



AGENDA ITEM MEMORADUM

Public Works

Department

Don Prince

Department Director

COMMISSION MEETING DATE - 7:00 PM	Deadline to Town Clerk
<input checked="" type="checkbox"/> June 12, 2012	June 1, 2012

*Subject to Change

Presentation Reports **Consent** Ordinance

FY2012 DESIGNATED HIGH PRIORITY ITEM – SEWER SYSTEM INFRASTRUCTURE

SUBJECT TITLE: Sewer Mainline Sealing/Grouting

EXPLANATION: In the Sanitary Sewer Analysis King Engineering identified 49 sewer main lines that required sealing/grouting to stop groundwater infiltration from leaking joints. King reviewed the Town's DVDs of the sewer mains and documented the number of joints in the pipe sections to be repaired. (The 49 main lines are approximately 2.7 miles (14,446 feet) in length and have about 3,400 joints). King estimated the cost to do the repair work to be \$153,235 in their report.

The Town currently has a contract with Tele Vac that includes sealing/grouting sewer lines, but the work is priced on an hourly basis plus \$5.00 a gallon for grout. In order to determine what the cost would be for Tele Vac to do the work, King reviewed previous sealing/grouting bills from Tele Vac and concluded their cost is about \$30.60 per joint.

Then King got pricing for us from other government contracts that, because of the economics of scale, should have competitively- priced agreements. King prepared the attached report (**Exhibit 1**) detailing the number of joints, length of pipe and estimated cost for three contractors. The summary of their cost analysis is shown in Table 1.

Table 1

Government	Multiple Government Contracts	Miami Dade Wastewater Division	LBTS
Company:	JCC Enterprises	Miami Dade Wastewater Division	Tele Vac
Price Method	Per Joint	Per Foot	Per Joint
Price:	\$97,376	\$144,461	\$93,115.80

The King report shows that the lowest price is offered by the Town's current contractor, Tele Vac. Tele Vac has agreed to a not to exceed price of \$93,200 to complete all the sealing/grouting.

This project is estimated to take 60 days.



By grouting the 49 joints the Town could eliminate over 8.4 million gallons of groundwater infiltration a year from our sewer system. Currently we pay Pompano \$2.052 per 1,000 gallons to process wastewater, thus a saving of about \$17,258 per year. It would take 5.4 years to recover the funds if 100% of the infiltration was stopped. However, these repairs are as much about preventing further expansions of the gaps in the joints and greater infiltration.

Although this project is coming in under the engineer's estimate, our research is indicating we are likely to see higher costs than estimated on the cure in place and sectional liners.

FISCAL IMPACT: Funds are available in the Sewer Fund account 103.535.000.630 for this project.

RECOMMENDATION: We recommend the Commission authorize the Town Manager to issue a Purchase Order to Tele Vac for \$93,200 for this work.

On Town Attorney approved form
 Yes No

Town Manager Initials OA



Town of Lauderdale-By-The-Sea
Sanitary Sewer System Evaluation, Analysis, and Engineering Services
Detailed Grouting Take Off



Detailed Grouting Take Off

Item No.	Basin No.	UMH	DMH	Repair Type	Pipe Length (ft)	Pipe Diameter (Inch)	# of joints	# of Laterals	Cost					
									JCC Enterprises Labor Inc. (\$/joint)	MDWASD (\$/ft)	TELEVAC (\$/joint)	*Envirowaste Service Group (\$/joint)		
												8"	10"	12"
									\$ 32.0	\$ 10.0	\$ 30.6	\$ 170.07	\$ 192.52	\$ 214.97
1	2	139	140	Grouting	300	8	65	10	\$2,080.00	\$3,002.00	\$1,989.00	\$11,054.55		
2	2	151	150	Grouting	260	8	54	5	\$1,728.00	\$2,600.00	\$1,652.40	\$9,183.78		
3	2	152	153	Grouting	357	8	75	9	\$2,400.00	\$3,570.00	\$2,295.00	\$12,755.25		
4	10	1	2	Grouting	422	8	90	14	\$2,880.00	\$4,220.00	\$2,754.00	\$15,306.30		
5	10	4	5	Grouting	303	8	62	8	\$1,984.00	\$3,030.00	\$1,897.20	\$10,544.34		
6	10	7	8	Grouting	385	10	81	12	\$2,592.00	\$3,850.00	\$2,478.60		\$15,594.12	
7	10	13	15	Grouting	297	8	60	3	\$1,920.00	\$2,966.00	\$1,836.00	\$10,204.20		
8	10	18	19	Grouting	365	8	78	13	\$2,496.00	\$3,647.00	\$2,386.80	\$2,386.80		
9	10	19	20	Grouting	364	8	77	10	\$2,464.00	\$3,640.00	\$2,356.20	\$13,095.39		
10	10	20	21	Grouting	330	8	70	10	\$2,240.00	\$3,296.00	\$2,142.00	\$11,904.90		
11	10	22	23	Grouting	337	8	68	2	\$2,176.00	\$3,370.00	\$2,080.80	\$11,564.76		
12	10	28	29	Grouting	177	8	37	5	\$1,184.00	\$1,765.00	\$1,132.20	\$6,292.59		
13	10	30	31	Grouting	380	8	80	9	\$2,560.00	\$3,801.00	\$2,448.00	\$13,605.60		
14	10	31	32	Grouting	381	8	80	8	\$2,560.00	\$3,812.00	\$2,448.00	\$13,605.60		
15	10	32	33	Grouting	376	8	77	5	\$2,464.00	\$3,759.00	\$2,356.20	\$13,095.39		
16	10	33	55	Grouting	134	8	29	3	\$928.00	\$1,340.00	\$887.40	\$4,932.03		
17	10	34	35	Grouting	311	8	65	7	\$2,080.00	\$3,113.00	\$1,989.00	\$11,054.55		
18	10	39	40	Grouting	305	8	64	6	\$2,048.00	\$3,050.00	\$1,958.40	\$10,884.48		
19	10	41	42	Grouting	425	10	85	2	\$2,720.00	\$4,245.00	\$2,601.00		\$16,364.20	
20	10	47	48	Grouting	316	12	68	10	\$2,176.00	\$3,162.00	\$2,080.80			\$14,617.96
21	10	48	49	Grouting	309	12	66	8	\$2,112.00	\$3,094.00	\$2,019.60			\$14,188.02
22	10	49	54	Grouting	286	12	59	3	\$1,888.00	\$2,860.00	\$1,805.40			\$12,683.23
23	10	52	53	Grouting	323	8	70	13	\$2,240.00	\$3,227.00	\$2,142.00	\$11,904.90		
24	10	53	54	Grouting	314	8	67	9	\$2,144.00	\$3,142.00	\$2,050.20	\$11,394.69		
25	10	55	83	Grouting	294	8	59	0	\$1,888.00	\$2,940.00	\$1,805.40	\$10,034.13		
26	10	60	59	Grouting	221	8	46	5	\$1,472.00	\$2,212.00	\$1,407.60	\$7,823.22		
27	10	65	66	Grouting	390	8	84	11	\$2,688.00	\$3,896.00	\$2,570.40	\$14,285.88		
28	10	66	66	A Grouting	158	8	34	4	\$1,088.00	\$1,583.00	\$1,040.40	\$5,782.38		
29	10	66	A 68	Grouting	228	8	47	4	\$1,504.00	\$2,280.00	\$1,438.20	\$7,993.29		
30	10	68	67	Grouting	112	8	24	4	\$768.00	\$1,123.00	\$734.40	\$4,081.68		
31	10	68	69	Grouting	286	8	62	9	\$1,984.00	\$2,862.00	\$1,897.20	\$10,544.34		
32	10	71	72	Grouting	287	8	63	10	\$2,016.00	\$2,873.00	\$1,927.80	\$10,714.41		
33	10	72	75	Grouting	264	8	55	4	\$1,760.00	\$2,641.00	\$1,683.00	\$9,353.85		
34	10	74	75	Grouting	243	8	51	6	\$1,632.00	\$2,432.00	\$1,560.60	\$8,673.57		
35	10	75	78	Grouting	269	8	57	4	\$1,824.00	\$2,689.00	\$1,744.20	\$9,693.99		
36	10	77	78	Grouting	220	8	46	4	\$1,472.00	\$2,200.00	\$1,407.60	\$7,823.22		
37	10	93	92	Grouting	379	8	80	11	\$2,560.00	\$3,790.00	\$2,448.00	\$13,605.60		
38	10	100	101	Grouting	400	8	86	11	\$2,752.00	\$4,000.00	\$2,631.60	\$14,626.02		
39	10	103	104	Grouting	424	8	91	13	\$2,912.00	\$4,240.00	\$2,784.60	\$15,476.37		
40	10	104	105	Grouting	401	8	88	12	\$2,816.00	\$4,010.00	\$2,692.80	\$14,966.16		
41	10	106	107	Grouting	304	8	66	12	\$2,112.00	\$3,040.00	\$2,019.60	\$11,224.62		
42	10	111	112	Grouting	271	8	57	7	\$1,824.00	\$2,709.00	\$1,744.20	\$9,693.99		
43	10	114	115	Grouting	297	8	62	8	\$1,984.00	\$2,974.00	\$1,897.20	\$10,544.34		
44	10	119	A 120	Grouting	133	8	28	5	\$896.00	\$1,325.00	\$856.80	\$4,761.96		
45	10	120	121	Grouting	337	8	70	6	\$2,240.00	\$3,367.00	\$2,142.00	\$11,904.90		
46	10	126	127	A Grouting	174	8	37	4	\$1,184.00	\$1,744.00	\$1,132.20	\$6,292.59		
47	10	127	128	Grouting	370	8	75	5	\$2,400.00	\$3,700.00	\$2,295.00	\$12,755.25		
48	10	127	B 127	A Grouting	104	8	23	3	\$736.00	\$1,040.00	\$703.80	\$3,911.61		
49	10	129	83	Grouting	123	8	25	3	\$800.00	\$1,230.00	\$765.00	\$4,251.75		
Total					14,446		3,043	349	\$97,376.00	\$144,461.00	\$93,115.80			\$529,915.41

* Cost includes joint seal and joint air retest

Number of joints could not be accurately counted due to depth of flow at several intervals during CCTV inspection

Lower Cost

- *Basin No.2 = Hibiscus Lift Station
- *Basin No.10 = Seagrape Lift Station
- *UMH = Upstream Manhole
- *DMH = Downstream Manhole