

Check Valve Sensor.
Route existing sensors communication lines from 2-6" check valve sensors. Add new communication sensor line GV-1 and pull cable for future check valve. Route conduit to existing communication manhole and connect to system.

Route 6" Pump Line 2 after Wet Well Demo. See sheet 8 for details.

Route 6" Pump Line 1 prior to Wet Well Demo. See sheet 8 for details.

Route 10" Pump Line 4 after Wet Well Demo. See sheet 8 for details.

Route 10" Pump Line 3 prior to Wet Well Demo. See sheet 8 for details.

Existing Valve Vault.
At Pump line 3, remove 2-10" Blind Flanges and install 10" Check Valve, 10" Gate Valve and Sif of 10" DICL. See Sh 16 & Elec. Plans for sensor installation.

Install 1-10'x4' Check Valve Vault, with 1-6" Flanged Check Valve and 10" DICL Pipe for future Flanged Check Valve, see vault details.

4" Stub
4" FL = 1354.75

10" Pump Line
10" FL = 1356.58

Install 30" PVC @ 0.15% length 40ft with Plug.
30" FL = 1330.00
30" FL Plug = 1330.06

Contractor to sawcut existing 12" DICL vertical pump line 8" above floor and install 12" flow sensor. Install conduit, parallel to ex. 6" flow sensor, extending to headwork bldg. electrical room, See EE plans.

4" Vent, see Vent Detail.

Future Pump 4

Comm. & Power Conduit into Well B. See Elec. Plans for location and details.

Route install 2 conduits, 1 power, 1 communication to Hut, see Elec. Plan for details.

Install 10'x12'x8' Jacobs Manufacturing Utility Shelter, or approved equal. Shelter to be anchored to a concrete pad, that is elevated 4" higher than the surrounding pad. See Elec. Plan for Electrical Connection requirements. Visual pump indicator lights are to be seen from the wetwell area.

Install 1-10'x4' Check Valve Vault, with 1-6" Flanged Check Valve and 1-10" Flanged Check Valve, see vault details.

Connect 4" Drain.
4" FL = 1355.00

Check Valve Sensor Conduit, see EE plans

6" Pump Line
6" FL = 1356.75

12" SS Line 5 outside Drop.
12" FL = 1333.50
12" FL = 1344.50

15HP Pump 1.

Install 10.33lf of 24" PVC cross-flow pipe.
24" FL = 1324.00

40HP Pump 2

Wet Well B, 10' Dia. Manhole Wetwell, with S2R7260 Holliday (60"x72") Access Door. See Sheet 7 for Profile.

12" FRP Foul Air Line.
12" FL = 1356.50

Comm. & Power Conduit into Well A. See Elec. Plans for location and details.

4" Vent, see Vent Detail.

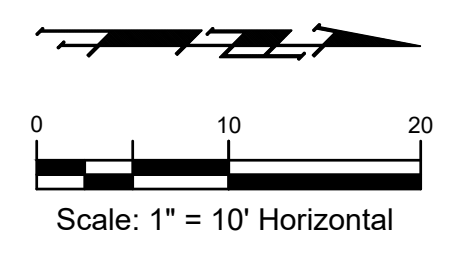
Wet Well A, 10' Dia. Manhole Wetwell, with S2R7260 Holliday (60"x72") Access Door. See Sheet 7 for Profile.

Ex. 21" SS PVC Line.
21" FL = 1333.38

DETAIL A - A
Scale: 1" = 4'

Comm. & Power Conduit to Well A. See Elec. Plans for location and details.

Comm. & Power Conduit to Well B. See Elec. Plans for location and details.



BENCHMARKS

- BM #1:**
Mag Nail on North edge of road, 78' West of North Entrance Gate into Plant 3 Facility.
Elev. = 1361.84 NGVD88
- BM #2:**
RR Spike in East Transmission power pole, 100' West and 4' North of the NE corner of Sewer Treatment Plant #3 Add.
Elev. = 1357.64 NGVD88
- BM #3:**
RR Spike in West Transmission power pole, 52' North of 37th St. N. E. & SE corner of Sewer Treatment Plant #3 Add.
Elev. = 1360.00 NGVD88

Precast Wet Well Notes

- The price bid for Furnishing and Installing the Pump Station, including the Wet Well, Valve Vault, and Other Miscellaneous Appurtenances, Shall include all costs for Furnishing and installing the Pump Station as indicated in the Plans Complete in Place and in Operation. This Price Shall include the Cost of Constructing and/or Installing Compacted Subgrade, Electrical Conduit, Electrical Wiring, Disconnect Switch, Pump Controls, Electrical Power Supply, Finished Grading, Concrete Slump Block Wall, and any other incidentals necessary to complete the work and place the Wet Well into satisfactory operation. The Price Bid Shall include All Sanitary Sewer Pipe and Force Main Extended Outside the Slab as Shown in the Site Plan and Details.
- All pump lines shall be Ductile Iron (Flanged) to 5' outside the structures, unless otherwise noted. All interior piping shall be Cement Lined and Epoxy Coated Ductile Iron Pipe.
- Pipe Penetrations thru the Wet Well, Valve Vault, and Concrete Pad shall be Grouted Watertight With Non-Shrink Grout and Water Stop Gaskets as required.
- The Contractor shall perform an Exfiltration Test on the complete Wet Well. The Wet Well shall be tested individually by securely plugging all inlet and outlet pipes. The Wet Well shall be filled to its full depth and then observed for at least six (6) hours. Exfiltration loss from the 6-foot diameter Wet Well shall not exceed the rate of 1.70 Gallons per foot of Wet Well depth per day. If exfiltration exceeds the maximum limits, the Contractor shall repair the leaks and defects, and then retest.
- The Contractor shall support all piping inside the Wet Well and Valve Vault as required.
- All hardware inside the Wet Well and Valve Vault, including but not limited to the Guide Bar, Hoist Chain, Chain Catch, etc. shall be stainless steel. 316 Stainless Steel shall be used when available, otherwise 304 Stainless Steel is acceptable. Nylon Rope will not be allowed in the Wet Well.
- Wet Well and Check Valve Vault design shall be subject to the same design requirements as Precast Manholes.
- The interior of the Wet Well shall be lined with Spectrashield per manufacturer specification. No substitutions without approval by the Engineer.
- Backfill around the Wet Well and under the Valve Vault and Pad shall be a low volume change material compacted to 95% ASTM D-1557.
- No Electrical Connections will be Allowed within the Wetwell.
- Contact City of Wichita Public Works at 316-219-8921 PRIOR to Lift Station Start-up.
- Contractor shall install 4 Fall Prevention Anchors at locations as shown outside of Hatch on above drawing. Anchors shall be 3M/Sala Model 2100169 Pour-in-Place Detent Anchor w/ Socket or approved equal.
- All stubs to include an "A" lock ring. All stubs located below the elevation of 1347.00 are to include an outside stub to be jointed wrapped and a 6" thick layer of non-shrink grout surrounding the stub. Cost to be subsidiary to Wet Well.
- Pumps P-2 & P-4 are 40 hp pumps, to be installed at a future time. Contractor to install all guiderails, wet well piping, mounting brackets, all other hardware for these pumps with this project.
- See Electrical Plans for communication and power conduit sizing and installation requirements.

GATE VALVE SCHEDULE

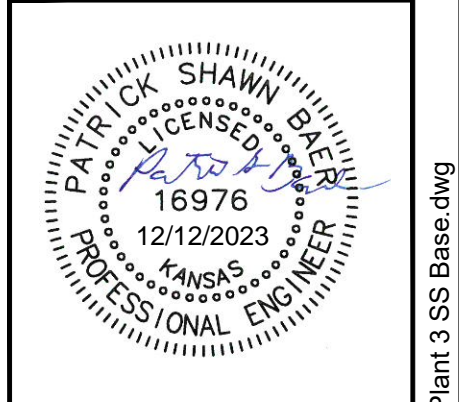
MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
GV-1	EX. VALVE VAULT	NEW	10"	FLANGE	GEARED OPERATOR W/ EXTENSION & 2" NUT

CHECK VALVE SCHEDULE

MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
CV-1	CHECK VAULT 1	NEW	6"	FLANGE	LEVER & SPRING
CV-2	CHECK VAULT 1	NEW	10"	FLANGE	LEVER & SPRING
CV-3	CHECK VAULT 2	NEW	6"	FLANGE	LEVER & SPRING
CV-4	CHECK VAULT 2	FUTURE	10"	FLANGE	LEVER & SPRING
CV-5	EX. VALVE VAULT	NEW	10"	FLANGE	LEVER & SPRING

PUMP SCHEDULE

MARK	TYPE	GPM	HEAD (FT)	EFF. %	HP	RPM	ELECT.
P-1	SUBMERSIBLE	670	74.0	75%	15	1,783	460/60/3
P-2	SUBMERSIBLE	1489	78.9	67%	40	1,172	460/60/3
P-3	SUBMERSIBLE	670	74.0	75%	15	1,783	460/60/3
P-4	FUTURE	TBD	78.9	TBD	40	TBD	460/60/3



BAUGHMAN COMPANY
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Wichita, KS 67211
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PLANT #3 (NW)
NEW WET WELL

OPTION #1
2 Precast
Wetwells

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
468-2023-005511

DESIGN: PSB DRAWN: LN

DATE: Dec. 13, 2023

SHEET OF
6 29

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