

downstream pressure main)?

Unknown

Booster Station Design Criteria

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1.	What water type will be used (potable, raw, or reclaimed)?
Pota	able
2.	Is any special equipment required for water filtration or sampling? If yes, please describe (e.g., "basket filters, "chlorine analyzer", etc.).
No	
3.	What is the inlet water source (e.g., "storage tank", "pressure main", " storage pond", etc.)?
Dua	ıl pressure Main
4.	What is the inlet pipe size and material (e.g., 8-inch PVC, 10-inch ductile iron, etc.)?
8-in	ich and 16-inch ductile iron
5.	If the inlet water source is also a pressure main, please provide the minimum inlet water pressure (PSI) coming into the new booster station. An accurate minimum inlet water pressure is critical for booster station design.
30 F	PSI
6.	What is the average daily domestic demand (gallons per minute)?
Unl	known
7.	What is the peak (max) domestic demand (gallons per minute)?
500	gpm
8.	A. What is the minimum required domestic service water pressure (PSI) at the booster station (i.e., at the point where the booster station connects to the

B. T	he Ro	mtec	Utilitie	es supp	olied	syste	m wil	I prov	vide	the fo	llowing	mini	mum)
don	nestic	serv	ice w	ater p	res	sure a	at the	boos	ter	station	(based	d on t	the g	iven
mini	imum	inlet	water	pressi	ire (auesti	on 5)	and	the	pump	curves)):		

102 PSI

9. A. What is the **maximum domestic service water pressure** (PSI) allowed at the booster station (i.e., at the point where the booster station connects to the downstream pressure main)?

Unknown

B. The Romtec Utilities supplied system will provide the following **maximum domestic service water pressure** at the booster station (based on the pump curves):

139 PSI

10. A. What is the required **minimum downstream domestic service water pressure** (PSI) at all downstream fixtures? In other words, what is the minimum required water pressure at any fixture (faucet, spigot, etc.) downstream of the booster station?

35 PSI

- **B.** <u>Note</u>: Romtec Utilities cannot guarantee the water pressure at any particular downstream fixture; pressure is only guaranteed at the booster station. Romtec Utilities is not responsible for pressure main analysis.
- **11.** What is the **pressure main length** from where it connects to the booster station to the farthest fixture that will be served by the booster station?

8-inch = 1515 ft ; 16-inch = 3875 ft

12. What is the **pressure main pipe size and material** (e.g., 12-inch PVC, 10-inch ductile iron, etc.)?

8-inch and 16-inch mixed PVC C900 and ductile iron

13. What is the **elevation** of the farthest fixture that will be served by the booster station?

1,067 ft

14. What is the **elevation** of the highest fixture that will be served by the booster station? (This may or may not be different than the elevation in question 13)

1067 ft

peak domestic demand? If so, please describe (e.g., for fire service equipment, for intermittent filling of large storage tanks, etc.)
Yes, fire service equipment
16. If high demand is required, what is the peak high demand (gallons per minute)?
4,000 gpm
17. A. If high demand is required, what is the required minimum high demand pressure (PSI) at the downstream high demand fixture(s) (e.g., fire hydrant(s), industrial storage tank, etc.)
30 PSI
B. Note: Romtec Utilities cannot guarantee the pressure at any particular downstream fixture; pressure is only guaranteed at the booster station. The Romtec Utilities supplied high flow pumps will provide the following minimum high demand pressure at the booster station:
108 PSI
18. If high demand is required, are the high demand pumps required to meet NFPA 20 standards (yes/no)? (This is determined by the local fire authority)
Yes
19. Does the new booster station require a new control building to house the system?
Yes
20. What is the available supply power for the new booster station (e.g., 480V/3-phase, 208V/3-phase, etc.)?
480V/3-phase
21. Does the new booster station require a backup generator ? If yes, what is the desired fuel type (diesel, natural gas, or LPG)?
Yes, diesel

15. Will the booster station need to accommodate occasional high demand beyond the