

Disclaimer for Construction Plans and Design Report Examples

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The example design report and construction plans are provided for the express purpose of assisting engineers in creating these documents for submittal to ADEQ, and to display the minimum requirements necessary for ADEQ approval. Other agencies, cities, counties, contractors, developers and other entities may require different or additional criteria and should be referenced accordingly. The complexity of your design may require additional information. This example may be revised from time to time and the design engineer should ensure that they have the most recent copy prior to creating their design. If you have any questions regarding this information, please contact our office at WQD_DWR@azdeq.gov.

It is the responsibility of the Professional Engineer to ensure that the design is adequate and meets the requirements of the project.

GENERAL NOTES

- In accordance with A.A.C. R18-5-504, all construction materials will be lead free, excluding leaded joints for cast iron pipes.
- All water treatment chemicals and water components in contact with potable water will conform to National Sanitation Foundation 60 and 61 respectively. All plastic pipes and fittings will have the National Sanitation Foundation seal in accordance with Engineering Bulletin No. 10.
- The system is designed using good engineering practice in accordance to Engineering Bulletin No. 10, as stated in A.A.C R18-5-502.
- The minimum pipe cover is 3 ft given by the Engineering Bulletin No. 10.
- All pipes, valves and other appurtenances will conform to the current AWWA standards in accordance with Engineering Bulletin No. 10.
- All connections have national standard threads in accordance with MAG 360-1.
- All new waterlines shall be pressure tested in accordance with current AWWA C605 for PVC and AWWA C600 for DIP.
- All new water system components or equipment will be disinfected and flushed in accordance to Engineering Bulletin No. 8 Disinfection of Water Systems or AWWA C651-14.
- After disinfection, all water system components or equipment will be bacteriologically tested by the Bacti test through an Arizona Department of Health Services certified laboratory.
- All paint systems and cathodic protection equipment used to protect against corrosion conform to current AWWA D102 standards.
- If one pump is out of service, the remaining pump has the capacity to deliver the required water at the minimum pressure in accordance to the Engineering Bulletin No. 10.
- The pumps will cycle a maximum of 6 times per an hour in accordance to the Engineering Bulletin No. 10.
- Concrete thrust block dimensions and construction will be done according to MAG 380.

BASIS OF BEARING

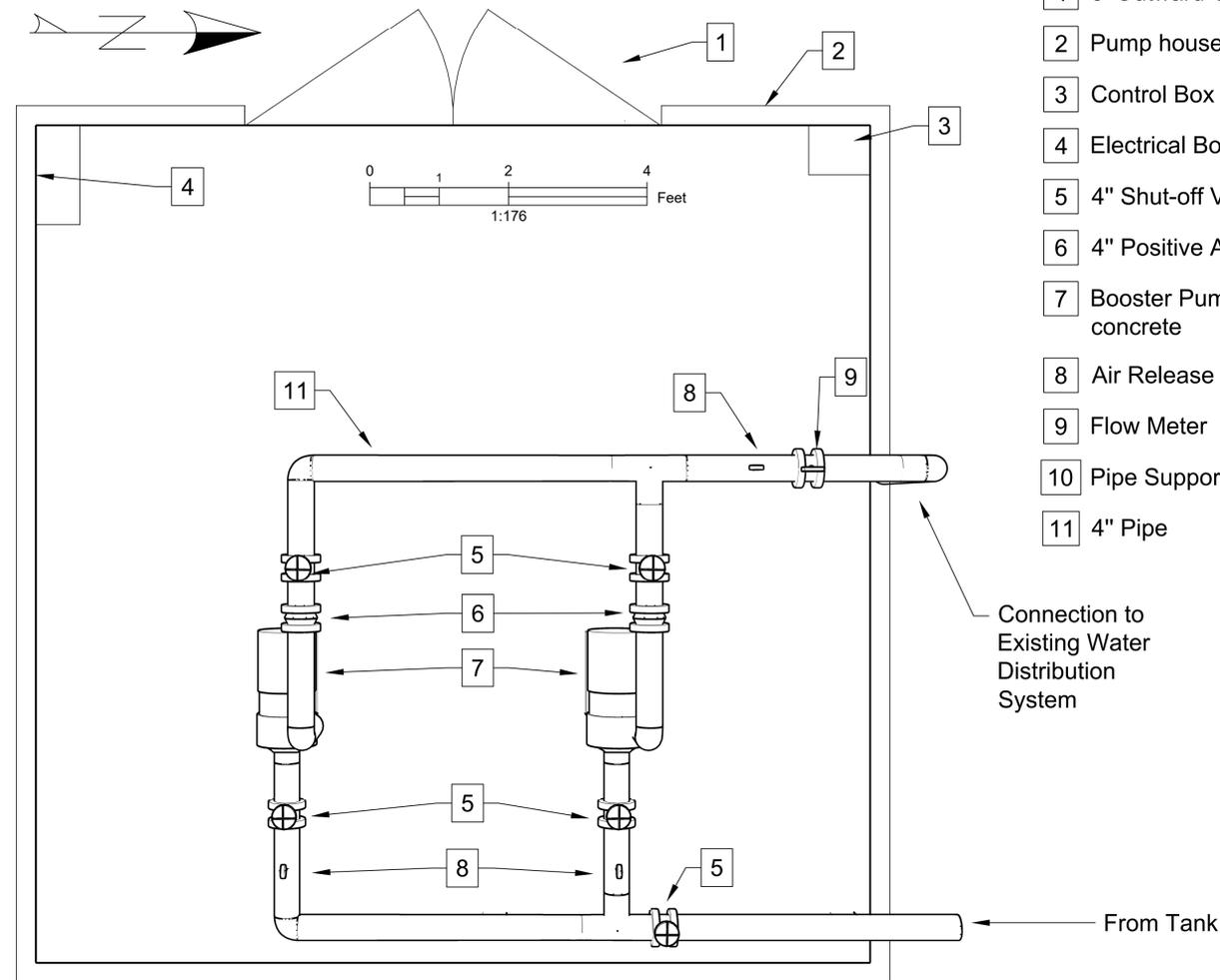
The site is located within Gilbert, AZ at the respective coordinates: Lat 33.24772615 N, Long 111.84106692 W. The township is 1S 6E, Section 14 SWSW. The site is located in the X-shaded flood zone and not within the 100 year flood zone.

MATERIALS AND QUANTITY

Materials	Quantity
Booster Pump w/ capacity to meet demand at minimum pressure	2
4" Shut-off Valve	5
4" Positive Acting Check Valve	2
Air Release Valve w/ Pressure Gauge	3
4" T Joint	2
4" 90° Bend Joint	5
Flow Meter	1
Pipe Support	4
3' Outward Opening Door w/ Lock	2
12.5'X12.5' Pump house	1
4" PVC C900 Piping	40'

Project Contact: _____
Date: _____

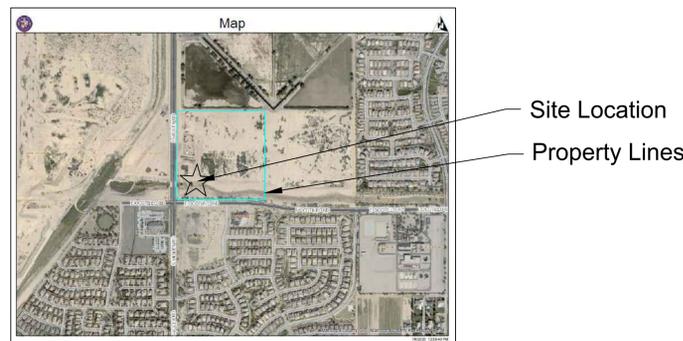
PUMP HOUSE PLAN VIEW



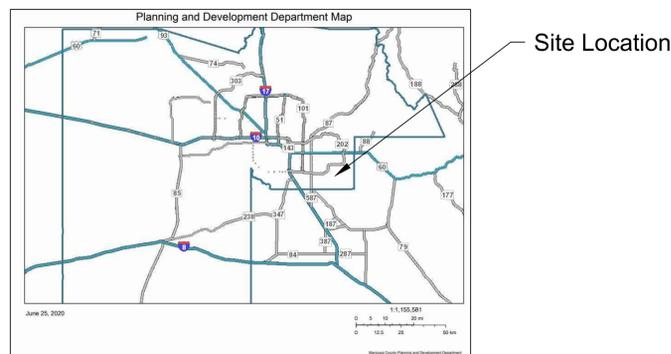
LEGEND

- 1 3' Outward Opening Doors w/ Lock
- 2 Pump house walls
- 3 Control Box
- 4 Electrical Box
- 5 4" Shut-off Valve
- 6 4" Positive Acting Check Valve
- 7 Booster Pump, securely bolted to concrete
- 8 Air Release Valve w/ Pressure Gauge
- 9 Flow Meter
- 10 Pipe Support
- 11 4" Pipe

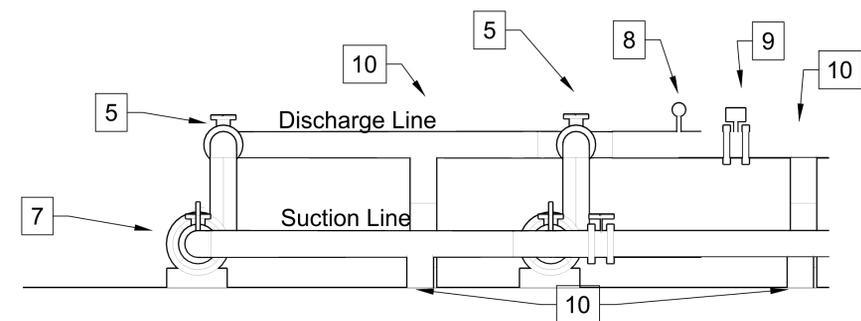
SITE LOCATION



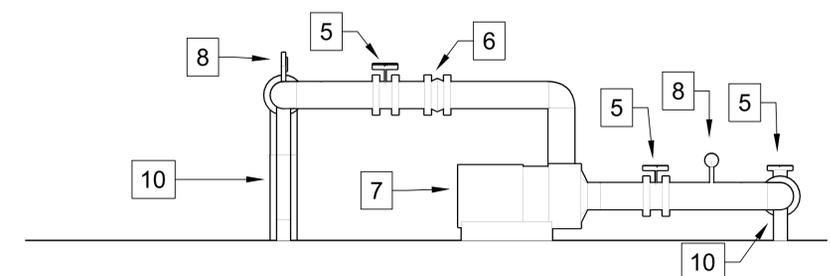
VICINITY MAP



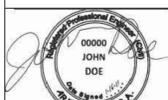
BOOSTER PUMP DETAILS PROFILE VIEW



BOOSTER PUMP DETAILS SIDE VIEW



Booster Pump Example



Revisions		
No.	Description	Date

Designed by:
Drafted by:
Checked by:
Date: June 2020

Project No 0407223	Sheet 1
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