

Instantaneous Demand Calculations & Meter Sizing Report
Using Fixture Based Demands

FACILITY: Clearwater Subdivision - Lot 45

DATE: 1/1/2004

NOTE: The FIXTURE VALUES on this table were derived from AWWA Manual M-22 table 4-2, 2004 edition.

#	Fixture Value in gpm	Quantity of Fixtures	Total Fixture Value in gpm	Reference	
# FIXTURE VALUES Standardized at 60 psi					
1	Typical Fixtures				
a	Toilet (Tank)	4	3	12	
b	Toilet (flush valve)	35		0	
c	Urinal (wall or stall)	16		0	
d	Urinal (flush valve)	35		0	
e	Bidet	2		0	
f	Shower (single head)	2.5	3	7.5	
g	Faucet (lavatory)	1.5	3	4.5	
h	Faucet (kitchen sink)	2.2	1	2.2	
i	Faucet (utility sink)	4	1	4	
j	Dishwasher	2	1	2	
k	Bath tub	8	1	8	
l	Clothes Washer	6	1	6	
2	Hose Wash Down Connections (with 50 feet of hose)				
a	1/2 inch Hose	5		0	
b	5/8 inch Hose	9		0	
c	3/4 inch Hose	12		0	
3	Miscellaneous				
a	Bedpan Washers	10		0	
b	Drinking Fountains	2		0	
c	Dental Units	2		0	
4	Other Added Fixed Demand Loads from Fixtures (from manufacturers specifications)				
a				0	
b				0	
c				0	
d				0	
e				0	
f				0	
g				0	
h				0	
i				0	
j				0	
5	TOTAL GROSS FIXTURE VALUE (gpm):			46.2	AWWA Manual M-22 table 4-2
6	Domestic Usage Instantaneous Probability Correction: Single Residence			Corrected gpm: 46.2	AWWA Manual M-22 figures 4-2 & 4-3
7	Select Average Pressure at Meter Outlet (psi):			60	
	Pressure Adjustment Factor:			1	AWWA Manual M-22 table 4-1
8	Domestic (Non-Irrigation) Demand - Corrected for Pressure (gpm):			46.2	Lines 6 X 7
9	IRRIGATION DEMANDS SECTION:				
a	Irrigated Area with SPRAY Systems in square feet:	1,000	1.16	11.6	AWWA Manual M-22 figure 4-5 and 4-6
b	Irrigated Area with ROTARY Systems in square feet:	3,000	0.4	12	
c	Irrigated Area with Hose Sprinkler Systems in square feet:	0			
d	TOTAL IRRIGATED AREA (in square feet):	4,000			
		#	Pressure Corrected Value ea.	Fixture Value in gpm	
e	Number of Irrigation Hose Bibs (average 50 feet of 5/8" hose):	1	9	9	
10	TOTAL IRRIGATION DEMANDS:			32.6	
11	FIRE SPRINKLER SYSTEM Demands (gpm):			0	
12	OTHER Fixed Demands not itemized above (gpm):			0	
13	TOTAL INSTANTANEOUS DEMAND for this Facility (gpm):			78.8	Lines 8+10+11+12