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March 10, 2022 (Updated March 31, 2022)

Rich Hibbard
St. Paul Regional Water Services
1900 Rice Street
St. Paul, MN 55113

Subject: Proposal for SPRWS Lead Service Line Replacement Program Planning

Dear Rich:

Project Background

Saint Paul Regional Water Services (SPRWS) has been replacing lead service lines (LSL) in the street right-of-way (ROW) for over 25 years in association with street and water main reconstruction projects. In recent years, SPRWS has replaced approximately 400 public-side LSLs annually in the ROW. These replacements are considered “partial” lead service line replacements (LSLR), as typically only 5-10% of property owners elect to replace the private property portion of the LSL in conjunction with the work.

To assist homeowners with private side replacement cost in the City of Saint Paul (City), SPRWS developed an assessment program which allows customers to pay the cost of a private property LSLR through property taxes over a 20-year period. Many customers have taken advantage of this program throughout the years.

In 2021, the State of Minnesota (State) provided funds to assist customers in replacing their LSLs. Grants were provided in the amount of \$1,500 for general applicants and \$2,500 for low-income applicants and registered childcare providers.

With American Rescue Plan (ARP) funding available for an additional 500-600 LSLRs in 2022, and other federal and state funding sources also becoming available, SPRWS is looking to accelerate its LSLR program with a goal to replace all remaining lead lines, as summarized below, over the next 10 years.

Water Service Line Inventory

SPRWS owns and maintains the portion of domestic water service lines located in the ROW and maintains records for this portion of the service. In recent years, much work has been done researching and verifying information on private property water service material type. Through this research, material type for most of the private property service line connections has been determined. Further investigation is needed on approximately 6,500 private property service lines



for which no definitive documentation is available. The following table summarizes the current understanding of LSLs within the SPRWS system.

Lead Service Lines	Number
Full Lead Service (in ROW and private property)	8,900
Partial Lead Service (copper in ROW and lead in private property)	11,200
Unknown Material in private property	6,500
Total Possible LSLs	26,600

CDM Smith will provide scope of services related to the following tasks on a time and materials basis up to the contract upper limit agreed upon with SPRWS.

Scope of Services

Task 1 – Lead Service Line Replacement Program Plan

- Facilitation of a project kick-off meeting/workshop with SPRWS staff to discuss LSLR project plan, goals, objectives, project critical success factors, and program schedule.
- Preparation of a LSLR Program Plan in compliance with the October 2024 requirements of the Lead and Copper Rule Revisions (LCRR) and the March 2022 Board of Commissioners resolution. The Plan will include the following:
 - Objectives and Background
 - Current inventory of lead service lines previously complied by SPRWS
 - Summarize Potential Funding Mechanisms and Requirements
 - LSLR Program Approach (inclusive of schedule, cost, bidding, prioritization, and private-side replacement plan)
 - Map out a schedule for the multiple design, bidding, and construction bid packages. Items to consider include concurrent or staggered solicitations, similar or varied number of LSLRs per package and resulting package durations. This analysis will include performing research on the local and national contracting community capacity to perform LSLRs, with an emphasis on local contracting and consideration of the City of St. Paul's workforce development initiatives
 - Based on the schedule and number of contracts estimated, estimate the number of office staff needed to carry out the project, including program management,

administrative assistance, marketing, accounting, etc. Discuss use of internal SPRWS staff.

- Based on the schedule and number of contracts estimated, estimate the number of crews and number of inspectors needed over the duration of the program. Discuss use of internal SRPWS staff.
- Develop a Gantt chart to illustrate the timing of the existing and anticipated LSLR funding mechanisms and their associated requirements. The timeline will be based on details from the various funding options and from discussions with SPRWS.
- CDM Smith will facilitate and assist SPRWS in developing the LSLR prioritization and the mapping of project zones. Zone sizes will be evaluated based on the most reasonable contract quotas and will be scheduled or prioritized by paving schedule, lead levels, density of children, economic factors, geographic factors, town/municipality, or other method.
- Evaluation of construction methods and logistics including development of street restoration protocols in collaboration with Public Works and evaluate efficiencies and protocols to replace sewer laterals in conjunction with water service for single family and multi-family housing, institutional and commercial facilities.
- Development of protocols for emergencies, partial replacements, and customer initiated LSLR requests including facilitation of decision-making on how much funding, if any, to provide to customers who want to replace their lead service themselves before or after their assigned zone is constructed.
- Evaluation and summary of post-construction activities at LSLR locations including a filter distribution plan and post-replacement sampling plan.

Task 2 – Public Outreach

- Develop a Communications Plan as a final deliverable with various methods of communications including letters, emails, robocalls, door hangers, social media, community meetings, television advertisements, newspaper notices, billboards, and lawn signs. CDM Smith will work with SPRWS public information officer and administrative staff to develop these materials to communicate with residential homeowners, landlords and renters.
- Using previous CDM Smith LSL program materials, assist with the development of LSLR educational materials including, but not limited to, pamphlets, letters, flyers, posters, and digital media, and provide recommendations and/or prepare additional materials as needed and agreed upon with SPRWS.

- Design flyers and door hangers for inclusion in the bid documents that contractors can print and use for notification to the customers, including flushing instructions, pitcher filter instructions, and restoration information.
- Design and/or edit existing postcards and bill inserts that will be used by contractors to notify water customers of the name of the contractor that will be performing work in their neighborhood and the planned schedule for replacements.
- Assist the SPRWS Public Information Officer with the development of a plan to obtain the information needed (phone numbers, email addresses, etc.) to communicate with customers.

Task 3 – Review and Modify Construction Package Bid Documents

SPRWS has existing bid documents for prior ROW LSLR projects. This task is intended to review those documents and modify, as appropriate, incorporating lessons learned, bidding structure, and bid forms, as well as providing input on development of bid documents for the private property LSLRs.

- Review and modify, as required, bid plans and specifications.
 - Review and recommend edits to SPRWS' technical specifications.
 - Review recommended edits to standard installation and restoration details and location maps and tables.

Task 4 – Assistance with Workforce Development Program

- Assist and make recommendations to SPRWS regarding discussions with unions and local contractors to maximize local participation with the LSLR construction work. Also, assist in development of an apprenticeship or workforce development program for plumbers to maximize local participation.
- Assist with incorporation into SPRWS' specification requirements to hire local workers, first verifying that such requirement is allowed by SPRWS' awarded LSLR Program funding mechanisms.
- Provide onsite field assistance, guidance and direction for SPRWS service crews performing lead service replacements in private property based on past experience in similar contexts. This will include insight and recommendations on means and methods of construction as well as pre- and post-installation documentation procedures. It is assumed that three (3) consecutive days of field assistance will be provided.

Task 5 – Lead Service Line Program Dashboard and Data Management System

- Provide demonstration of the Newark LSL Program Dashboard and data management system.
- Conduct a Data Management and LSL Program Dashboard Workshop. Workshop will discuss the requirements and SPRWS needs for the LSLR website and program dashboard. Discuss and document options related to collecting, hosting, and uploading data, as well as web-based dashboard details such as presentation and access. Discuss efficiencies and methodology for program related interactive web site features such as ability for customers to submit and sign property entrance agreements and other documents on inspector devices. Also determine the digital format specifics needed for smooth upload of the Program Data and Construction Management data into SPRWS's current long-term GIS and asset management systems. Dashboard will be developed by SPRWS staff.
- Review the LSLR Program website developed by SPRWS staff that would provide public information to water customers and other stakeholders. Website may contain both LSLR program specifics as well as public education information on lead in drinking water in general. Website may house the public service line inventory map and be interactive such that customers can submit and sign agreements and other documents.
- Make recommendations for an integrated digital, data and construction management system for recording, tracking and visually displaying LSLR Program and construction information in a cloud based, near real time solution, with password enabled access. The system will eventually be developed and implemented by SPRWS staff.
 - CDM Smith will evaluate customization to include SPRWS's preferred metrics and KPIs using dashboards for monitoring progress and determine which dashboard metrics shall be posted on a Public Website.
 - The data and construction management system should include construction inspector daily reports, method to store/upload construction photos, property access authorizations, etc. with property address linkage.
 - The data and construction management system should also have the ability to retrieve and upload to SPRWS's existing asset management system and GIS such that SPRWS's staff can continue to use their current system for inputting and retrieving information related to water service lines during the LSLR Program execution.

The intention is for the selected program to be used starting in 2023 for the LSLR data management program.



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Staffing

The proposed project management team and task leads for CDM Smith are shown below.

- Project Principal: Steve Wolsfeld
- Project Manager: Rob Isabel
- Task 1 – Lead Service Line Replacement Program Plan: Sandy Kutzing
- Task 2 – Public Outreach: Rose Hanson
- Task 3 – Review and Modify Construction Bid Package Documents: Brian Farrelly
- Task 4 – Assistance with Workforce Development Program: Brian Farrelly
- Task 5 – Lead Service Line Program Dashboard and Data Management System: Mark Zito

Additional assistance may be provided on an as needed basis by our local St. Paul-based staff, including Doug Youngblood, Sandy Wolfley, Allison Hansen, Kelli Moniz and Melissa Galatzer. Technical review (when needed) will be provided by Amrou Atassi.

Schedule

The contract will be in effect through December 31, 2022.

Compensation

CDM Smith will be compensated on a time and materials basis according to the billing rate table below, up to a total contract amount of \$100,000. The estimated level of effort per task is also enclosed.

CDM Smith will provide monthly invoices with associated project status updates.

Labor Category	Billing Rate (\$)	Key Staff
Project Principal	\$300	Wolsfeld
Project Manager	\$300	Isabel
Technical Leads	\$270-\$290	Kutzing, Atassi, Farrelly
GIS/Data	\$200	Zito
Professional II	\$150-\$200	Youngblood, Wolfley
Professional I	\$140	Hansen
Administration/Graphic Support	\$95	Moniz, Galatzer





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We look forward to the project. If you have any questions, please call me directly at (651) 485-7233.

Sincerely,

A handwritten signature in blue ink, reading "Steven L. Wolsfeld".

Steven L. Wolsfeld

Vice President

CDM Smith Inc.

Enclosure



SPRWS
Lead Service Line Replacement Program Planning
Estimated Fee
CDM SMITH

3/31/2022

Task	Description	Project Manager	Project Director	Tech Lead	Tech Lead	GIS/Data	Professional I	Communications	Admin/ Graphics	CDM Labor Total	CDM Labor Fee, \$	ODC, \$	Total, \$
		Isabel	Wolsfeld	Kutzing	Farrelly	Zito	Hansen	Hanson	Galatzer/ Moniz				
	Hourly Billing Rate	\$300	\$300	\$270	\$290	\$200	\$140	\$140	\$95				
1	LSLR Plan	15	8	60	16	8	64		4	175	\$ 38,680	\$ 1,000	\$ 39,680
2	Public Outreach Assistance	4	2	12	4			40	24	86	\$ 14,080	\$ 200	\$ 14,280
3	Review Construction Bid Packages	4		4	16					24	\$ 6,920	\$ -	\$ 6,920
4	Workforce Development Assistance	10		8	40		16			74	\$ 19,000	\$ 2,960	\$ 21,960
5	LSL Dashboard and Data Management Framework	8	4	8	8	32	12			72	\$ 16,160	\$ 1,000	\$ 17,160
	Subtotal Hours	41	14	92	84	40	92	40	28	431			
	Total Fee, \$	\$ 12,300	\$ 4,200	\$ 24,840	\$ 24,360	\$ 8,000	\$ 12,880	\$ 5,600	\$ 2,660		\$94,840	\$5,160	\$100,000