

# Town Center Sewer Pump Station Improvements

Date: November 29, 2016

Information requested / provided regarding project plans and specifications:

**Question 1:** On Drawing C-4 under Stage 2 Note 8, "Install Temp Plug" , please clarify the location of the sewer line for the temporary plug that the note references.

**Answer 1:** A new note was added as Item 6. Callout #6 (the callout pointing at the concrete pad within the enclosure), 7, & 8 should all be changed to 7, 8, & 9 respectively.

Therefore, the Temporary plug should be installed at the existing Manhole that is located in the asphalt by the electrical box.

**Question 2:** Please provide the peak flow requirement(s) for what the bypass system should be designed.

**Answer 2:** Our specifications provide the information as to number of housing units, businesses, etc. We do not have actual peak flow since we did not install flow meters to determine the peak flow. However, based on statistical data, attached please find our estimated peak flow calculations.

**Question 3:** Ductile Iron Pipe specification 00 2700, section 2.4 calls out for exposed piping to be coated per Section 09800, Protective Coatings. A protective coating specification is not included in the specifications. Please provide the required coating for exposed ductile iron pipe.

**Answer 3:** Pipe and fittings shall have a coating of an exterior asphaltic coating approximately 1 mil thick per AWWA C151 for ductile iron pipe, AWWA C115 for flanged pipe and AWWA C110 and C153 for fittings.

Flow at exist 4" gravity Main						
		Unit	Avg. Flow (GPD)	Diurnal Factor	Peak DWF (GPD)	
Gilbert Center	4700	SF	4230	1.57	6641	
Andrew Logan Psychotherapy	1200	SF	480	1.57	754	
2991 Woodside Office	1950	SF	273	1.314	359	
2989 Woodside Office	1400	SF	196	1.314	258	
2984 Woodside Office	1700	SF	238	1.314	313	
2977 Woodside Office	3000	SF	420	1.314	552	
2973 Woodside Office	900	SF	126	1.314	166	
2967 Woodside Office	5500	SF	770	1.314	1012	
2989 Woodside Office	3500	SF	490	1.314	644	
2955 Woodside Office	7000	SF	980	1.314	1288	
<b>Total</b>					<b>11985</b>	<b>GPD</b>
Flow at exist SSMH Sta. 1+32.29						
		Unit	Avg. Flow (GPD)	Diurnal Factor	Peak DWF (GPD)	
Woodside Library	5600	SF	1568	1.57	2462	
Woodside Fire Protection	5400	SF	988.2	1.57	1551	
Robert Super Market	11000	SF	2090	1.57	3281	
<b>49 Residential Units</b>	<b>49</b>	<b>Unit</b>	<b>9506</b>	<b>1.87</b>	<b>17776</b>	
<b>Total</b>					<b>25071</b>	<b>GPD</b>
Flow at exist SSMH sta. 1+59.42						
		Unit	Avg. Flow (GPD)	Diurnal Factor	Peak DWF (GPD)	
Commercial Building	17500	SF	15750	1.57	24728	
58 Residential Units	58	Unit	11252	1.87	21041	
<b>Total</b>					<b>45769</b>	<b>GPD</b>

Average Flow Values

Residential Avg Flow	194	GPD/Unit
Office	0.14	GPD/SF
Restaurant	0.9	GPD/SF
Medical office	0.4	GPD/ SF
Library/Church	0.28	GPD/SF
Fire Protection/Nursery School	0.183	GPD/SF
Super Market	0.19	GPD/SF