

# CITY OF NEWARK DELAWARE

November 29, 2023

To: Honorable Deputy Mayor and Council

From: Tim Filasky, Director of Public Works and Water Resources

Jeff Martindale, Chief Purchasing and Projects Officer

David Del Grande, Finance Director D

Via: Tom Coleman, City Manager 7

Subject: Recommendation to Amend the 2023-2027 CIP Budget and Award Contract No. 23-

15R – Sanitary Sewer Improvements 2023 (Capital Project S0904)

# **Background**

As part of our continued improvements to the sanitary sewer system, the Department solicited bids from contracting firms that specialize in cured in place pipe (CIPP) lining of existing sanitary sewer gravity mains. The objective of this contract is to extend our asset life expectancy, reduce long term operations and maintenance costs, provide a high level of service, while reducing sanitary sewer overflows and back-ups.

The department maintains approximately 500,000 linear feet (95 miles) of gravity sanitary sewer main ranging in size from 6-inches up to 42-inches in diameter. These gravity mains are comprised of a variety of materials as they were installed during various stages of growth throughout the City dating back to as early as the mid-1930s. Over time, the gravity mains begin to degrade resulting in structural defects and can become silted in with deposits which can restrict flow resulting in overflows or sewer backups. Beginning in 2010, the department embarked on a vigorous program to clean and perform closed circuit television inspection (CCTV) of the City's entire sanitary sewer system. Approximately 25% of the sanitary sewer system has been cleaned and inspected to date. Data obtained from the cleaning and CCTV inspection is grouped into various rehabilitation projects according to recommended method of repair, typically open cut point repairs or trenchless lining. This ongoing project aims to rehabilitate any defects in the system, while continuing to inspect the aging infrastructure.

#### **Purpose**

Contract 23-15R includes the installation of a CIPP liner in eight locations throughout the City totaling approximately 8,000 linear feet of sanitary sewer pipe ranging from 6-inches to 15-inches in diameter and 100 vertical feet of manhole rehabilitation. The CIPP liner is a fully structural thin felt/epoxy liner that is inserted into the existing sanitary sewer main and then expanded and cured in place to form a fully functioning pipe within the existing host pipe. The CIPP liner method of installation is trenchless, which provides not only significant cost savings, but also minimal site restoration requirements compared to the traditional open cut pipe replacement methods of installation. Where necessary, we will secure access agreements with private property owners prior to starting work and restoration of all areas is included in the contractor's scope of work. The general locations are listed

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#### below:

- 1. East Main Street East of Chapel Street
- 2. McKees Lane
- 3. New Street
- 4. Fremont Trail Connector Trunkline
- 5. Christina Creek behind Abbotsford Community
- 6. Bellevue Road along Robscott Ditch
- 7. 896 area along Christina River

#### **Bid Process**

Note: A similar contract, Contract 23-15, was advertised and bids received; however, all received bids were above the budget available for the project. The current contract with a reduced scope was advertised as Contract 23-15R.

The Purchasing Division advertised Contract 23-15R in <a href="The News Journal">The News Journal</a>, posted the contract on the City website (<a href="www.newarkde.gov/bids">www.newarkde.gov/bids</a>), and delivered contract documents via email to several contractors. One (1) Contractor was present at the non-mandatory pre-bid meeting held on October 17, 2023. Four contractors were present at the pre-bid meeting for Contract 23-15 on August 11, 2023. On Tuesday, November 7, 2023, the Purchasing Division received three (3) sealed bids via email, or hand delivery. These bids were opened shortly after the 2:00 p.m. deadline. The same three bidders bid on this contract both times.

The bids are summarized in the chart below:

Rank	Contractor Name	Total Bid
1	Insituform Technologies, LLC	\$1,829,770.00
2	Spiniello Companies	\$1,913,300.00
3	Mobile Dredging & Video Pipe, Inc.	\$2,381,997.00

#### **Contractor Experience**

The lowest responsible bidder, Insituform Technologies, LLC., has over 40 years of experience manufacturing and installing CIPP liner systems for over 25,000 miles of pipe. Insituform has offices across the United States with a corporate office located in St. Louis, Missouri. They have successfully completed similar contracts for the City of Newark within the past two years. Based on the feedback from current clients and our own experience with the company, the Public Works and Water Resources Department is confident that Insituform Technologies can complete the work in accordance with the specifications and schedule outlined in the contract documents.

#### **Funding**

Funding for this project is provided from the following source:

Capital Project Number:

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Project Title: Sanitary Sewer Study and Repairs

State Revolving Funds (Final 2018 Referendum Sewer Project): \$2,600,000 Original Loan

-\$700,000 Eng/Design and Phase 1 \$1,900,000 Remaining Loan Funds

A budget amendment is needed to move the balance of the State Revolving Funds into the 2023 funding year in order to complete this project. These funds were previously authorized in an approved budget, but remain unused.

### **Related Documents (Attached)**

- 1. Approved S0904 Sanitary Sewer Study and Repairs 2023-2027 CIP Sheet.
- 2. Amended S0904 Sanitary Sewer Study and Repairs 2023-2027 CIP Sheet.

# Recommendation

I move that council amend the 2023-2027 CIP Budget and award Contract No. 23-15R to the lowest responsible bidder, Insituform Technologies, LLC, in the amount of \$1,829,770.

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S0904 FUNDING SUMMARY:

PROJECT TITLE: Sanitary Sewer Study and Repairs

PROJECT NO:

\*Prior Authorized Balance includes 2022 carryover funding only.

\$ 5,011,000 \$ 5,011,000 Total 5 Year 1,000,000 1,000,000 2027 1,050,000 1,050,000 2026 \$ 1,050,000 850,000 2023-2027 Funding: \$ 1,061,000 1,061,000 New Funding: Prior Authorized Balance:

PROJECT STATUS: Reoccurring (with no end date)

CAPITA	CAPITAL BUDGET - PROJECT DETAIL
DEPARTMENT:	PWWR
DIVISION:	Sewer
FUND:	Sewer
PROJECT LOCATION: Various	Various
PROJECT PRIORITY:	PROJECT PRIORITY: 1 - Highest Priority Level
Project und	Project underway and must be completed
COMPREHENSIVE DEV	COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:
	Sustainable Community

First Year in Program:       2009         Est. Completion Date:       Perpetual         Est. Useful Life (in years):       50+         Est. Total Cost:       \$ 7,142,330         Est. Spend @ 12/31/2022 (if underway)*:       \$ 2,131,330         % Complete (if underway):       29.8%         Balance to be funded*:       \$ 5,011,000	§ 806.1(3) SUMMARY OF PROJECT DATA	DATA
Perpet (if underway) <sup>2</sup> : \$ 7,142,3 . 29.131,3 . 29.	First Year in Program:	2009
(if underway) <sup>2</sup> : \$ 7,142,3 \$ 2,131,3 : \$ 5,011,0	Est. Completion Date:	Perpetual
(if underway)*: \$	Est. Useful Life (in years):	+09
(if underway) <sup>1</sup> : \$	Est. Total Cost:	\$ 7,142,330
··	Est. Spend @ 12/31/2022 (if underway) <sup>±</sup> :	\$ 2,131,330
<u>\$</u>	% Complete (if underway):	79.8%
	Balance to be funded <sup>±</sup> :	\$ 5,011,000

<sup>†</sup> For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJE	PROJECT COST BY CATEGORY	
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:		- \$
Materials:		- \$
Other Contracts:	5395306.9760	\$ 5,011,000
TOTAL PROJECT COST	JECT COST	\$ 5,011,000

<sup>2</sup> Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

erived inflow and infiltration (RDII) which is a good indicator of structural damage in pipes (rainfall can get into the pipes through cracks and ecommendations for repair. To date we have inspected approximately 10 miles of the 95 miles of sanitary sewer main in our system. Using spections have been prioritized based on line size and backup history. As part of the ongoing sanitary sewer master plan project we have ompleted sanitary sewer flow monitoring in the Christina Basin and the White Clay Basin largely paid for by grant funds through the State esults from 10 miles of inspections we have identified and prioritized approximately \$2,600,000 worth of necessary repairs. To date our evolving Loan Fund. This flow monitoring will allow us to target inspections on those areas where we are experiencing the most rainfall holes). This will allow for a more targeted, data driven approach to investigations. The flow monitoring has also been used for a capacity his project affords the continuation of our cleaning and investigation of the condition of the sanitary sewer system and will result in model that will allow us to target select lines for capacity increases when performing rehabilitation efforts.

Referendum and State Revolving Loan Funding was approved over a 3 year period totaling \$3,900,000. Closed on \$1,300,000 loan in 2019. Closed on \$2,600,000 Ioan in 2021. Spending can be spread until 2022 as shown in previous budget to continue the inspection and ehabilitation of the targeted segments.

# 2023 Update:

below. Anticipating a Capital Referendum in 2024 (along with water projects) to provide funding for 2025, 2026, 2027, which is expected to be low interest loans through the SRF Program. Grants are listed as possible SRF Planning Grants, subject to funding and availability from SRF. SRF Funding of \$1,800,000 to be used in 2022 per previous budget. 2023 and 2024 will be funding request from City ARPA funds as shown

			PROJECT FINA	PROJECT FINANCING BY PLAN YEAR	N YEAR					
	Prior	Actual Funds	Estimated	Estimated Authorized						TOTAL
§ 806.1(3) <b>SOURCE OF FUNDS</b> :	Authorized <sup>2</sup>	Utilized as of	04/01/22 -	Balance <sup>2</sup>	2023	2024	2025	2026	2027	5 Year CIP
		03/31/22	12/31/22	12/31/22						
CURRENT RESOURCES	1	-	-	- \$	1	-	-	1	-	- \$
CAPITAL RESERVES	1	-	-	- \$	•	-	-	•	-	- \$
EQUIPMENT REPLACEMENT	1	1	-	- \$	ı	1	1	1	1	- \$
GRANTS WIAC	1	-	-	- \$	1	20,000	20,000	20,000	-	\$ 150,000
BOND ISSUES	1	-	-	- \$	1	-	-	1	-	- \$
STATE REVOLVING LOAN	1,800,000	3,858	1,796,142	- \$	1	-	1,000,000	1,000,000	1,000,000	\$ 3,000,000
AMERICAN RESCUE PLAN ACT	1	-	-	- \$	1,061,000	800,000	-	1	-	\$ 1,861,000
OTHER (SPECIFY)	1	-	-	- \$	•	-	-	•	-	- \$
TOTAL:	\$ 1,800,000 \$	3,858	\$ 1,796,142 \$	- \$	\$ 1,061,000 \$		\$ 1,050,000	850,000 \$ 1,050,000 \$ 1,050,000 \$	\$ 1,000,000	\$ 5,011,000
§ 806.1(4) ESTIMATED ANNUAL COST OF		OPEI	<b>OPERATING IMPACT:</b>		2023	2024	2025	2026	2027	TOTAL
OPERATING / MAINTAINING PROJECT OR ASSET	SSET	INCREMENT,	INCREMENTAL COSTS (NET SAVINGS)	AVINGS)	1	1	1	1	-	- \$

#### \*Prior Authorized Balance includes 2022 carryover funding only.

PROJECT NO: S0904

PROJECT TITLE: **Sanitary Sewer Study and Repairs**  **FUNDING SUMMARY:** New Funding \*Prior Authorized Balance

2027 2023 2024 2025 2026 **Total 5 Year** 850,000 1.050.000 1.050.000 1.000.000 \$ 5.011.000 \$ 1,900,000-2023-2027 Funding: \$ 1,900,000 \$ 850.000 \$ 1.050.000 \$ 1.050.000 \$ 1.000.000 \$ 5.011.000

PROJECT STATUS: Reoccurring (with no end date)

CAPITAL BUDGET - PROJECT DETAIL						
DEPARTMENT:	PWWR					
DIVISION:	Sewer					
FUND:	Sewer					
PROJECT LOCATION:						
PROJECT PRIORITY: 1 - Highest Priority Level						
Project underway and must be completed						
COMPREHENSIVE DEV	ELOPMENT PLANNING VISION ELEMENT:					
	Sustainable Community					

§ 806.1(3) SUMMARY OF PROJECT	DATA
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Est. Useful Life (in years):	50+
Est. Total Cost:	\$ 7,142,330
Est. Spend @ 12/31/2022 (if underway) :	\$ 2,131,330
% Complete (if underway):	29.8%
Balance to be funded¹:	\$ 5,011,000

For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY								
CLASSIFICATION	ACCOUNT NUMBER		AMOUNT					
Labor:		\$	-					
Materials:		\$	-					
Other Contracts:	5395306.9760	\$	5,011,000					
TOTAL PRO	\$	5,011,000						

Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

## Charter § 806.1(2) **DESCRIPTION & JUSTIFICATION**:

This project affords the continuation of our cleaning and investigation of the condition of the sanitary sewer system and will result in recommendations for repair. To date we have inspected approximately 10 miles of the 95 miles of sanitary sewer main in our system. Using results from 10 miles of inspections we have identified and prioritized approximately \$2,600,000 worth of necessary repairs. To date our inspections have been prioritized based on line size and backup history. As part of the ongoing sanitary sewer master plan project we have completed sanitary sewer flow monitoring in the Christina Basin and the White Clay Basin largely paid for by grant funds through the State Revolving Loan Fund. This flow monitoring will allow us to target inspections on those areas where we are experiencing the most rainfall derived inflow and infiltration (RDII) which is a good indicator of structural damage in pipes (rainfall can get into the pipes through cracks and holes). This will allow for a more targeted, data driven approach to investigations. The flow monitoring has also been used for a capacity model that will allow us to target select lines for capacity increases when performing rehabilitation efforts.

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#### 2023 Update:

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#### 2023 Amendment:

\$1,900,000 Remains from 2018 Capital Referendum. 2023 budget amendment carries this funding forward for award of Contract 23-15R.

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized <sup>2</sup>	Actual Funds Utilized as of 03/31/22	Estimated Expenditures 04/01/22 - 12/31/22	Estimated Authorized Balance <sup>2</sup> 12/31/22	2023	2024	2025	2026	2027	TOTAL 5 Year CIP
CURRENT RESOURCES	-	-	-	\$ -	-	-	-	-	-	\$ -
CAPITAL RESERVES	-	1	-	\$ -	-	-	-	-	-	\$ -
EQUIPMENT REPLACEMENT	-	1	-	\$ -	-	-	-	-	-	\$ -
GRANTS WIAC	-	I	-	\$ -	-	50,000	50,000		-	\$ 100,000
BOND ISSUES	-	I	-	\$ -	-	-	-	-	-	\$ -
STATE REVOLVING LOAN	2,600,000	3,858	696,142	\$ 1,900,000 -	1,900,000 -	1	1,000,000	1,000,000	1,000,000	\$ 4,900,000
AMERICAN RESCUE PLAN ACT	-	-	-	\$ -		1,861,000	-	-	-	\$ 1,861,000
OTHER (SPECIFY)	-	-	-	\$ -	-	-	-	-	-	\$ -
TOTAL:	\$ 2,600,000	\$ 3,858	\$ 696,142	\$ 1,900,000 -	\$ 1,900,000	\$ 1,911,000	\$ 1,050,000	\$ 1,000,000	\$ 1,000,000	\$ 6,861,000
§ 806.1(4) ESTIMATED ANNUAL COST OF		OPE	RATING IMPACT	:	2023	2024	2025	2026	2027	TOTAL
OPERATING / MAINTAINING PROJECT OR ASSET INCREMENTAL COSTS			AL COSTS (NET S	SAVINGS)	-	-	-	-	-	\$ -