



Date of Council Meeting: April 22, 2014

**TOWN OF LEESBURG
TOWN COUNCIL WORK SESSION**

Subject: Lower Sycolin Creek Sewage Conveyance System Phase II reimbursement to Shirley Contracting Company, LLC for construction of a section of the proposed sanitary sewer system.

Staff Contact: Amy R. Wyks, P.E., Director, Department of Utilities
Renée LaFollette, P.E., Director, Office of Capital Projects

Recommendation: To approve reimbursement to Shirley Contracting Company, LLC (Shirley) in the amount of \$225,857.06 for the construction of 340 feet of Lower Sycolin Creek gravity sewer main, Phase II, 140 feet of steel casing and two manholes; and to authorize the Town Manager to execute the reimbursement.

Fiscal Impact: No additional funds are needed. The construction cost is available with the approved and funded Lower Sycolin Creek Sewage Conveyance System Phase II capital project.

Issue: Should Town Council authorize reimbursement to Shirley in the amount of \$225,857.06 for the construction of 340 feet of gravity sewer main, 140 feet of steel casing and two manholes and authorize the Town Manager to sign the reimbursement request?

Background: The construction of the Lower Sycolin Creek Sewage Conveyance System was divided into two phases. Phase I construction has been completed including full operation of the Lower Sycolin Pump station, force main and gravity airport branch sewer main. Phase II (CIP Project 14401) consists of 9000' of pipeline construction along Cochran Mill Road to Sycolin Road.

Shirley has been contracted by Loudoun Water to construct the Access Road Project to their new water plant including a bridge as shown on the attached map. The proposed Lower Sycolin Creek gravity sewer main crosses the proposed Loudoun Water access road and the sewer main is in close proximity of the north bridge abutment. If the sanitary sewer main is constructed after the access road construction, the cost would be much higher than the attached cost proposal due to the need for having to bore or tunnel under the access road.

Since the construction of the access road will soon be underway, it was determined by Town staff that the most cost effective way to construct the sanitary sewer main within the area of the access road is by Shirley.

Lower Sycolin Creek Sewage Conveyance System reimbursement to Shirley Contracting Company, LLC for construction services

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The total of construction costs as outlined in the attached cost proposal from Shirley is \$225,857.06. The dollar value of the cost proposal exceeds the signature authority of the Town Manager and requires Town Council Authorization.

Attachment: Map of Lower Sycolin Creek Sewage Conveyance System Phase II
Shirley Contracting Company, LLC Cost Proposal



March 21, 2014
(REVISED from February 7, 2014 pricing)

Loudoun Water
44865 Loudoun Water Way
Ashburn, VA 20146

Attention: Ms. Nicolle Boulay, PE
Project Manager

Reference: Loudoun Water Access Road Project
Project Number: 1378-91669
Subject: Proposed Town of Leesburg Sanitary Sewer & Water Reuse Crossings

Ms. Boulay:

Pursuant to our previous discussions, Shirley Contracting Company, LLC [hereafter "Shirley"] has prepared the attached revised proposal for the proposed Town of Leesburg sanitary sewer and Gordon water reuse crossings at the Loudoun Water Access Road Project. This proposal captures the cost of the proposed sanitary sewer crossing, including the installation of PVC sewer pipe, steel casing, and two (2) sanitary manhole structures. The proposal also includes the cost for the proposed water reuse casing under the future Loudoun Water Private Access Road. This proposal has been revised in response to comments received from the Town of Leesburg and Loudoun Water. The following is a summary of the revisions made or general comments in response to the feedback we received from the original cost proposal:

- 1) This cost proposal is a lump sum proposal therefore this would eliminate the concern brought up with the production rate of the work, or how hard the rock is that is encountered when completing this work.
- 2) The rock excavation pricing has been broken down into a daily rate which corresponds with the number of days estimated to complete each applicable item of work in this cost proposal.
- 3) Shirley has added a spreadsheet to this cost proposal to break out each item of work into a linear foot basis. Per your request, this was done to give you a better way to analyze the cost submitted and for budget purposes. As a reminder, this cost proposal is a lump sum proposal so quantity overruns or underruns will have no affect on the final pricing for the work in this cost proposal.
- 4) Shirley has added a line item for utility coordination with Dominion Virginia Power to cover the costs for Shirley to coordinate an encroachment agreement.
- 5) Shirley has revised the proposed linear feet of 36-inch steel casing from 110' to 140' based on the quantities provided in your comment letter.

- 6) An ADD-ALTERNATE item has been included in this cost proposal for the scope of work to blast for the reuse line if blasting is allowed in these areas. This area is estimated to be 230 linear feet which would not include the 110 linear feet of proposed 42-inch steel casing which is already included with the original cost proposal.
- 7) Shirley is in the process of finalizing with Dominion Virginia Power and Dewberry what the blasting restrictions would be for the work included in this cost proposal adjacent to the power lines and north bridge abutment. Shirley has included a lump sum price for rock excavation for the scope of work included in this proposal which includes whatever means necessary for rock removal.
- 8) Shirley Contracting has provided breakout estimates for the sanitary sewer features and water reuse casing installations for Loudoun Water's use in obtaining funding from the two sources. This cost proposal is however based on concurrent installation of the sanitary and reuse lines and should be accepted as one package by Loudoun Water.

Contract Cost Impact

The total cost of this proposal as detailed on the attached Cost Proposal Summary Sheet is

Two Hundred Ninety-Six Thousand, Three Hundred Seventy Dollars and Zero Cents (\$296,370.00)

Contract Time Impact

The proposed changes in this cost proposal will have no schedule impacts to the tentative schedule to begin the work on the bridge substructure in May, 2014 as long as notice to proceed is provided by the end of March and the work of installing the 36-inch and 42-inch steel casings are completed by the end of April, 2014 due to the close proximity to the north bridge abutment.

If you have any questions please call me at (703) 550-1120.

Sincerely,

SHIRLEY CONTRACTING COMPANY, LLC

Joseph R. Fragale, P.E.
Assistant Project Manager

CC: Field/File
Enclosures

COST PROPOSAL SUMMARY
TOWN OF LEESBURG - PROPOSED SANITARY SEWER

Item Number	Description	Quantity	Unit	Direct Cost Subtotal	Overhead & Profit @ 15%	Total Cost Subtotal	Bond @ 1%	Total Cost	Unit Prices
1000	Survey	1	LS	\$ 750.00	\$ 112.50	\$ 862.50	\$ 8.63	\$ 871.13	\$ 871.13
2000	Revise E&S Plans	1	LS	\$ 1,500.00	\$ 225.00	\$ 1,725.00	\$ 17.25	\$ 1,742.25	\$ 1,742.25
3000	16-inch PVC Sanitary Sewer C905	340	LF	\$ 76,703.25	\$ 11,505.49	\$ 88,208.74	\$ 882.09	\$ 89,090.82	\$ 262.03
4000	36-inch Steel Casing - Sanitary	140	LF	\$ 51,699.66	\$ 7,754.95	\$ 59,454.61	\$ 594.55	\$ 60,049.16	\$ 428.92
6000	Rock Excavation for 3000/4000	1	LS	\$ 45,600.00	\$ 6,840.00	\$ 52,440.00	\$ 524.40	\$ 52,964.40	\$ 52,964.40
7000	Dewatering	1	LS	\$ 3,500.00	\$ 525.00	\$ 4,025.00	\$ 40.25	\$ 4,065.25	\$ 4,065.25
8000	QA/QC	1	LS	\$ 11,700.00	\$ 1,755.00	\$ 13,455.00	\$ 134.55	\$ 13,589.55	\$ 13,589.55
9000	Utility Coordination with VA Power	1	LS	\$ 3,000.00	\$ 450.00	\$ 3,450.00	\$ 34.50	\$ 3,484.50	\$ 3,484.50
TOTALS:				\$ 194,452.91	\$ 29,167.94	\$ 223,620.85	\$ 2,236.21	\$ 225,857.06	

Cost Proposal Summary

Town of Leesburg - Proposed Sanitary Sewer

Item Number	Description	Quantity	Unit	Direct Unit Price	Direct Cost Subtotal	Direct Cost Estimate Total
1000	Survey	1	LS	\$ 750.00	\$ 750.00	\$ 750.00
2000	Revise E&S Plans	1	LS	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00
	16-inch PVC Sanitary Sewer C905 (340 LF)					\$ 108,603.25
3000	Labor and Equipment	16	Days	\$ 3,000.00	\$ 48,000.00	
3000	Materials Estimate (See attached Materials List)	1	LS	\$ 25,303.25	\$ 25,303.25	
3000	Sanitary Sewer Testing	1	LS	\$ 3,400.00	\$ 3,400.00	
6000	Rock Excavation	16	Days	\$ 1,900.00	\$ 30,400.00	
7000	Dewatering	1	LS	\$ 1,500.00	\$ 1,500.00	
	36-inch Steel Casing (140 LF)					\$ 68,899.66
4000	Labor and Equipment	8	Days	\$ 3,000.00	\$ 24,000.00	
4000	Materials Estimate (See attached Materials List)	1	LS	\$ 24,849.66	\$ 24,849.66	
4000	Welder	30	HR	\$ 95.00	\$ 2,850.00	
6000	Rock Excavation	8	Days	\$ 1,900.00	\$ 15,200.00	
7000	Dewatering	1	LS	\$ 2,000.00	\$ 2,000.00	
8000	QA/QC	1	LS	\$ 11,700.00	\$ 11,700.00	\$ 11,700.00
9000	Utility Coordination with VA Power	1	LS	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00
Direct Cost Subtotal of Estimate:						\$ 194,452.91
Overhead and Profit @ 15%:						\$ 29,167.94
Subtotal:						\$ 223,620.85
Bond @ 1%:						\$ 2,236.21
Total Proposal Estimate:						\$ 225,857.06

Sanitary Sewer Estimate of Materials

3000	16-inch PVC Sanitary Sewer C905				
	Description	Quantity	Unit	Unit Price	Subtotal
	16 INCH C905 PVC	340	LF	\$ 22.87	\$ 7,775.80
	16" BELL RESTRAINT	8	EA	\$ 303.95	\$ 2,431.60
	16" SPGT TEMP PLUG	1	EA	\$ 92.00	\$ 92.00
	16" BELL TEMP PLUG	1	EA	\$ 92.00	\$ 92.00
	3 X 1000 FT DET TAPE BLK/GRN SWR	1	EA	\$ 29.59	\$ 29.59
	SS MH-21 (11.36')	1	EA	\$ 2,300.00	\$ 2,300.00
	SS MH-22 (12.36')	1	EA	\$ 2,300.00	\$ 2,300.00
	TOL MH FRAME & COVER	2	EA	\$ 350.00	\$ 700.00
	MP-51 ASPHALT TAR JOINT COMPOUND	3	EA	\$ 50.00	\$ 150.00
	BACKFILL MATERIAL W/ HAUL	400	TN	\$ 20.00	\$ 8,000.00
		Subtotal Estimate of Materials:			\$ 23,870.99
				Tax:	\$ 1,432.26
		Total Estimate of Materials:			\$ 25,303.25
4000	36-inch Steel Casing				
	Description	Quantity	Unit	Unit Price	Subtotal
	36 INCH STEEL CASING	140	LF	\$ 96.77	\$ 13,547.80
	16" X 36" SS CASING SPACER	24	EA	\$ 151.16	\$ 3,627.84
	16" X 36" MODEL C END SEAL	2	EA	\$ 133.72	\$ 267.44
	BACKFILL MATERIAL W/ HAUL	300	TN	\$ 20.00	\$ 6,000.00
		Subtotal Estimate of Materials:			\$ 23,443.08
				Tax:	\$ 1,406.58
		Total Estimate of Materials:			\$ 24,849.66

**COST PROPOSAL SUMMARY
GORDON - PROPOSED WATER REUSE**

Item Number	Description	Quantity	Unit	Direct Cost Subtotal	Overhead & Profit @ 15%	Total Cost Subtotal	Bond @ 1%	Total Cost	Unit Prices
1000	Survey	1	LS	\$ 750.00	\$ 112.50	\$ 862.50	\$ 8.63	\$ 871.13	\$ 871.13
2000	Revise E&S Plans	1	LS	\$ 1,500.00	\$ 225.00	\$ 1,725.00	\$ 17.25	\$ 1,742.25	\$ 1,742.25
5000	42-inch Steel Casing - Reuse Line	110	LF	\$ 43,009.11	\$ 6,451.37	\$ 49,460.48	\$ 494.60	\$ 49,955.08	\$ 454.14
6000	Rock Excavation for Item 5000	1	LS	\$ 11,400.00	\$ 1,710.00	\$ 13,110.00	\$ 131.10	\$ 13,241.10	\$ 13,241.10
7000	Dewatering	1	LS	\$ 1,750.00	\$ 262.50	\$ 2,012.50	\$ 20.13	\$ 2,032.63	\$ 2,032.63
8000	QA/QC	1	LS	\$ 2,300.00	\$ 345.00	\$ 2,645.00	\$ 26.45	\$ 2,671.45	\$ 2,671.45
		TOTALS: \$ 60,709.11 \$ 9,106.37 \$ 69,815.48 \$ 698.15 \$ 70,513.63							
ADD-ALTERNATES									
10000	Blasting for Reuse Line Parallel Sanitary	230	LF	\$ 17,000.00	\$ 2,550.00	\$ 19,550.00	\$ 195.50	\$ 19,745.50	\$ 85.85

Cost Proposal Summary
Gordon - Proposed Water Reuse Crossings

Item Number	Description	Quantity	Unit	Direct Unit Price	Direct Cost Subtotal	Direct Cost Estimate Total
1000	Survey	1	LS	\$ 750.00	\$ 750.00	\$ 750.00
2000	Revise E&S Plans	1	LS	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00
	42-inch Steel Casing (110 LF)					\$ 56,159.11
5000	Labor and Equipment	6	Days	\$ 3,000.00	\$ 18,000.00	
5000	Materials Estimate (See attached Materials List)	1	LS	\$ 22,159.11	\$ 22,159.11	
5000	Welder	30	HR	\$ 95.00	\$ 2,850.00	
6000	Rock Excavation	6	Days	\$ 1,900.00	\$ 11,400.00	
7000	Dewatering	1	LS	\$ 1,750.00	\$ 1,750.00	
8000	QA/QC	1	LS	\$ 2,300.00	\$ 2,300.00	\$ 2,300.00
Direct Cost Subtotal of Estimate:						\$ 60,709.11
Overhead and Profit @ 15%:						\$ 9,106.37
Subtotal:						\$ 69,815.48
Bond @ 1%:						\$ 698.15
Total Proposal Estimate:						\$ 70,513.63

Water Reuse Estimate of Materials

5000	42-inch Steel Casing				
	Description	Quantity	Unit	Unit Price	Subtotal
	42 INCH STEEL CASING	110	LF	\$ 138.71	\$ 15,258.10
	42" STL TEMP PLUG	2	EA	\$ 308.57	\$ 617.14
	3 X 1000 NON DET TAPE RECL WT	1	EA	\$ 29.58	\$ 29.58
	BACKFILL MATERIAL W/ HAUL	250	TN	\$ 20.00	\$ 5,000.00
		Subtotal Estimate of Materials:		\$	20,904.82
				Tax:	\$ 1,254.29
		Total Estimate of Materials:		\$	22,159.11

PRESENTED APRIL 22, 2014

RESOLUTION NO. _____

ADOPTED _____

A RESOLUTION: LOWER SYCOLIN CREEK SEWAGE CONVEYANCE SYSTEM
PHASE II REIMBURSEMENT TO SHIRLEY CONTRACTING
COMPANY, LLC FOR CONSTRUCTION SERVICES

WHEREAS, the Lower Sycolin Creek Sewage Conveyance System Phase II project is a funded capital project; and

WHEREAS, the Loudoun Water Access Road Project including north bridge abutment is in close proximity to the proposed Lower Sycolin Creek gravity sewer main; and

WHEREAS, Town has requested Shirley Contracting Company, LLC to construct 340 feet of sewer main within a steel casing pipe (140 feet) and two sanitary manhole structures during construction of the Loudoun Water Private Access Road; and

WHEREAS, construction will soon be underway for the Loudoun Water Access Road project; and

WHEREAS, Town staff determined that requesting a quote from Shirley Contracting Company, LLC was the most cost effective way to construct this section of sanitary sewer main; and

WHEREAS, purchasing staff from the Town was consulted and is in agreement that this is within what is allowable by the Virginia Public Procurement Act; and

WHEREAS, the value of the construction of the sewer main and manholes in the amount of \$225,857.06 exceeds the signature authority of the Town Manager and requires Town Council Authorization; and

WHEREAS, no additional funding is required; and

WHEREAS, the Department of Utilities recommends that this construction cost proposal be approved.

A RESOLUTION: LOWER SYCOLIN CREEK SEWAGE CONVEYANCE SYSTEM
REIMBURSEMENT TO SHIRLEY CONTRACTING COMPANY, LLC
FOR CONSTRUCTION SERVICES

THEREFORE, RESOLVED by the Council of the Town of Leesburg in Virginia that the
Town Manager is authorized to execute a construction cost reimbursement with Shirley
Contracting Company, LLC in the amount of \$225,857.06 for providing the construction
services for the Lower Sycolin Creek Sewage Conveyance System.

PASSED this ___ day of _____, 2014.

Kristen C. Umstattd, Mayor
Town of Leesburg

ATTEST:

Clerk of Council