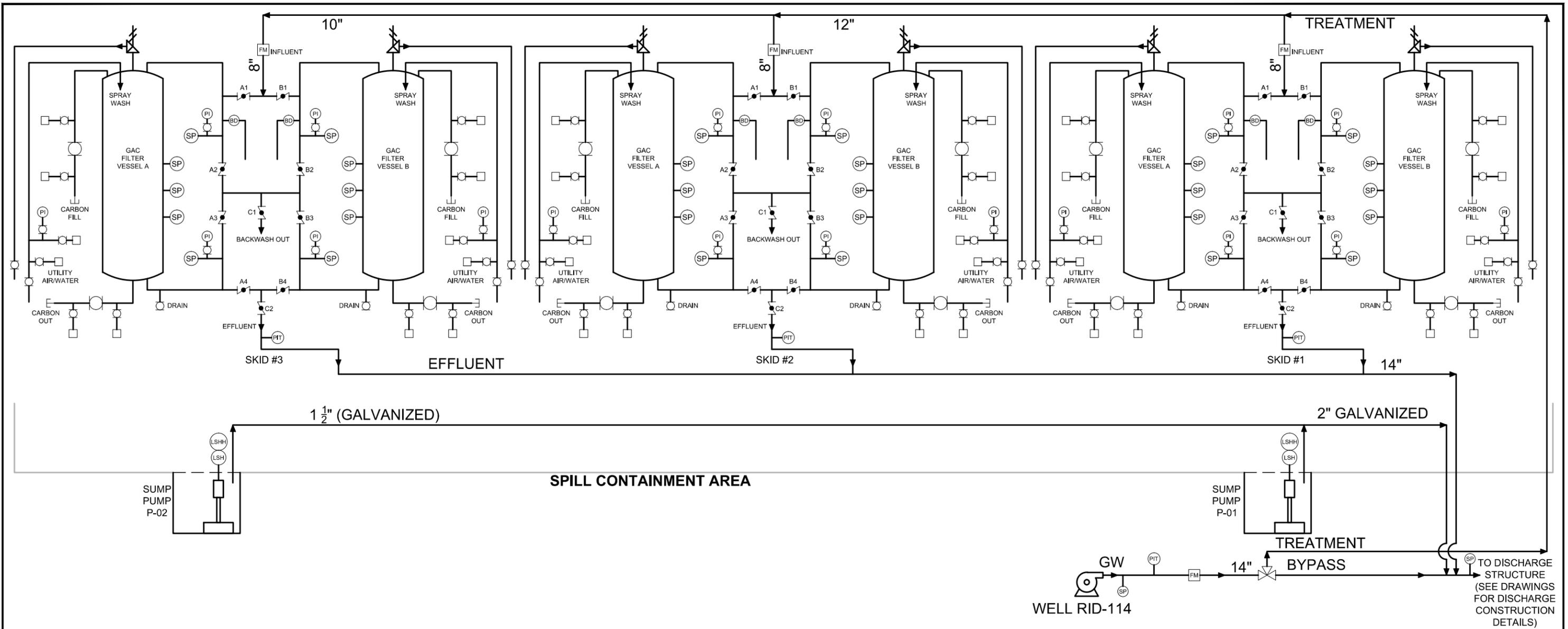
VALVE SEQUENCE CHART: 3-TIER SYSTEM MANIFOLD									
OPERATION	VALVE NUMBER								
	A1	A2	A3	A4	B1	B2	B3	B4	C1
SERVICE: SERIES 'A' TO 'B'	O	X	O	X	X	O	X	O	X
SERVICE: SERIES 'B' TO 'A'	X	O	X	O	O	X	O	X	X
SERVICE: 'A' ONLY	O	X	X	O	X	X	X	X	X
SERVICE: 'B' ONLY	X	X	X	X	O	X	X	O	X
SERVICE: PARALLEL 'A' AND 'B'	O	X	X	O	O	X	X	O	X
BACKWASH: 'A' ONLY	X	O	X	O	X	X	X	X	O
BACKWASH: 'B' ONLY	X	X	X	X	X	O	X	O	O
BACKWASH 'A' FROM SERVICE 'B' ¹	X	O	X	O	O	X	X	O	O
BACKWASH 'B' FROM SERVICE 'A' ¹	O	X	X	O	X	O	X	O	O
BACKWASH: PARALLEL 'A' AND 'B'	X	O	X	O	X	O	X	O	O

¹ REQUIRES VALVE ON EFFLUENT WATER PIPE TO BE CLOSED.

- EXPLANATION**
- CHICAGO FITTING
 - BALL VALVE
 - 3-WAY VALVE
 - BUTTERFLY VALVE
 - VACUUM/AIR RELIEF
 - CAM LOCK (MALE)
 - WELL PUMP
 - PRESSURE INDICATOR
 - BURST DISK
 - SAMPLE PORT
 - FLOW METER
 - PRESSURE TRANSMITTER
 - HIGH LEVEL SWITCH
 - HIGH-HIGH LEVEL SWITCH



PIPING AND INSTRUMENTATION DIAGRAM RID-92 WELLHEAD TREATMENT SYSTEM		
Roosevelt Irrigation District West Van Buren Area		
By: LD	Date: 10/07/14	Project No. 802.40
<small>10645 N. Tatum Blvd. Suite 200-437 Phoenix, AZ 85028 602-430-2785</small>		
		Figure 4



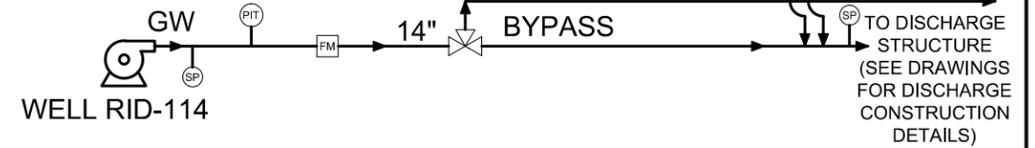
VALVE SEQUENCE CHART

VALVE SEQUENCE CHART: 3-TIER SYSTEM MANIFOLD									
OPERATION	VALVE NUMBER								
	A1	A2	A3	A4	B1	B2	B3	B4	C1
SERVICE: SERIES 'A' TO 'B'	O	X	O	X	X	O	X	O	X
SERVICE: SERIES 'B' TO 'A'	X	O	X	O	O	X	O	X	X
SERVICE: 'A' ONLY	O	X	X	O	X	X	X	X	X
SERVICE: 'B' ONLY	X	X	X	X	O	X	X	O	X
SERVICE: PARALLEL 'A' AND 'B'	O	X	X	O	O	X	X	O	X
BACKWASH: 'A' ONLY	X	O	X	O	X	X	X	X	O
BACKWASH: 'B' ONLY	X	X	X	X	X	O	X	O	O
BACKWASH 'A' FROM SERVICE 'B' ¹	X	O	X	O	O	X	X	O	O
BACKWASH 'B' FROM SERVICE 'A' ¹	O	X	X	O	X	O	X	O	O
BACKWASH: PARALLEL 'A' AND 'B'	X	O	X	O	X	O	X	O	O

¹ REQUIRES VALVE ON EFFLUENT WATER PIPE TO BE CLOSED.

EXPLANATION

- CHICAGO FITTING
- BALL VALVE
- 3-WAY VALVE
- BUTTERFLY VALVE
- VACUUM/AIR RELIEF
- CAM LOCK (MALE)
- WELL PUMP
- PRESSURE INDICATOR
- BURST DISK
- SAMPLE PORT
- FLOW METER
- PRESSURE TRANSMITTER
- HIGH LEVEL SWITCH
- HIGH-HIGH LEVEL SWITCH



**PIPING AND INSTRUMENTATION DIAGRAM
RID-114 WELLHEAD TREATMENT SYSTEM**

Roosevelt Irrigation District
West Van Buren Area

By: LD	Date: 10/07/14	Project No. 802.40	
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10645 N. Tatum Blvd.
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Phoenix, AZ 85028
602-430-2785

Figure **6**

Plot Date: 10/07/14 - 5:48pm. Plotted by: Luke
 Drawing Path: N:\Synergy\Roosvelt\RID-114 P&ID Etab.dwg
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