

Williams Crossing Pump Station

General Site and Safety Considerations

Wednesday, December 02, 2015

GENERAL SITE CONDITION/ACCESS

Vehicle Entrance and Exit to Site	Gravel drive off of ??? Street
Parking	On street or on driveway
Sight lighting Fixture	None

SAFETY CONSIDERATIONS

General Site Safety Issues	Service disconnect switch is accessible from outside of building (unsecured)
----------------------------	--

SITE SECURITY

Facility Fenced	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Privacy Fence	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Fence Material	N/A	Height of Fence	N/A
Method of Securing Access Gates	N/A	Fence Topping	N/A
Adequate security for keeping public off site?	No		

Notes:

Disconnect for station is accessible to public.



General Site Photos

Wednesday, December 02, 2015



Site entrance from street



Site access driveway and valves separating upper zone (7 homes)



Station set in terraced area

Equipment Housing

Wednesday, December 02, 2015

Equipment Housing	<input checked="" type="checkbox"/> Building	<input checked="" type="checkbox"/> Enclosure	<input type="checkbox"/> Other		
Condition	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Criticality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	
Serviceability	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	

Structural Materials	Stick frame over/around fiberglass clam shell
Age	Installed 2005

Locking Doors	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Intrusion Alarm	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Dimensions:

Length	20	ft
Width	20	ft

HVAC:

Heat	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Cooling	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Humidity Control	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Fan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Notes:

Clam shell in a house.

Tank drain off back of building could impact downhill property.



Equipment Housing Photos

Wednesday, December 02, 2015



Double doors access to one side of clam shell, side entrance to tank and backside of clam shell



Electric meter and entrance to building, disconnect on left wall down low



Clam shell access to control panel from within structure





Clam shell access to pumps and valves



Backside of structure, roof drains collect with pressure tank drain



Backside of structure



Side of structure

Flow Meter and Vault(s)

Wednesday, December 02, 2015

Flow Meter	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
-------------------	------------------------------	--

Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
-----------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Criticality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
-------------	----------------------------	----------------------------	----------------------------	----------------------------

Serviceability	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
----------------	----------------------------	----------------------------	----------------------------	----------------------------

Asset Nos.	
Location.	
Type/Manufacturer	
Age	

Vault	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
--------------	------------------------------	-----------------------------	------------------------------

Description	
-------------	--

Structural Materials	
Dimensions	
Age	

Access Hatch Fall Protection	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Access Hatch Lock	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Intrusion Alarm	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Notes:



Flow Meter and Vault(s) Photos

Wednesday, December 02, 2015

No Facility

WILLIAMS CROSSING #1

Wednesday, December 02, 2015

Suction Zone	1280	Discharge Zone	1360
---------------------	------	-----------------------	------

Pumping System No. 1

Condition 1 2 3 4 5

Criticality 1 2 3 4

Serviceability 1 2 3 4

Pump Type Vert. Turb. End Suction Split case In-line centrifugal

Mounting Horizontal Vertical

Pump from Piping Can Basin/Clearwell

Pump to Closed zone Pressure tank Reservoir

Asset no.	P-7-21-1
Manufacturer	Weinman
Model	Wein-60.MPC v.1
Serial #	C880303
Age	Installed 2005

Rated Design Pt 70 gpm @ 148 feet TDH

Ability to Isolate Pump Yes No

How to Remove Pump Manual

MOTOR

ODP TEFC TENV TEBC Diesel Engine Other

Horsepower 5 Voltage 230 Phase 1 rpm 3510

Manufacturer	Marathon Electric
Model	FVM 154TCOR701105 L
Serial #	Unknown
Age	Installed 2005

Inverter duty rated? Yes No Unknown

Motor Driver VFD Soft Starter FVNR Starter None

Notes:

Impeller trimmed down on pump 1 due to over pressurization



Valves and Gauges

Wednesday, December 02, 2015

Check/Control Valve	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reported/Exterior Condition	No issues noted.	
Asset Nos.		
Type/Manufacturer	Globe check	
Age	Installed 2005	

Isolation Valve(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reported/Exterior Condition	No issues noted.	
Asset Nos.		
Type/Manufacturer	1/4 turn butterfly	
Age	Installed 2005	

Pressure Gauge(s)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Asset Nos.		
Type/Manufacturer		
Age		

Notes:

- PT-7-21-1 Williams Crossing Suction Pressure Transmitter Dwyer
- PT-7-21-2 Williams Crossing Pre-PRV Pressure Transmitter Dwyer
- PT-7-21-3 Williams Crossing Post-PRV Pressure Transmitter Dwyer



Piping

Wednesday, December 02, 2015

Common Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	3"
Pipe material	Stainless steel
Age	Installed 2005

Pump Specific Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	1-1/2"
Pipe material	Stainless steel
Age	Installed 2005

Pump Specific Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	1"
Pipe material	Mix brass, galv, stainless steel - potential corrosion issue due to dissimilar metals
Age	Installed 2005

Common Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	2"
Pipe material	Stainless steel
Age	Installed 2005

Notes:

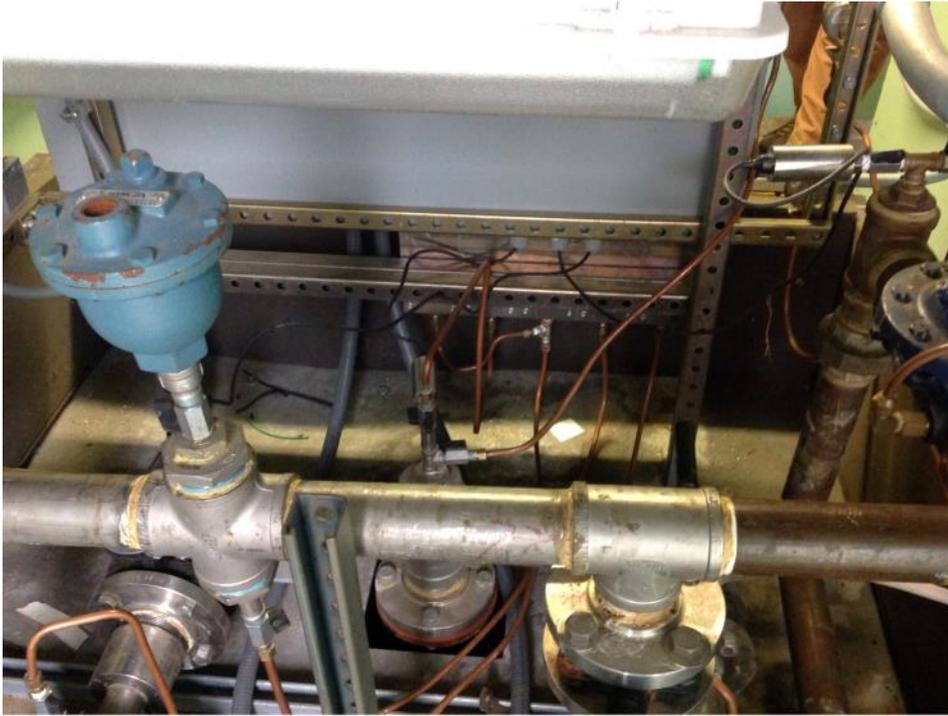


Pump/Valve/Piping Photos

Wednesday, December 02, 2015



Pumping System No. 1



Common discharge piping and air relief valve



Common system pressure tank



Station control panel



Pressure sensors for pump control

WILLIAMS CROSSING #2

Wednesday, December 02, 2015

Suction Zone	1280	Discharge Zone	1360
---------------------	------	-----------------------	------

Pumping System No. 2

Condition 1 2 3 4 5

Criticality 1 2 3 4

Serviceability 1 2 3 4

Pump Type Vert. Turb. End Suction Split case In-line centrifugal

Mounting Horizontal Vertical

Pump from Piping Can Basin/Clearwell

Pump to Closed zone Pressure tank Reservoir

Asset no.	P-7-21-2
Manufacturer	Weinman
Model	Wein-60.MPC v.1
Serial #	C880304
Age	Installed 2005

Rated Design Pt 70 gpm @ 148 feet TDH

Ability to Isolate Pump Yes No

How to Remove Pump Manual

MOTOR

ODP TEFC TENV TEBC Diesel Engine Other

Horsepower 5 Voltage 230 Phase 1 rpm 3505

Manufacturer	Weinman
Model	Unknown
Serial #	Unknown
Age	Installed 2005

Inverter duty rated? Yes No Unknown

Motor Driver VFD Soft Starter FVNR Starter None

Notes:



Valves and Gauges

Wednesday, December 02, 2015

Check/Control Valve	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reported/Exterior Condition	No issues noted.	
Asset Nos.		
Type/Manufacturer	Globe check	
Age	Installed 2005	

Isolation Valve(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reported/Exterior Condition	No issues noted.	
Asset Nos.		
Type/Manufacturer	1/4 turn butterfly	
Age	Installed 2005	

Pressure Gauge(s)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Asset Nos.		
Type/Manufacturer		
Age		

Notes:

See pumping system no. 1 for info on pressure sensors



Piping

Wednesday, December 02, 2015

Common Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	3"
Pipe material	Stainless steel
Age	Installed 2005

Pump Specific Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	1-1/2"
Pipe material	Stainless steel
Age	Installed 2005

Pump Specific Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	1"
Pipe material	Mix brass, galv, stainless steel - potential corrosion issue due to dissimilar metals
Age	Installed 2005

Common Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	2"
Pipe material	Stainless steel
Age	Installed 2005

Notes:



Pump/Valve/Piping Photos

Wednesday, December 02, 2015



Pumping System No. 2



Pumping System No. 2 motor nameplate



Pumping System No. 2 suction isolation

Backup Power

Wednesday, December 02, 2015

BACKUP POWER

Source	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Pig tail for portable	<input type="checkbox"/> On-site, permanent
Transfer Switch	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Type	<input type="checkbox"/> Manual	<input type="checkbox"/> Auto	

Notes:

STANDBY GENERATOR

Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Criticality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
Serviceability	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
Asset No.					
Manufacturer					
Model					
Serial #					
Age(s)					
Location					
Electrical capacity	KW		Voltage		Phase(s)
Fuel type	<input type="checkbox"/> Diesel	<input type="checkbox"/> Nat. Gas	<input type="checkbox"/> Propane	<input type="checkbox"/> Gasoline	<input type="checkbox"/> Other
Full load fuel demand		gal/hr			
Fuel stored on-site		gal			

Notes:

