

February 8, 2022
REVISED

Brian Howard Town
Manager Town Hall
41 South Main St.
Randolph, MA 02368

**RE: Tri-Town Regional Water Treatment Plant
Application for Financial Assistance
Drinking Water State Revolving Fund – Construction Stage
DWSRF #7260**

Dear Mr. Howard:

The Tri-Town Water District on behalf of the communities of Randolph, Holbrook and Braintree recently applied for financial assistance through the Drinking Water State Revolving Fund (DWSRF) Program for the Tri-Town Regional Water Treatment Plant project (DWSRF-7260)

The 90% design was submitted to MassDEP on October 15, 2021 by AECOM the design Engineer. Environmental Partners, the Owners Project Manager has completed the peer review of the 90% and AECOM is currently working on the 100% design, to be completed by January 2022. Local permit approvals are underway.

To receive the Drinking Water Trust and MassDEP Project Approval Certificate (PAC) and Permission to Advertise in February 2022 certification of the appropriation for the entire project from design through startup is required. The Town of Randolph appropriated a total of **\$24,344,950 (ENR 2018)** for the project based on Conceptual Opinion of Probable Construction Cost (OPCC) **2018 of \$67,136,000** for the Tri-Town Regional Water Treatment Plant design, construction, and construction phase engineering services and **\$2,864,000** for the subaqueous transmission mains construction for a total November 2018 OPCC of \$70,000,000.

As part of the 90% submission an OPCC was prepared by an independent construction cost estimator utilizing the now detailed design. The 90% OPCC, prepared in November 2021, is **\$78,761,618** for the Tri-Town Regional Water Treatment Plant design, construction, and construction phase engineering services and **\$2,843,064** for the subaqueous transmission mains construction for a total OPCC of \$81,604,682. The increase in overall project costs is outlines below:

1. **Escalation.** There is a great deal of uncertainty as inflation continues to ramp up. Specifically, supply chain disruption due to the long-term effects of COVID 19 have resulted in an increase of escalation to mid-point of construction rate increased from **3.5% to 5.0% for an increase of \$0.5M.**

2. **Water & Wastewater Equipment Costs.** Supply chain uncertainty and lead time issues are affecting cost and openness of suppliers to hold pricing firm. Some suppliers will now only quote firm prices at order time. Estimated increase in equipment costs for this project.
 - a. Increase of **\$1.4M** total from all divisions.
3. Dissolved Air Flootation unit pricing increased by **\$0.2M** in May 2021 following our submission of the 60% estimate.
4. Average **labor cost** increased from \$94.50/hr to \$101.64/hr.
 - a. The \$7.14/hr increase x 236,500 person-hours results in an increase of **\$1.7M**.
5. **Concrete material cost** increased by **\$1.6M**.
 - a. Wall concrete unit cost increased from \$190/CY to \$495/CY.
 - b. Elevated framed slabs cost increased from \$180/CY to \$505/CY.
6. **Electrical material cost** increased by **\$1.6M**, impacted by the following increases in average cost:
 - a. Fitting prices increased by 1.5x.
 - b. Copper price/LB increased by 2x.
 - c. Conduit price/LF increased by 3x.
7. General Contractor **Overhead & Profit** multiplier on costs outlined above increased **\$1.1M**.
 - a. Assuming 20% overall OH&P (have been seeing 17% OH&P for WTP Subtotals and 25% OH&P for Filed Sub-bids.
8. Costs due to advancement of design and reduced by contingency: **\$1.4M**
 - a. Advancement of design, specifically for civil/site, electrical and I&C disciplines increased **\$3.6M**.
 - b. Contingency decreased to 10% to reduce the cost by **(\$2.2M)**.
9. Owner's project manager and design engineering services for construction phase services and resident project representatives increased by **\$2M**.

We respectfully request that you present the need for additional funding of **\$3,855,532** to the Town Council at their next meeting for reading and Public Hearing. It should be noted the design and construction costs associated with the lagoons (if required as a result of the MWRA permitting) would require an additional appropriation of \$850,000 which is 34% of \$2,500,000.

Please find attached a summary of project costs and a draft Town Council for additional funding based on the requirements of the DWSRF program.

Please feel free to contact me at (781) 856-2611 or htg@envpartners.com with any questions you may have or if you need any additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Helen T/G', is positioned above the typed name and title.

Environmental Partners Group, LLC
Helen Gordon, P.E., MCPPO, BCEE
Senior Program Manager | Associate

cc: Board of Selectmen
Janine Smith, Treasurer
Christopher Pellitteri, DPW Superintendent
Stephen DeFrancesco, P.E., AECOM
Sarah Price P.E., EP

1. Funding Sources	Randolph Funding FY19				
Council Order: 2018-030	\$ 16,000,000				
Council Order: 2019-039	\$ 8,344,950				
2. Design Phase Work		Total Costs 2021	Randolph (34%) Total Costs 2021	Randolph SRF Eligible Cost	Randolph SRF Ineligible Cost
Preliminary Pilot Plant, Schematic Design		\$ 514,863	\$ 175,053		\$ 175,053
EP OPM & Designer Services During Design and Construction Procurement Phase		\$ 5,198,830	\$ 1,767,602	\$ -	\$ 1,767,602
	Subtotal	\$ 5,713,693.00	\$ 1,942,655	\$ -	\$ 1,942,655
3. Expected Construction Costs					
TTRWTP Construction Estimate (90% OPCC) Construction Contingency and midpoint construction		\$ 67,905,025	\$ 23,087,708	\$ 23,087,708	
Subaqueous Transmission Mains Construction Estimate (90% OPCC) Construction Contingency and Midpoint Construction		\$ 2,843,064	\$ 1,421,532 ¹	\$ 1,421,532 ¹	
OPM Construction Admin, Resident Project Representative (EP) & Design Engineer (AECOM)		\$ 5,042,900	\$ 1,714,586	\$ 1,714,586	
Other Legal		\$ 100,000	\$ 34,000	\$ 34,000	
	Subtotal	\$ 75,890,989	\$ 26,257,826	\$ 26,257,826	
4. Project Totals	\$ 24,344,950	\$ 81,604,682	\$ 28,200,482	\$ 26,257,826	\$ 1,942,655
Randolph SRF Funding Gap			\$ (3,855,532)		

Notes:

- 1) The communities shall split the costs of the Tri-Town Regional Water Treatment Plant as follows: the Town of Braintree - 50%; the Town of Randolph - 34%; and, the Town of Holbrook - 16%. The Towns of Randolph and Holbrook shall split the costs of the Subaqueous Transmission Mains 50/50.

Randolph Town Council
In Town Council, December XX, 2021
Council Order: O-FY22-XX

Introduced By: Town Manager

Date Introduced: -

Reading/Public Hearing: -

Date Adopted:

Date Effective:

Order O-FY

LOAN ORDER - FOR TRI-TOWN REGIONAL WATER TREATMENT PLANT

ORDERED, that, the Town of Randolph appropriates **\$3,855,532** to pay the Town of Randolph's share of the additional costs of designing, constructing, equipping, and furnishing of the Tri-Town Regional Water Treatment Plant including without limitation all costs incidental or related thereto; which amount shall be expended in addition to all other amounts previously appropriated by the town for this project. To meet this appropriation the Treasurer with the approval of the Town Manager is authorized to borrow **\$3,855,532** and issue bonds or notes therefore under M.G.L. c. 44, §7 (1), §8 (4), 44 of the General Laws and/or Chapter 29C of the General Laws; or pursuant to any other enabling authority, that the Treasurer with the approval of the Town Manger is authorized to borrow all or a portion of such amount from the Massachusetts Drinking Water Trust established pursuant to Chapter 29C; and in connection therewith to enter into a financing agreement and/or a security agreement with the Trust and otherwise to contract with the Trust and the Department of Environmental Protection with respect to such loan and for any federal or state aid available for the project or for the financing thereof; that the Town Manager is authorized to enter into a project regulatory agreement with the department of Environmental Protection, to expend all funds available for the project and to take any other action necessary or convenient to carry out the project. Any premium received upon the sale of any bonds or notes approved by this vote, less any such premium applied to the payment of the costs of issuance of such bonds or notes, may be applied to the payment of costs approved by this vote in accordance with M.G.L. c. 44, §20, thereby reducing the amount authorized to be borrowed to pay such costs by a like amount.

Explanation:

1. **Escalation.** There is a great deal of uncertainty as inflation continues to ramp up. Specifically, supply chain disruption due to the long-term effects of COVID 19 have resulted in an increase of escalation to mid-point of construction rate increased from **3.5% to 5.0% for an increase of \$0.5M.**
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