City of Birmingham
A Walkable Community

MEMORANDUM

Engineering Dept.

DATE: **June 16, 2014**

TO: **Joe Valentine, Interim City Manager**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Old Salem Ct. Sewer Lateral Replacements Update**

At the April 28, 2014 regular meeting, the City Commission declined to create a special assessment district for the replacement of sewer laterals on Old Salem Ct. The decision was made based on the combination of the high cost, the existing burden of backyard water main disconnections, and the fact that the street is being replaced with chip seal. The Commission requested that staff offer a voluntary replacement of the laterals, in the event that some of the homeowners would in fact appreciate getting this work done.

On May 22, 2014, I hand delivered the attached letter to all five eligible homeowners. The same letter was also mailed that week to the same people, via U.S. Mail. The letter set a deadline of June 16, 2014, so that the contractor could be notified in advance of work starting on this street.

One homeowner requested a meeting on site to better understand what was proposed, not only with the sewer, but with the water disconnection as well. After the meeting, it was decided that they did not want to proceed with the sewer work, due to the damage it would cause to their landscaping. Another homeowner called and asked questions, and left it that they would think about it. However, no response ever came back. No response ever came from the other three homeowners. Therefore, no sewer laterals will be replaced on Old Salem Ct.

Work on the water main installation is planned to start approximately the week of July 7.

May 22, 2014

TO: Property Owner, Old Salem Ct.

RE: Old Salem Ct. Water Main Project

Dear Resident,

In April, you should have received notice from this office describing the upcoming project. The contractor for this job has been hired, and tentatively plans to start work during the week of July 7. As that date gets closer, you will receive more information relative to the details of the project.

The previous mailing sent to you discussed the intention to install a new water service for your home within the public right-of-way (covering the area under the street, plus about ten feet beyond the curb). That work is still planned to proceed as described before. The remainder of this letter has to do with your sewer service.

Each home on Old Salem Ct. has a pipe that extends from the house to the City sewer located in the street, known as the sewer lateral. The sewer lateral was generally installed when the house was built. It was expected to have a 50 year service life. As it gets older, it may be prone to leakage, allowing roots to enter the pipe, or eventually, collapse. Once the pipe gets old and is no longer functioning, it will eventually result in sewage backup into your home. Should the pipe need maintenance, such as root control, lining, or even excavation and replacement, such projects must be initiated and paid for by the homeowner. Even though some of the pipe is on City property, it must still be maintained by the homeowner (as only one home benefits from it). A complete excavation and replacement of a pipe such as yours, when hired out to a contractor, will generally cost about $6,000 to $8,000.

To help homeowners reduce these costs, if a utility or paving project is being done, the City often bids replacement of the sewer lateral with the City's contractor. Usually, the price comes in much less than what is described above, and the City Commission will then create a Special Assessment District which authorizes the replacement of all sewer laterals older than 50 years. The cost of the work would then become a lien on your property, and you would be asked to pay this cost in either one lump sum (after the work is done), or over a ten year period (with interest payable on the remaining balance).

The assessment district cost, when levied, includes the City's actual cost payable to the contractor, charged by the foot of pipe installed. (Since this is a City project, other costs, such as permits, inspection, and restoration of the road and lawn are paid using City sewer funds.) In the

case of Old Salem Ct., the project is small, and bid prices can become more unpredictable. The price the contractor is asking for this work is $195 per foot. The City sewer as it was installed is close to the east side curb of the street. Therefore, the cost to the homes on the east side at this price would be approximately $1,560, while the cost for the homes on the west side would be approximately $6,630. These costs are higher than what would normally be charged for a sewer lateral special assessment. Since the City is already asking you to be prepared to disconnect your backyard water service at your expense (within the next ten years), it was not felt that it would be appropriate to create a sewer special assessment, with its additional cost burden, as well. A sewer special assessment district will not be created for Old Salem Ct. at this time.

The above notwithstanding, the City Commission felt that it is possible that some of you may be interested in having your sewer replaced while this project is in progress. If you are interested, you are asked to contact me at the telephone number or email below, and I can answer any questions you may have. If you decide to proceed with having the sewer lateral replaced, I will need authorization to proceed in writing. Once received, we will then add the work to the project, and make sure it is completed and restored in accordance with City standards. You will receive an invoice for the entire amount (payable within 30 days) once the work is done.

Since your decision will impact how much new pipe our contractor must order, we ask that you make your decision whether to proceed no later than Monday, June 16. If we do not hear any response from you, we will assume you are not interested in getting your service replaced at this time.

Again, if you have any questions, please call or write me below.

Sincerely,

Paul T. O'Meara, P.E.
City Engineer

248-530-1836
pomeara@bhamgov.org

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MEMORANDUM

Engineering Dept.

DATE: **April 10, 2014**

TO: **Joe Valentine, Interim City Manager**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Old Salem Ct. Water Main Improvements**
Sewer Lateral Replacement Special Assessment District

The City Commission recently awarded the contract known as Birmingham Villas Water Main Improvement Project. Combined with it was the short street known as Old Salem Ct. (located within the Quarton Lake neighborhood). The projects were combined together, because they represent the last streets planned for improvements to begin the process of disconnecting customers from backyard water mains.

As you know, it is the City's policy to require the replacement of all older sewer laterals as a part of a project when a street pavement is being replaced. In the case of Old Salem Ct., the road was constructed as gravel with curbs and storm sewer, which was later cape sealed. The project was designed wherein the contractor would pulverize the existing cape seal, install the new water main (while saving the curbs and storm sewer system), repairing the gravel base, and installing new cape seal. Although a new pavement is not being installed, Old Salem Ct. has a reliable drainage system in place. Since the cape seal surface is being replaced, and drainage will not be impaired, we felt that Old Salem Ct. was a good candidate for sewer lateral replacements at this time. All five houses with frontage on the street have older laterals, and all five have been included in the district, as outlined on the attached chart.

(The remainder of the project, within the Birmingham Villas subdivision, has a different condition. Like most of our unimproved streets, Yosemite Blvd. and Villa Ave. do not have a reliable drainage system, and they remain basically gravel streets with a cape seal surface added. There are portions of these streets where drainage conditions are currently poor. In fact, discussions were held last fall about initiating a special assessment for new pavement, but a majority of signatures could not be obtained. As a result, the water main was designed with horizontal directional drilling technology to avoid excavations and surface disruptions. We feel that this element of the design is very important to ensure that the City and its contractor are not blamed for degrading the drainage conditions after this project is complete. As a result, no sewer lateral replacements are planned on these streets.)

Now that bid prices have been received, it is appropriate to initiate a public hearing to cover the cost of the laterals (through special assessment) that will be replaced on Old Salem Ct.

A chart listing all of the properties impacted by this project, and the work involving sewer laterals, is attached. All five of the existing homes that have direct frontage on the Old Salem Ct. right-of-way have been included in the district, as our records indicate that they are all over 50 years old. The remaining houses in the immediate area that are impacted by this project (4) do not have a sewer lateral extending into the Old Salem Ct. right-of-way.

The price per foot for this work bid by the low bidder (D&D Water & Sewer) is quite high at $195 per foot. In fact, it is the highest rate bid of the three bids received. In previous projects where this condition existed, we have compared the low bidder's price to the average bid. In this case, the average price per linear foot is $118.33, still above normal. Also in the past, we have combined the price of the sewer lateral connection, as well as the price of the pipe per foot, to see if a reduced rate can be justified. As shown on the attached chart, D&D's price per connection is also high. Averaging out their price considering both factors results in a higher cost of $189.86.

The high cost of this work can be attributed to two factors:

1. The project was designed primarily as one where the bidding environment will favor those contractors whose expertise is drilling plastic water main (such as D&D). The total value of this work (sewer pipe installation and connections) represents about 3% of the total value of the job. As a result, if a contractor is efficient at the main item of work (water main), they can be less efficient at sewer connections, and still be considered the low bidder on the job.
2. Since Old Salem Ct. is small, and only five homes are involved, there are set up costs such as bringing in the equipment, etc., that need to be spread out over a small group of residents. This same factor is what drives up the cost of any sewer lateral repair when a homeowner is getting such work done on their own, and the cost is typically about $6,000 to $8,000.

In order to provide a price per foot that is reasonable given the circumstances of the job, yet not exhorbitant compared to costs charged for other projects, we recommend that the average price per linear foot ($118.33) be charged for these sewer laterals. The attached chart has been prepared using this base figure, which results in costs of as little as $700 to over $4,000 per home, depending on the length of the sewer service needed. The higher costs shown are higher than those typically charged for this type of special assessment. We believe it is still cheaper than the homeowners would receive if they had to do this work themselves. However, given that Old Salem Ct. is a chip seal street, and not a high quality, permanent pavement, the merit for the special assessment is not as justifiable as it is on most projects. It is also important to consider

that these same five homes are already being asked to pay for a backyard water disconnection valued at several thousand dollars each. There may be reason to forego this work altogether. Two resolutions have been provided below.

SUGGESTED RESOLUTION A:

It is recommended that a public hearing of necessity be scheduled at the Monday, May 19, 2014 City Commission meeting. Should the district be declared at that time, it is further recommended that the public hearing to confirm the roll be held on Monday, June 9, 2014 at the $118.33/linear ft. unit price for 6" dia. sewer.

Suggested Resolution:

RESOLVED, that the City Commission shall meet on Monday, May 19, 2014 at 7:30 P.M., for the purpose of conducting a public hearing of necessity for the installation of lateral sewers within the Old Salem Ct. Water Main Project area. Should the district be declared at that time, be it further

RESOLVED, that the City Commission meet on Monday, June 9, 2014 at 7:30 P.M. for the purpose of conducting a public hearing to confirm the roll for the installation of lateral sewers in the Old Salem Ct. Project area.

SUGGESTED RESOLUTION B:

To accept the report regarding the installation of Old Salem Ct. sewer laterals, and direct the Engineering Dept. to remove the replacement of sewer laterals on this street from the contract, at an estimated value of $32,250.

Old Salem Ct. Water Main Project - Contract #3-14(W)

Address	Street	Location	Date Installed	SAD?	Estimated Length	Estimated Cost	Water Type	Date Installed	Location
						$118.33			
Old Salem Ct. - North End to Redding Rd.									
WEST SIDE									
1501	Old Salem	Unknown	1961	N	0	$0	1" C	1961	B
1483		Unknown	---	Y	34	$4,023	1" C	Unk	B
1447		Unknown	---	Y	32	$3,787	1" C	Unk	B
1401		Unknown	---	Y	30	$3,550	1" C	1958	B
						$0			
EAST SIDE						$0			
1155	Quarton	Unknown	---	N	0	$0	1" Iron	Unk	B
1502	Old Salem	6" PVC	2005	N	0	$0	1.5" C	2005	B
1480		Unknown	---	Y	6	$710	1.5" C	Unk	B
1440		Unknown	---	Y	8	$947	1.5" L	Unk	B
26-226-024		Vacant Lot	---	N	0	$0	None	---	---
		TOTAL			110	$13,016			
	RATIO =	5/9	56%					8/9	89%

SUMMARY OF BIDS
OLD SALEM CT. SEWER LATERALS

	Bidder	Sewer	Service	Connection	Sewer	Service	6”	Total Cost Conn. Plus Pipe Laying
Ranking	**Contractors Name**	**Number Connections**	**Cost per Connection**	**Total Cost**	**Total Length**	**Cost per Foot**	**Total Cost**	
1.	D&D Water & Sewer	5 @	$ 2,160	$10,800.00	110 @	$195.00	$21,450.00	$32,250.00
2.	Bidigare	5 @	$190.00	$950.00	110 @	$ 70.00	$7,700.00	$8,650.00
3.	Pamar Enterprises	5 @	1,900.00	$9,500.00	110 @	$ 90.00	$9,900.00	$19,400.00
Average		**5**	**$1,416.67**	**$7,083.35**	**110**	**$118.33**	**$13,016.67**	**$20,100.02**

Ratio of connection cost to total cost $7,083.35 / $20,100.02 = 0.3542 0r 35.42%
Remaining percentage attributed to unit per lineal ft. 100% - 35.42% = 64.76%
Total value attributed to unit cost per lineal ft. using low bidders total cost: 64.76% X $32,250 = $20,885.10
Revised Cost per Foot reflecting unit rate charged to homeowner: $20,885.10 / 110 = $189.86/lineal ft.