



## AGENDA MEMORANDUM

Action Item for the City Council Meeting of September 3, 2024

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**DATE:** September 3, 2024

**TO:** Peter Zaroni, City Manager

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<p style="text-align: center;"><b><u>Professional Services Contract Award</u></b> <b>ONSWTP Fluoride System Improvements</b></p>
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**CAPTION:**

Motion awarding a professional services contract to Hazen and Sawyer, Corpus Christi, Texas, to provide design, bid, and construction phase services to fully upgrade the complete Fluoride system utilized at the O.N. Stevens Water Treatment Plant (ONSWTP) in an amount not to exceed \$532,418 with FY 2024 funding available from the Water Capital Fund.

**SUMMARY:**

As part of the water treatment process conducted at O.N. Stevens water Treatment Plant, hydrofluosilicic acid is dosed to meet fluoride residual recommendations. This motion authorizes approval of a professional engineering contract to upgrade the Fluoroide system at ONSWTP. The system components to be upgraded are all the existing mechanical, structural, plumbing, HVAC, electrical, and instrumentation utilized in the feed process for hydrofluorosilicic acid. The design will also focus on ensuring functional operation, efficient maintenance, and safe operation.

**BACKGROUND AND PURPOSE:**

Water fluoridation is the controlled adjustment of fluoride to a public water supply for dental health. Hydrofluorosilicic acid is the most common additive for water fluoridation in the United States. The Centers for Disease Control and Prevention, World Health Organization, U.S. Public Health Service, American Medical Association, American Dental Association, Corpus Christi-Nueces County Local

Health Authority, and local dentists and pediatricians recommend the addition of fluoride to drinking water. Hydrofluorosilicic acid is added in the treatment of potable (drinking) water through a controlled liquid feed system to reduce the incidence of dental cavities and tooth decay.

The City of Corpus Christi has been adding fluoride to its treated water since 1950. Fluoride is naturally present in the City’s raw water sources from Lake Corpus Christi, Choke Canyon Reservoir, Lake Texana, and Colorado River. The naturally occurring fluoride level in the Corpus Christi Water system due to its water sources averages 0.2 mg/l. The targeted concentration for Fluoride in a public drinking water system is 0.7 mg/l.

The Environmental Protection Agency (EPA) has set levels of fluoride in a drinking water system with a maximum contaminant level of 4.0 mg/l and a secondary contaminant level of 1.4 mg/l. Public water systems are required to meet these standards by ensuring fluoride levels are less than these requirements.

The upgrades to the existing Fluoride System will improve the dosage of hydrofluorosilicic acid to the water supply resulting in consistent fluoride levels of the treated water. The scope of services will first include a condition and operational assessment of the existing system. This initial analysis is required to ensure the most effective design is completed to ensure functional operation, efficient maintenance, and safe operation. Specifically, the system components to be upgraded are all mechanical, structural, plumbing, HVAC, electrical, and instrumentation.

**PROJECT TIMELINE:**

<b>2024 – 2025</b>	<b>2025 - 2026</b>	<b>2026 – 2027</b>
<b>October – October</b>	<b>November – February</b>	<b>March – October</b>
<b>Design</b>	<b>Bid/Award</b>	<b>Construction</b>

Project schedule reflects City Council award in September 2024 with anticipated design completion by October 2025 and construction anticipated to start in March 2026 with an estimated construction completion of October 2027.

**COMPETITIVE SOLICITATION PROCESS**

The Contracts and Procurement Department issued a Request for Qualifications on August 7, 2023, with the RFQ Number 5036 for Professional Engineering Services for Capital Improvement Projects FY2024. The City received statements of qualifications from nine firms and a technical evaluation was performed by the selection committee. The selection committee consisted of representatives from Corpus Christi Water (CCW) and Engineering Services.

Firm ranks were based on three factors:

1. Experience of the firm
2. Experience of the key personnel with specific experience with similar projects
3. Understanding of Project Scope.

Hazen and Sawyer were the highest ranked firm for this project and awarded the AE contract, they have over 60 years of experience in water planning, preliminary, and detailed design services. Hazen and Sawyer have provided professional services for several City projects in the past. Some of the projects are Water and Wastewater On-Call Services, Water System assessment and Optimization, ONSWTP Chlorine System Handling and Storage, and ONSWTP Solids Handling and Storage.

**ALTERNATIVES:**

City Council could choose not to award the contract to Hazen and Sawyer. Not awarding the contract for professional services to Hazen and Sawyer will delay necessary improvements of the Fluoride system at ONSWTP resulting in inconsistent Fluoride levels within the treated water.

**FISCAL IMPACT:**

The fiscal impact in FY 2024 is an amount of \$532,418 with funding available from the Water CIP Fund. Currently the project has \$300,000.00 available. The shortfall of funding in the project will be transferred from Project 24021 Up River Road. Project 24021 Up River Road has been delayed and has been moved to the long range plan.

**FUNDING DETAIL:**

Fund: Water 2024 CIP (Fund 4486)  
Department: Water (45)  
Organization: Grants & Capital Projects Funds (89)  
Project: ONSWTP Fluoride System Improvements (Project No. 24026)  
Account: Outside Consultants (550950)  
Activity: 24026  
Amount: \$532,418

**RECOMMENDATION:**

City staff recommend approval of the professional services contract with Hazen and Sawyer in an amount not to exceed of \$532,418 for the ONSWTP Fluoride System Improvement Project.

**LIST OF SUPPORTING DOCUMENTS:**

Location & Vicinity Maps  
Evaluation Matrix  
Proposal  
CIP Page  
Presentation