

To: Mayor and City Council

From: Carl Thomas, Stormwater Utility Manager

Re: Funding Authorization for 3900 Spalding Drive Storm Repairs

Date: November 13<sup>th</sup>, 2023

# <u>Action</u>

Authorize the Mayor, City Manager, or designee to approve \$99,000.26 in funding for Stormwater Pipe lining at 3900 Spalding Drive.

## Summary/Details

On June 13th, 2022, City Council approved \$511,286.00 in funding for improvements to the stormwater drainage system for the intersection improvements at Chamblee Dunwoody Road and Spalding Drive. The scope of the projects involved boring 12 to 14 feet underground and installing two 117-foot 30-inch steel pipes to avoid impacts to 4 City of Atlanta water mains 12 to 24 inches in diameter and at varying depths. Due to space constraints, the steel pipe was welded in 10-foot segments. According to City of Atlanta engineers, the water mains provide water to the 'Pill Hill' area, and the City could not bypass the utilities or temporarily take them out of service. Due to the cost, effort, and safety risks associated with the location of the storm system, Public Works staff agreed that these assets were a high priority and contracted with Federal EC to provide a quote for installing a cured-in-place liner inside of the pipes to extend the service life and structural condition of the pipes, along with reducing the chances of exfiltration of storm runoff between the pipe joints into the subgrade, which could cause sinkholes underneath the utilities.

If approved by the Council, the cost of this project, plus a 10% contingency, is \$99,000.26 and would be funded from the Stormwater Repairs and Maintenance budget allocated for stormwater improvement projects.

## Recommendation

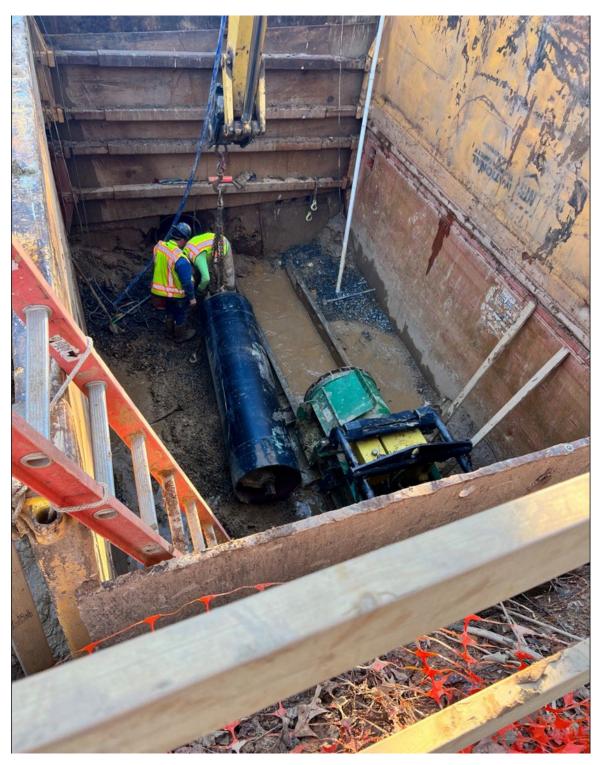
Staff recommends approving \$99,000.26 in funding for Stormwater Pipe Repairs at 3900 Spalding Drive .



Federal EC						
SPALDING DRIVE CIPP PIPE LINING						
Storm Sewer Rehabilitation						
Mobilization	1	EA	\$	1,334.00	\$	1,334.00
Dewatering Pumping Setup and Hose Placement	1	EA	\$	1,600.00	\$	1,600.00
4" Pumping Operation Time	40	HR	\$	139.00	\$	5,560.00
Traffic Control Flagging	8	DAY	\$	1,334.00	\$	10,672.00
CCTV Storm Piping Pre Lining	234	LF	\$	5.07	\$	1,186.38
CCTV Storm Piping Post Lining	234	LF	\$	5.07	\$	1,186.38
30" Cleaning Less than 25%	234	LF	\$	6.93	\$	1,621.62
CIPP Lining Setup	2	EA	\$	2,667.25	\$	5,334.50
30" CIPP	234	LF	\$	192.04	\$	44,937.36
30" Grout Ends of Liner to Structure	4	EA	\$	267.00	\$	1,068.00
Restoration	1	LS	\$	5,000.00	\$	5,000.00
Remove Structure Top and Replace	1	LS	\$	10,500.00	\$	10,500.00
Subtotal					\$	90,000.24
10% Contigency					\$	9,000.02
			Tot	Total		99,000.26

# Federal EC Cost Estimate





30-inch steel pipe installation boring underneath 4 water mains (November 2022)

SCALE: 1" = 20'

WATER EASEMENT

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2/14/2023

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FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES
THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA OF THE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AS SET FORTH IN O.C.G.A. SECTION



REVISIONS

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## **MEMORANDUM**

**To:** Mayor and City Council

From: Michael Smith, Public Works Director

**Date:** June 13, 2022

Subject: Approval of a Construction Contract to Upgrade the Stormwater Pipe

Crossing near 3900 Spalding Drive

#### **ACTION**

Authorize the Mayor, City Manager, or designee to execute all documents necessary and proper for a construction contract with Astra Construction Services, LLC, procured through the Georgia Department of Administrative Services statewide convenience contract, to upgrade the stormwater pipe crossing near 3900 Spalding Drive.

#### **SUMMARY**

The city has evaluated the following options to upsize the existing stormwater pipe near 3900 Spalding Drive and the Dunwoody city limit (see attached map) to handle the increased flow from the intersection improvements at Chamblee Dunwoody Road.

- A. Removing the existing pipe and placing a new larger pipe below 4 City of Atlanta water mains
- B. Raising the entire road bed 3 to 4 feet to place the new pipe over the water mains
- C. Boring two new pipes side by side under the water mains along a new alignment

Boring under the roadway along a new alignment is the preferred option based on cost and ease of construction. The city has obtained a price of \$511,286 with Astra Construction Services, LLC under a statewide convenience contract with unit prices procured competitively through the Georgia Department of Administrative Services.

#### **DETAILS**

The stormwater drainage system for the intersection improvements at Chamblee Dunwoody Road and Spalding Drive was designed to flow into a pipe under Spalding Drive that was to be increased in size from 24 inches to 48 inches in diameter. During construction the contractor discovered that 4 City of Atlanta water mains at varying depths would require the new storm pipe to be 12 feet deep to clear the water lines. According to City of Atlanta engineers, the 12 to 24-inch diameter mains provide water to the 'Pill Hill' area and they could not be bypassed or temporarily taken out of service. In order to protect the mains while excavating to replace the stormwater pipe, Dunwoody worked with a City of Atlanta approved, structural engineer to develop a robust shoring and bracing system. The city advertised a bid for this work (ITB 22-03) and received a bid from Blount Construction for \$650,806.20 and from GS Construction for \$1,543,000. The cost of the shoring and bracing alone was \$250,000 in Blount's bid and both bids appear to reflect the current scarcity in the construction industry as well as the risk associated with excavating around the large water mains.



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To arrive at a "Best and Final" cost proposal, the city approached the two responsive bidders to solicit value-engineering alternatives. GS withdrew from consideration and Blount furnished a cost proposal of \$584,000 based on an alternative design, which employs directional boring (in lieu of the proposed open cut / structural support). The city also obtained an engineer's estimate of \$562,000 to raise the road and place the new stormwater pipe above the water lines. As a final value-engineering check, the city obtained a cost proposal of \$511,286 from Astra Construction Services through the Georgia Department of Administrative Services statewide convenience contract. Pavement resurfacing has been excluded from the costs because the city can obtain more competitive prices by working directly with a local paving contractor.

The funds for the pipe replacement and associated work can be taken from the stormwater utility surplus fund balance which is approximately \$1.9 million.

The contractor for the intersection improvement project is preparing to complete their contract within the next few weeks and will then demobilize. Astra's directional boring subcontractor is expected to be available in August to begin the stormwater pipe upgrades and the work is expected to take about 1 month.

#### **RECOMMENDATION**

Authorize the Mayor, City Manager, or designee to execute all documents necessary and proper for a construction contract with Astra Construction Services, LLC, procured through the Georgia Department of Administrative Services statewide convenience contract, to upgrade the stormwater pipe crossing near 3900 Spalding Drive.