



# Staff Report

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**Agenda Item:**            **Mountain Gate (Empire Residential) Increased Pipe Sizing of Wastewater Force Main** - Approval of over sizing approximately 1,824' of 3" force main to 8" diameter gravity sewer for the amount of \$33,896 to Empire Residential, Inc.

**Staff Contact:**            Ron Doba, Interim Utilities Director

**Meeting Date:**            December 18, 2007

**Background:**            As part of the Development Agreement with Empire Residential, Inc. for the Mountain Gate Project, Empire is to construct a lift station to pump the backwash water from the Kinetico Arsenic Removal Facility to the Town's sewer system at Valley View Drive and Hwy 89A. The project includes approximately 3,684' of 3" force main that runs from the reservoir site through an easement granted by Selna Mongini along Hummingbird Road to Valley View Drive, through the cemetery out to 89A and ending at an existing manhole.

Topography permits approximately 1,824' of the force main to be gravity sewer which can immediately serve approximately 7 customers and eventually serve the Sienna Canyon area, west of the cemetery. It is estimated that approximately 60-70 future sewer service connections can be provided to the Town if 1,824' of force main is changed to 8" gravity sewer. The new sewer line would comply with the Town's Wastewater Master Plan.

The Amendment to the Development Agreement with Empire permits over sizing lines in Section 16A.4. Empire has obtained bids for the over sizing and the original cost to determine the difference. The total cost is \$202,152. The difference is \$33,896. Funding is available for this work from development fees.

**Recommendations:**    To approve the over sizing of the Mountain Gate Well force main to Empire Residential for the amount of \$33,896.

# MG Force Main

Plans Dated: September 2007

				Offsite Water	
				Arsenic Force Main	
			UNIT PRICE	QUANTITY	TOTAL
<b>Mobilization</b>					
1	Mobilization	LSUM	3,000.00	1	\$ 3,000.00
<b>SUBTOTAL</b>					<b>\$ 3,000.00</b>
<b>Excavation</b>					
2	Clear and Grub	LSUM	3,500.00	1	\$ 3,500.00
3	Surface Replacement per Note 205	LSUM	3,250.00	1	\$ 3,250.00
4	Remove and Dispose of Existing Bollards and Cattle Guard	LSUM	3,800.00	1	\$ 3,800.00
5	Traffic Control	LSUM	2,100.00	2	\$ 4,200.00
<b>SUBTOTAL</b>					<b>\$ 14,750.00</b>
<b>Arsenic System Backwash Disposal</b>					
6	Install Duplex Pumping System	LSUM		1	\$ -
7	Install Control Panel Pump System	LSUM		1	\$ -
8	3 Inch HDPE Sewer Force Main Typical	LF	34.00	1460	\$ 49,640.00
9	3 Inch HDPE Sewer Force Main in Floodplain	LF	66.00	400	\$ 26,400.00
10	Instll 6 Inch Sleeve on Road Crossing per Note 310	LF	70.00	39	\$ 2,730.00
11	Air Release Valves per Note 312	EACH	3,400.00	2	\$ 6,800.00
12	3 Inch Corp Stop Valve (Including Box and Cover) per Note 324	EACH	650.00	2	\$ 1,300.00
13	8 Inch Sewer Line	LF	38.00	1824	\$ 69,312.00
14	Sewer Man Hole (48" MAG 420)	EA	3,800.00	7	\$ 26,600.00
15	Force Main Discharge Per Detail On DWG C03	EA	1,200.00	1	\$ 1,200.00
16	Stub-Out of Sewer Line with Plug	EA	420.00	1	\$ 420.00
<b>SUBTOTAL</b>					<b>\$ 184,402.00</b>
<b>LUMP SUM TOTAL</b>				<b>\$</b>	<b>202,152.00</b>

## NOTES

1. Assumes digging rate of 400 LF of 4' deep trench with a CAT 320 or equivalent in an 8 hour day. Anything less than this is considered hard dig.
2. Assumes 1 mobilization.
3. Assumes native material is acceptable backfill material per typical trench details.
4. Assumes SDR 11 (160 PSI) HDPE pipe
5. Assumes staking, permitting and inspection to be furnished by owner.
6. Item 14 includes insecticide coating and vacuum test one time
7. Surface replacement includes paving on Old Jerome HWY & ABC replacement on Hummingbird Lane
8. Assumes 10% retention with progress payments based on percentage of completion per line item net 30 days.