Framingham, MA

Worcester Road Sewer Pumping Station Replacement

Project 7385

October 2022

Construction Stage Application for Financial Assistance
Clean Water State Revolving Fund
CWSRF 6999

BETA
701 George Washington Hwy
Lincoln, Rhode Island 02865
401.333.2382
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IMPROVING COMMUNITIES TOGETHER

October 12, 2022

Maria Pinaud
Division of Municipal Services
Massachusetts Department of Environmental Protection
One Winter Street, 5th Floor
Boston, MA 02108-4747

Re: 2022 Clean Water State Revolving Fund
Construction Stage Funding Submittal
Worcester Road Sewer Pumping Station Replacement, CWSRF 6999
City of Framingham

Dear Ms. Pinaud:

On behalf of the City of Framingham, we are pleased to submit the enclosed Construction Stage funding documents for your review. The work on this contract involves the replacement of the pump station building superstructure, piping, pumps, electrical, and mechanical components.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Alan Gunnison, P.E.
Project Manager

cc: Robin McNamara, Deputy Director of Municipal Services MassDEP
Gregory Devine, Environmental Engineer MassDEP
Robert Marchesseault, P.E. Senior Project Manager Framingham DPW

BETA GROUP, INC.
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Part I

Applicant Information and Certification
(Attach additional pages as necessary)

1. LOCAL GOVERNMENTAL UNIT (LGU)			
LGU Name: City of Framingham	Dept. of Revenue ID No.: 04-6001151		FEIN 04-6001151
Authorized Representative: Charlie Sisitsky		Title: Mayor	
Street/P.O. Box: 150 Concord Street			
City/Town: Framingham	State: MA		Zip: 01702
Telephone: 508-532-5400	Fax:	E-Mail: mayor@framinghamma.gov	

2. LGU CONTACT PERSON (if different from item 1)			
Name: Robert Marchesseault, P.E.		Title: Senior Project Manager	
Mailing Address (if different from item 1)			
Street/P.O. Box: 110 Western Avenue			
City/Town: Framingham	State: MA		Zip: 01702
Telephone: 508-532-6086	Fax:	E-Mail: rpm@framinghamma.gov	

3. ENGINEER OR CONSULTANT FIRM			
Firm/Agency: BETA Group, Inc.			FEIN 05-0398907
Contact Person: Alan Gunnison, P.E.			
Mailing Address			
Street/P.O. Box: 701 George Washington Highway			
City/Town: Lincoln	State: RI		Zip 02865
Telephone: 401-333-2382	Fax:	E-Mail: agunnison@beta-inc.com	

4. CWSRF PROJECT IDENTIFICATION NUMBER	5. AMOUNT OF ASSISTANCE REQUESTED $
ID No. from Current Priority List: 6999	$ 7,830,000

Project Description:

The project consists of replacement of the existing Worcester Road Sewer Pump Station. Constructed in 1966 the existing pump station is reaching the end of its useful life. Currently the pump station consists of two electric pumps and one natural gas fired pump that is manually operated when required. Resiliency will be provided in the new pump station by including three electric pumps (two duty and one standby) and a diesel emergency generator that will automatically provide electricity during any power outage.

6. CERTIFICATION

In submitting this Application to MassDEP, the Applicant certifies that it shall comply with the following Project related conditions, and understands that the Applicant's non-compliance with one or more of these conditions may preclude MassDEP's issuance of a Project Approval Certificate or entry into a Project Regulatory Agreement.

(1) The Applicant shall obtain MassDEP's prior written approval to: (a) advertise any Invitation To Bid or Request for Proposals to procure contracts for the Project; and (b) award any contracts for the Project.

(2) The Borrower shall comply with the (a) the Civil Rights Act of 1964, 42 USC s.2000(1) et seq., as amended, Section 13 of the Federal Water Pollution Control Act (FWPCA) of 1972; Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, (b) the Equal Employment Opportunity requirements (Executive Order 11246), and all Executive Orders and regulations promulgated thereunder, and (c) the Affirmative Action and Minority/Women Business Enterprise ("M/WBE") requirements in the Regulations and the federal Disadvantaged Business (DBE) rule. The Borrower shall ensure that any prime contracts or subcontracts for services, construction, goods, or equipment for the Project contain the DM/DWBE utilization goals of 4.2% D/MBE and 4.5% D/WBE.

(3) The Applicant shall at all times provide and maintain competent and adequate resident supervision and inspection of the Project under the direction of a licensed professional engineer. Such resident site engineer shall ensure that the implementation of the Project conforms with the approved plans and specifications, and shall certify to the Applicant and MassDEP at the completion of the Project that the implementation of the Project is in accordance with MassDEP approved final plans and specifications for the Project. The Applicant also agrees to submit an executed copy of the contract for resident site engineering services to MassDEP within sixty (60) days of the date of the contract award. The Applicant understands that no payments for the Project will be processed until such contract has been submitted to MassDEP.

(4) Prior to receiving final payment for the Project, the Applicant shall certify to MassDEP that the Project has been completed and performed in accordance with the Project Regulatory Agreement.

(5) The Applicant shall be solely responsible for the implementation and completion of the Project in accordance with MassDEP approved plans and specifications and MassDEP permit(s) issued for the Project, and for the economical and efficient operation and administration of the Project. The Applicant's responsibilities include retaining sufficient operating personnel and conducting operational tests and other needed evaluations to ensure the economical and efficient operation and administration of the Project.

(6) The Applicant shall establish accounts for the Project, which shall be maintained in accordance with generally accepted government accounting standards.

(7) The Applicant understands that if MassDEP issues a Project Approval Certificate for this project, such action does not constitute MassDEP's sanction or approval of any changes or deviation from any applicable state regulatory or permit standards, criteria, or conditions, or from the terms or schedules of state enforcement actions or orders applicable to the Project.

(8) The Applicant shall maintain all Project records for seven years after the issuance of final payment or until any litigation, appeal, claim, or audit that is begun before the end of the seven-year period is completed and resolved, whichever is longer.

(9) The Applicant agrees to provide any Project information and documentation requested by MassDEP.

(10) The Applicant shall obtain fee simple title or such other property interest in the Project site, including any easements and rights-of-way, necessary to ensure the undisturbed use and possession of the Project site for the purposes of implementation and operation of the Project for its estimated life.

(11) Any proposed change in Project-related contracts, which substantially modifies the Project initially proposed, shall be submitted to MassDEP for prior approval.

(12) The Applicant's implementation of the Project, including the procurement of related contracts, shall comply with all applicable requirements of state and local laws, ordinances, by-laws, rules, and regulations.

(13) MassDEP representatives shall have access to Project work whenever it is in preparation or progress and shall be provided proper facilities for such Project access and inspection. All the Applicant's construction and other relevant contracts shall contain the above provision.

To the best of my knowledge and belief, data provided in this application is true and correct; the documentation has been duly authorized by the governing body of the applicant. Furthermore, the applicant certifies that it possesses the legal authority to apply for the loan, and to finance and construct the proposed facilities. A resolution, motion, or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application. The same resolution, motion, or similar action is directing and authorizing the person identified below as the authorized representative of the applicant to act in connection with the application and to provide such additional information as may be required.

Name of Representative (Type)	Title
Charlie Sisitsky	Mayor
Signature of Representative	Date
	1/6/22

Project Section Information

1. Project contract(s) list				2. Contract(s) Schedule (estimated dates mm/dd/yyyy)			
Contract Number and Name	**Total Costs**	**Eligible Cost**	**InEligible Cost**	**Plans and Spec Submittal**	**Bid Advertisement**	**Contract Award**	**Contract Completion**
PW-XXX Worcester Road Pump Station Replacement	$ 5,400,000	$ 5,400,000		10/14/2022	01/18/2023	04/05/2023	02/18/2025
	$ 0						
	$ 0						
	$ 0						
	$ 0						
	$ 0						
	$ 0						
	$ 0						
	$ 0						
	$ 0						

3. Summary of Costs	**Total Costs**	**Eligible Cost**	**InEligible Cost**
Construction Contingency (max. 10% pre-bid; 5% post-bid)	$ 540,000	$ 540,000	
	$ 0		
Construction Services	$ 1,790,000	$ 1,790,000	
	$ 0		
	$ 0		
	$ 0		
	$ 0		
Other (specify)	$ 0		
	$ 0		
	$ 0		
	$ 0		
	$ 0		
	$ 0		
Police – Traffic Detail	$ 100,000	$ 100,000	
TOTAL	$ 7,830,000	$ 7,830,000	$ 0

Date of Estimate: *2/24/2020*

ENR Construction Cost Index: *11,500*

Part II

4. Environmental Benefits (*Response required) https://www.epa.gov/cwsrf

A. Population Served			ANSWER
1	Population Served by the Project*	Report the number of people estimated to be served by the project upon its completion.	21,500
2	Project Part of a Wastewater Treatment Facility or Collection System)?*	Select **Yes** if this project is part of a wastewater treatment facility or collection system. "Yes" should also be selected if the project is part of a decentralized collection system.	Yes ☑ No ☐
3	Population Served by System*	Enter the number of people connected to the discrete, permitted facility or system that the CWSRF funded project affects.	74,000

B. Non-CWSRF Federal Funding			ANSWER
1	Do the projects funded under this assistance agreement receive non-CWSRF funding from another federal program*	Select **Yes** if the projects funded under this assistance agreement will receive non-CWSRF funding from another federal program.	Yes ☐ No ☑
	If Yes: Water Infrastructure Finance and Innovation Act Program Funding ($)*	Identify the amount of non-SRF project funding that will come from the Water Infrastructure Finance and Innovation Act (WIFIA) program.	$
	If Yes: USDA Rural Development Water and Environmental Programs ($)*	Identify the amount of non-SRF project funding that will come from the USDA Rural Development Water and Environmental Programs.	$
	If Yes: HUD Community Development Block Grants ($)*	Identify the amount of non-SRF project funding that will come from the HUD Community Development Block Grants (CDBG).	$
	If Yes: EPA Nonpoint Source Management Grants ($)*	Identify the amount of non-CWSRF project funding that will come from the EPA Section 319 Nonpoint Source Management Grants.	$
	If Yes: Other Amount ($)*	Identify the amount of non-SRF project funding that will come from another federal source not currently listed.	$

C. Non-CWSRF State Funding			ANSWER
1	Do the projects funded under this assistance agreement receive non-CWSRF funding from another state program?*	Select **Yes** if the projects will receive non-CWSRF funding from another state program.	Yes ☐ No ☑
	If Yes: DWSRF ($)*	Identify the amount of project funding that will come from the DWSRF.	$
	If Yes: Non-SRF State Loan Program ($)*	Identify the amount of non-SRF project funding that will come from state loan programs.	$
	If Yes: State Grant Program ($)*	Identify the amount of non-SRF project funding that will come from state grant programs.	$
	If Yes: Other Amount($)*	Identify the amount of non-SRF project funding that will come from another state source not currently listed.	$

D. CWSRF Funding by Project Category			PERCENT OF PROJECT
	Secondary Treatment* (%)	This category includes costs necessary to meet the minimum level of treatment that must be maintained by all treatment facilities, except those facilities granted waivers of secondary treatment for marine discharges under section 301(h) of the Clean Water Act. Secondary treatment typically requires a treatment level that produces an effluent quality of 30 mg/l of both 5-day Biochemical Oxygen Demand (BOD5) and total suspended solids (secondary treatment levels required for some lagoon systems may be less stringent). In addition, the secondary treatment must remove 85 percent of BOD5 and total suspended solids from the influent wastewater. **Replacement or installation of individual or community septic systems or other decentralized treatment approaches are reported in Category: Individual/Decentralized Sewage Treatment.**	
	Advanced Treatment* (%)	This category includes costs necessary to attain a level of treatment that is more stringent than secondary treatment or produce a significant reduction in nonconventional or toxic pollutants present in the wastewater treated by a facility. A facility is considered to have Advanced Wastewater Treatment if its permit includes one or more of the following: Biochemical Oxygen Demand (BOD) less than 20mg/l; Nitrogen Removal; Phosphorous Removal; Ammonia Removal; Metal Removal; Synthetic Organic Removal.	
	Infiltration/inflow Correction* (%)	This category includes costs for correction of sewer system infiltration/inflow problems. Infiltration includes controlling the penetration of water into a sanitary or combined sewer system from the ground through defective pipes or manholes. Inflow includes controlling the penetration of water into the system from drains, storm sewers, and other improper entries.	
	Sewer System Rehabilitation* (%)	This category includes costs for the maintenance, reinforcement, or reconstruction of structurally deteriorating sanitary or combined sewers. The corrective actions must be necessary to maintain the structural integrity of the system.	100
	New Collector Sewers* (%)	This category includes costs of new pipes used to collect and carry wastewater from a sanitary or industrial wastewater source to an interceptor sewer that will convey the wastewater to a treatment facility. **Construction of a collector sewer to transport wastes to a cluster septic system or other decentralized facility are reported in Category: Individual/Decentralized Sewage Treatment.**	
	New Interceptor* (%)	This category includes costs for constructing new interceptor sewers and pumping stations to convey wastewater from collection sewer systems to a treatment facility or to another interceptor sewer. This category includes costs for relief sewers.	
	CSO Correction – Grey Infrastructure* (%)	This category includes measures used to achieve water quality objectives by preventing or controlling periodic discharges of a mixture of storm water and untreated wastewater (combined sewer overflows) that occur when the capacity of a sewer system is exceeded during a wet weather event. This category does not include costs for overflow control allocated to flood control or drainage improvement, or treatment or control of storm water in separate storm and drainage systems.	
	CSO Correction - Green Infrastructure* (%)	This category includes needs and costs to prevent or control the periodic discharges of mixed stormwater and untreated wastewater that occur when the capacity of a sewer system is exceeded during a wet-weather event. This category includes green infrastructure CSO control infrastructure such as upland runoff control techniques. This category does not include needs and costs for overflow control allocated to flood control or drainage improvement, or the treatment or control of stormwater in separate storm systems.	
	Stormwater: Grey Infrastructure* (%)	This category includes costs associated with the planning, design, and construction of conveying stormwater via pipes, inlets, roadside ditches, and other similar mechanisms. This category also includes the costs of activities associated with the planning, design, and construction of treating stormwater with wet ponds, dry ponds, manufactured devices, and other similar means.	
	Stormwater: Green Infrastructure* (%)	This category includes costs associated with the planning, design, and construction of low impact development and green infrastructure, such as bioretention, constructed wetlands, permeable pavement, rain gardens, green roofs, cisterns, rain barrels, vegetated swales, restoration of riparian buffers and flood plains, etc. Note: Projects that used to be reported under the old Urban needs category that meets this definition should be reported here.	
	Nonpoint Source: Ground Water - Unknown Source* (%)	This category covers nonpoint source pollution control activities related to ground water protection such as wellhead and recharge area protection activities. Any activity that can be attributed to a specific cause of ground water pollution, such as leaking storage tanks, soil contamination in a brownfield, or leachate from a sanitary landfill, should be reported to that more specific category. Desalination projects that protect or restore groundwater should be reported under this category.	
	Nonpoint Source: Resource Extraction* (%)	This category covers nonpoint source pollution control activities nonpoint source pollution control activities related to mining and quarrying activities. Examples of BMPs include detention berms and seeding or revegetation.	

	Nonpoint Source: Brownfields and Superfund Sites* (%)	This category covers nonpoint source pollution control activities related to land that was developed for industrial purposes and then abandoned, which might have residual contamination. All work at brownfields and Superfund sites should be included in this category regardless of the activity. Some typical activities used to address cleanup of brownfields and Superfund sites are ground water monitoring wells, in situ treatment of contaminated soils and ground water, and capping to prevent storm water infiltration.	
	Nonpoint Source: Storage Tanks* (%)	This category covers nonpoint source pollution control activities related to tanks designed to hold gasoline or other petroleum products or chemicals. The tanks may be located above or below ground level. Some typical BMPs are spill containment systems; in situ treatment of contaminated soils and ground water; and upgrade, rehabilitation or removal of petroleum/chemical storage tanks.	
	Nonpoint Source: Sanitary Landfills* (%)	This category covers nonpoint source pollution control activities related to sanitary landfills. Some typical BMPs used to address needs at landfills are leachate collection, onsite treatment, gas collection and control, capping and closure.	
	Nonpoint Source: Hydromodification / Habitat Restoration* (%)	This category covers nonpoint source pollution control activities related to habitat protection and restoration. Examples of projects include shoreline activities (e.g., swales, filter strips), instream activities (e.g., fish ladders), and capital costs associated with the control of invasive vegetative and aquatic species. **Any habitat restoration projects involving stormwater management should be reported in Category: Stormwater - Green Infrastructure.**	
	Nonpoint Source: Individual / Decentralized Sewage Treatment* (%)	This category covers nonpoint source pollution control activities related to rehabilitating or replacing onsite wastewater treatment systems (OWTS) or clustered (community) systems. It also includes the treatment portion of other decentralized sewage disposal technologies. Costs related to developing and implementing onsite management districts are included (but not the costs of ongoing operations of such districts). Costs could also include the limited collection systems associated with the decentralized system. This category does not include costs associated with changing a service area from decentralized wastewater treatment to a publicly owned centralized treatment system. Costs to construct a publicly owned centralized collection and treatment system should be reported in Secondary Wastewater Treatment, Advanced Wastewater Treatment, or both. Note: Activities related to installing sewers to connect the service area to an existing collection system are reported in Category: New Collector Sewers & Category: New Interceptor.	
	Other: Estuary (§320) Assistance* (%)	Enter assistance provided for the development and implementation of the 28-estuary comprehensive conservation and management plans (CCMP) established under CWA, §320. Only activities unique to §320 are included in this category. All other pollution control activities related to development and implementation of estuary plans that meet the definition of one of the other categories should be reported under those respective categories.	
	Other: Desalination* (%)	Projects include treatment and disposal of brine, desalination of brackish water to augment water supply, aquifer recharge using desalinated sea water, and treatment/reinjection of brackish groundwater.	
		100 **PERCENTAGE TOTAL**	**100%**

E. Green Project Reserve (GPR Funding)		
1	Green Infrastructure Amount ($)* $ 0	Report the amount of the project funding that will classified under the Green infrastructure GPR category. This category includes costs that manage wet weather and maintain and restore natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. Examples include installation of rain gardens, green roofs, permeable pavement, constructed wetlands and other practices that mimic natural hydrology to prevent wet weather flows to, from or within the treatment works.
2	Energy Efficiency Amount ($)* $ 506,000	Report the amount of the project funding that will classified under the Energy Efficiency GPR category. This category includes the costs associated with the use of improved technologies and practices that result in reduced energy consumption and the production of renewable energy. Examples include lighting, HVAC, process equipment, electronic equipment (SCADA), wind and solar, methane capture and energy conversion equipment, biosolids drying/dewatering and energy conversion equipment, co-digestion, combined heat and power (CHP) systems, hydroelectric systems that harness wastewater flows to, from, or within a treatment works.
3	Water Efficiency Amount ($)* $ 0	Report the amount of the project funding that will classified under the Water Efficiency GPR category. This category includes the costs associated with projects that reduce the demand for POTW capacity through reduced water consumption. Examples include water meters, plumbing fixture retrofits or replacement, water efficient appliances, water efficient irrigation equipment (e.g., moisture and rain sensing equipment), water audit, water conservation plan, recycling, water reuse and education programs.
4	Environmentally Innovative Amount ($)* $ 0	Report the amount of the project funding that will classified under the Environmentally Innovative GPR category. This category includes the costs associated with projects that demonstrate new and/or innovative approaches to delivering service and/or managing water resources in a more sustainable way. Examples include integrated water resources management plan, sustainability plan, greenhouse gas inventory mitigation plan, planning activities to prepare for adaptation to the long term effects of climate change and/or extreme weather, LEED certified buildings and decentralized wastewater systems.

F. Project Location(s)		
	Add Project Location* 730 Worcester Road Framingham, MA	At least one project location must be added.
	Project Location – Description	Optional description to accompany the latitude/longitude coordinates.
	Project Location: Latitude* 42.298441	Provide the latitude coordinate(s) for the location of your project. Latitude coordinates must be provided in the decimal format.
	Project Location: Longitude* -71.426345	Provide the longitude coordinate(s) for the location of your project. Longitude coordinates must be provided in the decimal format.
	Project Location: Radius	Optional: Add a radius to the latitude/longitude coordinates.

G. Estuary Impacts			ANSWER
1	Will the CWSRF Funded Project Benefit a National Estuary Program?*	Select **Yes** if the CWSRF funded project will benefit a National Estuary Program.	Yes ☐ No ☑
	If Yes, Is the project is located within a NEP watershed?*	Select **Yes** if the CWSRF funded project is located within a NEP watershed.	Yes ☐ No ☐
	If Yes, Is the project is being funded because it develops, amends, or implements a Section 320 Comprehensive Conservation and Management Plan (CCMP)?*	Select **Yes** if the CWSRF funded project is being funded because it develops, amends, or implement a Section 320 Comprehensive Conservation and Management Plan (CCMP)	Yes ☐ No ☐

H. Project Improvement/Maintenance of Water Quality and Related Data Fields			ANSWER
1	How does this Project Contribute to the Improvement or Maintenance of the Receiving Waterbody?*	To contribute to water quality "improvement," a project must reduce pollutant loading to the receiving waterbody. A project that simply sustains the treatment capacity of a facility counts for water quality "maintenance." Select **Improvement** when a project reduces pollutant loading to the affected waterbody. Select **Maintenance** when a project simply sustains the treatment capacity of a facility. Select **Not Applicable** when the project increases loadings to the affected waterbody. Information can be found in the engineering and/or environmental review documents for a project. Information on pre-project pollutant loadings should be confirmed with the most recent Discharge Monitoring Reports (DMRs).	☐ Improvement ☑ Maintenance ☐ Not Applicable
2	Does this Project Allow the System to Either Maintain or Achieve Compliance with the Clean Water Act?*	Select **Maintain Compliance** when the facility/system was already in compliance before the project and has a lower risk of falling out of compliance after the project. Select **Achieve Compliance** when the facility/system was out of compliance before the project and is expected to be in compliance at project completion. Otherwise select **Not Applicable** Use the engineering and environmental review documents, the Discharge Monitoring Reports, and the permit (most likely a National Permit Discharge Elimination System(NPDES) permit, but also possibly a reuse, recharge, or land discharge permit), along with any administrative, consent, or court orders. Strictly speaking, these options do not give credit to projects that move the facility/system toward compliance but that do not **Achieve Compliance** at project completion. For example, 1). If a project is a significant factor in a system/facility achieving compliance, accomplishing a specific group of items on a consent order, or eliminating CSO's for a large section of the sewer system, select **Achieve Compliance.** 2. If a project simply addresses a few I/I problems that generally affect SSOs, select **Not Applicable**. 3. If a project occurs under the threat of noncompliance – i.e. it allows the system/facility to meet anticipated permit limits – select **Achieve Compliance** instead of **Maintain Compliance.**	☑ Maintain Compliance ☐ Achieve Compliance ☐ Not Applicable

3	What is the Designation of the Waterbody Affected by the Project? (As it Appears on the 303(d) Impaired Waters or State Groundwaters List)* •	Please report the designation of the affected waterbody as it appears on the 303(d) impaired waters list, or on a state groundwaters list. More information regarding the 303(d) impaired waters lists is available at the following EPA website: https://ofmpub.epa.gov/waters10/attains_index.home	☐ Meeting Standards ☑ Impaired ☐ Threatened ☐ Not Assessed ☐ Not Applicable
4	Discharge Information (Check all that Apply)*	Select the type(s) of waterbody(ies) that the project affects the discharge to. At least one box must be checked. If this section is not applicable to the project, please choose no change/no discharge. Check this box if the wastewater discharge is seasonal. **Note: Seasonal discharge can be checked along with the other, above choices.**	☐ Ocean Outfall ☐ Wetland ☐ Groundwater ☐ Other/Reuse ☐ No Change/No Discharge ☐ Estuary/Coastal Bay ☑ Surface Water (Stream, River, Lake) ☐ Land Application ☐ Eliminates Discharge ☐ Seasonal Discharge
5	This Project Addresses the Following: Total Maximum Daily Limit (TMDL) or Watershed Management Plan (Select all that Apply)*	Identify whether the project reduces the pollutants specified in the Total Maximum Daily Limit (TMDL) or watershed management plan for the affected waterbody. The appropriate state environmental agency office(s) can be contacted to find out if the affected waterbody has a TMDL or watershed management plan. Watershed management plan is a general term, so terminology may differ between states. Check the project's engineering and environmental documents to see if it will reduce the pollutants specified in the TMDL or management plan. TMDL information may already be attached to the permit or found in the state's Integrated Report. Projects on impaired waters do not automatically address a TMDL. Information about projected TMDLs may appear on a state schedule.	☐ Existing TMDL ☐ Projected TMDL ☐ Watershed Management Plan ☑ Not Applicable

I. Contribution to Protection or Restoration of State Designated Surface Water Uses			**ANSWER**
1	Identify Which State Designated Surface Water Use this Project Protects and/or Restores*	Identify the Designated Surface Water Uses that this project helps to protect or restore from the list that is provided. If the project maintains or improves water quality, or if it increases effluent loadings but meets its permit, it contributes to protection of the uses you find when matching pollutants. If the project reduces loadings of a pollutant that is impairing a designated use (303(d) list), the project contributes to restoration of that use. Specify as primary those affected uses that drive a large portion of project financing. Often, a primary use will correspond to the largest pollutant reduction. In most cases, one and possibly two uses will qualify as primary. Specify secondary for other uses. If no use qualifies as primary, specify secondary for all applicable uses.	☐ Protect ☐ Restore (Primary) ☑ Protect ☐ Restore (Secondary) ☐ Water Use Not Applicable? ☐ Water Use Not Found?

J. Other Uses and Outcomes			ANSWER
1	Does this Project Contribute to Regionalization/Consolidation?*	Identify whether this project supports efforts to consolidate separate wastewater treatment and collection systems.	Yes ☐ No ☑
2	Does this Project Address Nutrient Loadings of Nitrogen and Phosphorous?*	Identify whether the primary purpose of the project is to reduce loadings of Nitrogen and Phosphorous into the waterbodies.	Yes ☐ No ☑
3	Does this Project Contribute to Resiliency and Disaster Preparedness?*	Select Yes if the project helps make communities and/or utilities more resilient to manmade and natural disasters by reducing the risk of physical damage from a disaster or helping maintain operations during a disaster. Also select Yes if the project helps a utility /community recover quickly from a disaster. Examples of these type of projects include building sea walls and levees, elevating equipment, waterproofing, etc.	Yes ☑ No ☐
4	Does this Project Contribute to Public Health/Pathogen Reduction?*	Identify whether this project will positively contribute to public health (e.g., pathogen reduction).	Yes ☑ No ☐

Clean Water State Revolving Fund Program Loan
Application Checklist

CONSTRUCTION STAGE PROJECTS

Please use this checklist to confirm that all required forms and supplemental information have been included with the application and submit the checklist with your application.

Item	Included (check)	Previously submitted (date)	Not applicable (check)
Part I - Applicant Information and Certification			
1. Authority to File	✔		
2. Certifying Authority to File	✔		
3. Local Appropriation	✔		
4. Fiscal Sustainability Plan Certification (or FSP Schedule)	✔		
5. Cost and Effectiveness Certification (or C&E schedule)	✔		
6. Useful Life Certificate	✔		
Part II - Project Section Information			
1. Plans & Specifications	✔		
Part III - Supplemental Requirements			
1. Land Title/Easements (Legal Opinion)	✔		
2. IWRMP, CWMP or Project Evaluation Report	✔		
3. Water Resources Certifications (310 CMR 44.07)	✔		
4. Land Use Certification (310 CMR 44.07)	✔		
5. Inter-municipal Agreements	✔		☐
6. User Charge System (310 CMR 44.12(2)(b))	✔		
7. Sewer Use Ordinance (on file with MassDEP)	✔		☐
8. Federal and/or State Wastewater Discharge Permits	☐		✔
9. Site Hearing	☐		✔
10. Construction Permits			
a. US Army Corps of Engineers	☐		✔
b. MassDEP			
- Air Quality	☐		✔
- Sludge Disposal Approval	☐		✔
- Water Quality Certification	☐		✔
- Waterways	☐		✔
c. Local Conservation Commission (Order of Conditions)	✔		☐
d. MassDOT	✔		☐
e. MBTA/Railroad	☐		✔
f. Other State/Federal (Crosscutters Memorandum) Permits	☐		✔
g. DCR	☐		✔
11. Protection of Water Supplies	✔		☐
12. Coastal Zone Management Consistency Certificate	☐		✔
13. MEPA Compliance	✔		
14. Flood Insurance Participation	✔		☐
15. Historic Preservation	✔		

Item	Included (check)	Previously submitted (date)	Not applicable (check)
16. Legislation (if needed)	☐		✔
17. Professional Services Agreements			
a. Required Model Sub-Agreement Clauses	✔		☐
b. Detailed Fee Breakdown	✔		☐
c. Subcontracts	✔		☐
d. Disadvantaged Business Enterprise	✔		☐
e. Chapter 233 - Statement on MA Taxes	☐		✔
18. Map of Project	✔		
19. Basic Design Data	✔		☐
20. Provision for O & M Program	✔		☐
21. Displacement of Persons or Businesses	✔		☐
22. Plan of Operation	✔		☐
23. Start-up Services	✔		☐
24. Post-Construction Services	✔		☐
Part IV – 0% Interest Rate Financing for Certain Nutrient Removal Projects (if applicable)			
1. MassDEP CWMP Approval Letter or MEPA Certificate	☐		☐
2. Project Narrative with Cost Breakdown	☐		☐
3. Flow Neutral Land Controls	☐		☐
4. Consistency with Regional Water Resources Plan	☐		☐
5. Certification of no Nutrient Related Enforcement Orders	☐		☐

I-1. Authority To File

AUTHORITY TO FILE

Whereas, City of Framingham, after thorough investigation,

(Applicant)

has determined that the work activity consisting of:

Worcester Road Sewer Pumping Station Replacement

(describe project)

is both in the public interest and necessary to protect the public health, and that to undertake this activity, it is necessary to apply for assistance; and

Whereas, the Massachusetts Department of Environmental Protection (MassDEP) and the Massachusetts Clean Water Trust (the Trust) of the Commonwealth of Massachusetts, pursuant to Chapter 21 and Chapter 29C of the General Laws of the Commonwealth (Chapter 21 and Chapter 29C) are authorized to make loans to municipalities for the purpose of funding planning and construction activities relative to Water Pollution Abatement Projects; and

Whereas, the Applicant has examined the provisions of the Act, Chapter 21 and Chapter 29C, and believes it to be in the public interest to file a loan application.

NOW, THEREFORE, BE IT RESOLVED by Framingham City Charter

(Governing Body)

as follows:

1. That Mayor is hereby authorized on behalf

(Title of Official)

of the Applicant to file applications and execute agreements for grant and/or loan assistance as well as furnishing such information, data and documents pertaining to the applicant for a grant(s) and/or loan(s) as may be required; and otherwise to act as the authorized representative of the Applicant in connection with this application;

2. That the purpose of said loan(s), if awarded, shall be to fund construction activities.
3. That if said award is made the Applicant agrees to pay those costs which constitute the required Applicant's share of the project cost.

I-2. Certifying Authority To File

CERTIFYING AUTHORITY TO FILE

I hereby certify that the Framingham City Charter of

(Name of Governing Body)

the City of Framingham, MA

(Corporate Name of Local Government Unit)

(hereinafter referred to as the "Applicant"), at a meeting noticed and conducted in accordance with all applicable legal requirements, duly voted to authorize

Mayor

(Title of Local Government Unit Official)

to act on behalf of the Applicant, as its agent, in filing applications for, executing agreements regarding, and performing any and all other actions necessary to secure for the Applicant such loan(s) for construction or planning of Water Pollution Abatement Projects as may be made available to the Applicant pursuant to the provisions of the Massachusetts Clean Waters Act (M.G.L. c.21, section 27-33E, inclusive, as amended) and the Water Pollution Abatement Revolving Loan Program (M.G.L. c.29C) for the following project:

Worcester Road Sewer Pumping Station Replacement

(describe project)

I hereby certify that Charlie Sisitsky is the present incumbent of the

(Name of Person)

position referenced above, and do hereby certify:

1. That the attached resolution is a true and correct copy of the resolution as finally adopted at a meeting of the governing body held on the ____ day of _____, 20_____, and duly recorded in my office:
2. That said meeting was duly convened and held in all respects in accordance with law and to the extent required by law, due and proper notice of such meeting was given; and a legal quorum was present throughout the meeting, and a legally sufficient number of members of the governing body voted in the proper manner and for the adoption of said resolution; that all other requirements and proceedings under the law incident to the proper adoption or passage of said resolution, including publication, if required, have been duly fulfilled, carried out, and otherwise observed; and that I am authorized to execute this certificate:
3. That if an impression of a seal has been affixed below, it constitutes the official seal of the Applicant and this certificate is hereby executed under such official seal; but if no seal has been affixed, the Applicant does not have an official seal:

IN WITNESS WHEREOF, I have hereunto set my hand this

_____ day of _____, 20____.

Name: Lisa Ferguson Title: City Clerk

I-3. Local Appropriation

Town of Framingham
Annual Town Meeting
May 1, 2013

ARTICLE 20

To see if the Town will vote to raise and appropriate, transfer from available funds, borrow or otherwise provide a sum or sums of money for various sewer department capital projects including purchase of equipment, purchase of land, repair, rehabilitation, design or construction of buildings and infrastructure, including any related engineering, personnel and legal services, and the acquisition of any necessary permanent and/or temporary easements or other interests in land for said projects.

Pass any vote or take any action relative thereto.

Sponsor: Chief Financial Officer

May 9, 2013 Voted: That the Town raise and appropriate, transfer from available funds, or borrow the sum of $25,630,000 for the projects listed below, to be spent under the direction of the Town Manager or his designee, and further, that the Town Manager shall be allowed to exceed the appropriation for individual capital projects to be spent under his direction as long as the total amount to be spent does not exceed the total amount appropriated and that such adjustments are in compliance with M.G.L., Chapter 44, for the purpose of the design and construction, including any related engineering, personnel and legal services of the Sewer Department projects as provided in the supplemental background material and attached:

A20 A	Repair Shop Make-Up Air Unit	Sewer	$26,000
A20 B	Trailer Mounted Generators	Sewer	$131,000
A20 C	Worcester Road Pumping Station Elimination Project - Construction	Sewer	$17,220,000
A20 D	Baiting Brook Sewer Improvements	Sewer	$6,563,000
A20 E	Bethany Road and Winthrop/Waverly Intersection Sewer Improvements	Sewer	$1,240,000
A20 F	Sewer Main Replacement Various Locations 2014	Sewer	$300,000
A20 G	Speen Street Force Main Decommissioning Project – Design	Sewer	$150,000

A TRUE COPY ATTEST

Valerie W. Mulvey

VALERIE MULVEY, TOWN CLERK
FRAMINGHAM, MASSACHUSETTS

Town of Framingham
Annual Town Meeting
May 1, 2013

ARTICLE 20 (CONTINUED)

And further, that the Board of Selectmen be authorized to acquire by gift, purchase, or eminent domain, permanent easements and temporary construction easements or other interests in land for said projects, and further, that the Board of Selectmen be authorized to take all actions necessary to carry out the purposes of this article;

And to meet said appropriation $46,788 will be transferred from 4/05 ATM A26 FF Swift Road Sewer Main Project to fund the Sewer Main Replacement Various Locations Project; and further, that the Treasurer be authorized, with the approval of the Board of Selectmen, to issue from time to time bonds or notes in the amount of $25,583,212 pursuant to the provisions of M.G.L., Chapter 44, Section 7 and 8 or any other enabling authority.

143 voting in favor, 0 opposed, 1 abstention.

I-4. Fiscal Sustainability Plan Certification

FISCAL SUSTAINABILITY PLAN CERTIFICATION

I William Sedewitz, Chief Engineer, of

(name) (title/position)

City of Framingham hereby certify that a Fiscal Sustainability Plan meeting

(local governmental unit)

the requirements of section 603(d)(1)(E) of the Federal Water Pollution Control Act has been prepared and implemented; and further certify that water and energy conservation efforts have been evaluated and will be implemented as part of the Fiscal Sustainability Plan.

William R Sedewitz
(signature)

10/31/2022
(date)

I-5. Cost and Effectiveness Certification

COST AND EFFECTIVENESS CERTIFICATION

I William Sedewitz (name), Chief Engineer (title/position), hereby certify that City of Framingham (local governmental unit) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity; and has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account:

(i) the cost of constructing the project or activity;

(ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and

(iii) the cost of replacing the project or activity.

William R. Sedewitz
(signature)

10/3/2022
(date)

I-6. Certificate of Useful Life

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP - CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement		

CERTIFICATE OF USEFUL LIFE

The Worcester Road Sewer Pumping Station Replacement project has been designed with a useful life span of 30-50 years for all buildings, major process structures, and components. Typical maintenance and regular upgrades of equipment will be required to achieve this lifespan.

Alan J Gunnison

Alan Gunnison, P.E.

Project Manager

II-1a. WRPS Replacement Project

Planset

Project plans are included separately with this submission

II-1b. WRPS Replacement Project Specifications

Project specifications are included separately with this submission

II-1C Plan & Specification
Check List

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF MUNICIPAL SERVICES (DMS)
STATE REVOLVING LOAN FUND PROGRAM (SRF)
PLANS AND SPECIFICATIONS CHECKLIST

DMS on the World Wide Web at https://www.mass.gov/lists/state-revolving-fund-applications-forms

1. Public Entity (LGU): City of Framingham	
2. Project Name: Worcester Road Sewer Pumping Station Replacement	
3. Contract Titled: Worcester Road Sewer Pumping Station Replacement	
Contract Number PW-1025	
Title Sheet Dated: May 2022	
Plans and Specifications Estimated Percentage Complete: 100%	
4. Engineering Consulting Firm: BETA Group, Inc.	
Name of Consulting Engineer/Program Manager: Alan Gunnison, P.E.	
Mailing Address: 701 George Washington Highway, Lincoln, RI 02865	**Phone:** 401-333-2382
Consulting Engineer/Program Manager Email Address: agunnison@beta-inc.com	

TYPE OF PROJECT

5. Clean Water (CMR 44.03)	**Drinking Water (CMR 45.03)**
Project Number: CWSRF-6999	**Project Number: DWSRF-_____**
☐ Wastewater Treatment Projects	☐ Drinking Water Treatment
☐ Interceptors	☐ Distribution
☐ Combined Sewer Overflows (CSO's)	☐ Storage
☐ Infiltration/Inflow (I/I)	☐ Other (Specify)
☑ Collection Systems	
☐ Stormwater	
☐ Nonpoint Source Projects	

The loan applicant or his/her assignee shall complete the following sections (Bid Advertisement, Instructions to Bidders, Bid Proposal, Contract, General/Supplementary Conditions, and Consulting Engineer's Certification Section) with page location. The completed checklist together with electronic files/copies of the contract plans must be sent to the appropriate MassDEP Regional Office and to the Boston Office.

BID ADVERTISEMENT	Indicate Location/Page # or Not Applicable (NA)
1) Check which Bid Law provisions apply to this contract. ☑ **A. M.G.L. c.30, s39M (Non-Building/Public Works Contracts)** ☐ **B. M.G.L. c.149, ss44A-44J (Building Contract with Filed Sub-Bids)** **The provisions under which this contract is being bid are stated in the BID ADVERTISEMENT at**	**14**
2) If bid under c.149, ss44A-44J, the bid advertisement must contain the category of certification every general bidder must furnish from the Division of Capital Asset Management (DCAM) and Maintenance and an update statement (Form CQ3) in accordance with c.149, s44D. **This is stated in the BID ADVERTISEMENT at** See MA DEP – DMS BID PROVISIONS FOR SRF PROJECTS (Appendix C) and DCAM Certification Categories (Appendix D)	**N/A**
3) The Bid Advertisement must contain the following information: **A. 5% bid deposit**	**2**
B. Project description with time frame for the contract completion	**15**
C. Where and how the bidding documents may be obtained or examined.	**5**
D. The location, date and time by which bids are required to be submitted.	**1**
E. A statement that the project is to be funded in part by the Massachusetts Clean Water Trust (the "Trust").	**1**
F. A statement that the project requires compliance with the Department of Environmental Protection's Diesel Retrofit Program. See (Appendix B)	**8**
4) The Bid Advertisement must contain the following paragraphs: **A. "Disadvantaged Business Enterprise (DBE) goals are applicable to the total dollars paid to the construction contract. The goals for this project are a minimum of 4.2 percent D/MBE participation and 4.5 percent D/WBE participation by certified DBEs. The two low bidders shall submit completed DBE forms (EEO-DEP-190C, EEO-DEP-191C and the DBE Certification of United States Citizenship form) by the close of business on the third business day after bid opening. Failure to comply with the requirements of this paragraph may be deemed to render a proposal non-responsive. No waiver of any provision of this section will be granted unless approved by the Department of Environmental Protection (MassDEP)."**	**7**
B. "Minimum Wage Rates as determined by the Executive Office of Labor and Workforce Development under the provision of the Massachusetts General Laws, Chapter 149, Sections 26 to 27D, as amended, apply to this project. It is the responsibility of the contractor, before bid opening, to request if necessary, any additional information on Minimum Wage Rates for those trades people who may be employed for the proposed work under this contract. Federal Minimum Wage Rates as determined by the United States Department of Labor under the Davis-Bacon Act also apply to this project."	**3**

INSTRUCTIONS TO BIDDERS	Indicate Location/Page # or Not Applicable (NA)
5) The provisions of the following paragraphs must be included in the INSTRUCTIONS TO BIDDERS. Other language may be substituted provided the language changes do not substantively alter the meaning of these provisions: **A. "Applicable provisions of Massachusetts General Laws and Regulations and/or the United States Code and Code of Federal Regulations govern this Contract and any provision in violation of the foregoing shall be deemed null, void and of no effect. Where conflict between Code of Federal Regulations and State Laws and Regulations exist, the more stringent requirement shall apply."**	**7**
B. "Minimum Wage Rates as determined by the Executive Office of Labor and Workforce Development under the provision of the Massachusetts General Laws, Chapter 149, Sections 26 to 27D, as amended, apply to this project. It is the responsibility of the contractor, before bid opening, to request if necessary, any additional information on Minimum Wage Rates for those trades people who may be employed for the proposed work under this contract. Federal Minimum Wage Rates as determined by the United States Department of Labor under the Davis-Bacon Act also apply to this project." See (Appendix G)	**3**
C. "The contractor guarantees that the Work and Services to be performed under the Contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction of the same shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Drawings, Specifications, and other contract documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the Work as stated in the final estimate. If part of the Work is accepted in accordance with that subsection of this AGREEMENT titled "Partial Acceptance", the guarantee for that part of the Work shall be for a period of one year from the date fixed for such acceptance."	**00700-39**
"If at any time within the said period of guarantee any part of the Work requires repairing, correction or replacement, the Owner may notify the contractor in writing to make the required repairs, correction or replacements. If the Contractor neglects to commence making such repairs, corrections or replacements to the satisfaction of the Owner within seven (7) days from the date of receipt of such notice, or having commenced fails to prosecute such Work with diligence, the Owner may employ other persons to make said repairs, correction or replacements, and charge the costs, including compensation for additional professional services, to the Contractor."	**00700-39** **00700-40**
D. "This project is subject to the Safety and Health Regulations of the U.S. Department of Labor set forth in Title 29 CFR, Part 1926 and to all subsequent amendments, and to any applicable Massachusetts regulations. Contractors shall be familiar with the requirements of these regulations."	**8**
E. "Whenever it is written that an equipment manufacturer must have a specified period of experience with his product, equipment which does not meet the specified experience period can be considered if the equipment supplier or manufacturer is willing to provide an "Efficiency Guarantee Bond" or cash deposit for the duration of the specified time period which will guarantee replacement of that equipment in the event of failure."	**8**
F. "This project is subject to the requirements of the Department of Environmental Protection's Diesel Retrofit Program. Bidders must submit a signed and dated Statement of Intent to Comply form as part of their bid proposal documents."	**8**
G. "This project is subject to the American Iron and Steel requirements of P.L. 113-76, the Consolidated Appropriations Act of 2014." (See Appendix I)	**8**

BID PROPOSAL	Indicate Location/Page # or Not Applicable (NA)
6) The bid proposal must contain the following information: **A. Contract name, contract number and SRF project number designation**	**Cover page**
B. The method for determining the award of the contract when Bid Alternates are included	**N/A**
C. Acknowledgement of Addenda	**60, 61**
D. A Labor and Material or Payment Bond in the amount of 100% of the total contract price must be provided by the general contractor.	**18**
E. A Performance Bond in the amount of 100% of the total contract price must be provided by the general contractor.	**18**
F. "The time for completion of this contract is ____ calendar days"	**15**
G. "Liquidated damages specified in this contract are $_____ per day for each calendar day beyond the contract completion date that work remains uncompleted."	**15**
H. SRF eligible and ineligible items must be clearly separated in the bid proposal.	**N/A**
7) The following paragraph must be included in its entirety in the Bid Proposal. "The time period for holding bids, where Federal approval is not required is 30 days, Saturdays, Sundays and legal holidays excluded, after the opening of bids and where Federal approval is required, the time period for holding bids is 30 days, Saturdays, Sundays and holidays excluded after Federal approval."	**62**
8) Indicate which bidder's "Bid Law" certification statements apply to this contract. ☑ **A. M.G.L. c.30, s39M (a) and (c)** See (Appendix A1) ☐ **B. M.G.L. c.149, ss44D (1) (b) and s44E (2) (3)** See (Appendix A2)	**14**
The following other certifications must be included in their entirety in the Bid Proposal. **C. State Taxes** **"Pursuant to M.G.L.c.62C, s49A I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all state tax returns and paid all State Taxes required under law"** See Appendix A1 for the applicable contractor's certification statements required when bid under the provisions of c.30 s39 (Non-Building/Public Works Contract) including certifications for state taxes, work in harmony, EEO/AA provisions, non-collusion, and non-debarment. See Appendix A2 for the applicable contractor's certification statements required when bid under the provisions of c.149 s44A-44J (Building Contract with filed sub-bids) including certifications for state taxes, EEO/AA provisions, eligibility update statement with non-collusion, work in harmony, and non-debarment.	**75**

BID PROPOSAL - CONTINUED	Indicate Location/Page # or Not Applicable (NA)
D. Equal Employment Opportunity/Affirmative Action Provisions **"The undersigned bidder hereby certifies he/she will comply with the specific affirmative action steps contained in the EEO/AA provisions of this Contract, including compliance with the Disadvantaged Business Enterprise provisions as required under these contract provisions. The contractor receiving the award of the contract shall incorporate the EEO/AA provisions of this contract into all subcontracts and purchase orders so that such provisions will be binding upon each subcontractor or vendor."** See Appendix A1, Appendix A2	**62**
E. Non-Debarment "The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of Section Twenty-Nine F of Chapter Twenty-Nine, or any other applicable debarment provisions of any other Chapter of the General Laws or any rule or regulation promulgated thereunder; and is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency." See Appendix A1, Appendix A2	**62**
F. Suspension and Debarment **The EPA prohibits the use of suspended or debarred contractors and suppliers in SRF financed contracts. All SRF financed contracts and subcontracts must include the following language requiring compliance with *2 CFR 180* and *2 CFR 1532*.** **Add the following statement in the bid proposal:** **"Bidders must fully comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532, entitled responsibilities of Participants Regarding transactions (Doing Business with Other Persons). Contractors, subcontractors, or suppliers that appear on the Excluded Parties List System at *www.usgovxml.com/dataservice.aspx?ds=EPLS* are not eligible for award of any contracts funded by the Massachusetts State Revolving Fund."** ***https://www.mass.gov/debarred-suspended-or-decertified-contractors*** **Add the following statement or a statement accomplishing the same purpose in the contract:** **The Contractor agrees that it will fully comply with Subpart C of 2 CFR Part 180 and 2 CFR Part1532, entitled Responsibilities of Participants Regarding Transactions (Doing Business with Other Persons). The Contractor shall not award any subcontracts or purchase any materials from suppliers that appear on the Excluded Parties List System.** **The Contractor shall include this requirement in each subcontract and require it to be included in all subcontracts regardless of tier. The Contractor shall maintain reasonable records to demonstrate compliance with these requirements.**	**62**
9) The following Diesel Retrofit Program form is included as part of the Bid Proposal: **Department of Environmental Protection's Diesel Retrofit Program Statement of Intent to Comply.** **In the <u>BID PROPOSAL</u> at** See (Appendix B for Diesel Retrofit Program.)	**77**

CONTRACT	Indicate Location/Page # or Not Applicable (NA)
10) The following paragraphs must be included in their entirety in the Contract. **A. "The fair share goals for disadvantaged business enterprise (DBE) participation for this contract are a minimum of 4.2 percent Disadvantaged Minority Business Enterprise (D/MBE) participation and 4.5 percent Disadvantaged Women Business Enterprise (D/WBE) participation, applicable to the total dollar amount paid for the construction contract. The Contractor shall take all affirmative steps necessary to achieve this goal, and shall provide reports documenting the portion of contract and subcontract dollars paid to DBEs, and its efforts to achieve the goals, with each invoice submitted or at such greater intervals as specified by the (municipality). The contractor shall require similar reports from its subcontractors."**	**7**
B. Equal Employment Opportunity/Affirmative Action (EEO/AA) Requirements **"During the performance of this contract, the contractor agrees as follows:** **1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.**	**39** **40**
2. The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.	**40**
3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.	**41**
4. The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.	**41**
5. The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders. Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230	**41**

CONTRACT - CONTINUED	Indicate Location/Page # or Not Applicable (NA)
6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.	42
7. The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970"	42
C. "The contractor shall not participate in or cooperate with an international boycott, as defined in Section 999 (b)(3) and (4) of the Internal Revenue code 1986, as amended, or engage in conduct declared to be unlawful by Section 2 of Chapter 151E of the Massachusetts General Laws."	24
11) The provisions of the following paragraphs must be included in the Contract. Other language may be substituted provided the language changes do not substantively alter the meaning of these provisions. A. "The time for completion of this contract is _____ calendar days"	15
B. "Liquidated damages specified in this contract are $_____ per day for each calendar day beyond the contract completion date that work remains uncompleted."	15
C. As per MassDEP's Policy Memorandum #10 – the agreed upon DIRECT LABOR MARKUP (percentage) for Change Orders on this project shall be _____ percent.	00700-48
12) The following LGU auditor/accountants certification must be included in contract "Pursuant to M.G.L. c.44, s31C, I certify that an appropriation has been made in the total amount of the contract."	25

CONTRACT - CONTINUED	Indicate Location/Page # or Not Applicable (NA)
13) All contracts must have a clause requiring compliance with the American Iron and Steel (AIS) requirements. The following is suggested language developed by the EPA for use in SRF construction contracts. Any deviation from this suggested language should be reviewed and approved by local legal counsel. The Contractor acknowledges to and for the benefit of the City/Town of _____ ("Purchaser") and the Commonwealth of Massachusetts (the "State") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a)the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.	01067-1
14) All contracts for clean and drinking water projects awarded as a result of a proposal or invitation for bids under MGL Chapter 30 section 39M shall include a price adjustment clause for fuel, both diesel and gasoline; liquid asphalt; and portland cement contained in cast-in-place concrete. A base price for each material shall be set by the awarding authority or agency and shall be included in the bid documents at the time the project is advertised. The awarding authority or agency shall also identify in the bid documents the price index to be used for each material. The price adjustment clause shall provide for a contract adjustment to be made on a monthly basis when the monthly cost change exceeds plus or minus 5 per cent.	8
15) All construction contracts are subject to the Davis Bacon wage rate requirements and must include the provisions found in Appendix G in the contract. The Davis Bacon Act Requirements are included	01067 Attachment B
16) The following suspension and debarment statement must be included in the contract: "The Contractor agrees that it will fully comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532, entitled Responsibilities of Participants Regarding Transactions (Doing Business with Other Persons). The Contractor shall not award any subcontracts or purchase any materials from suppliers that appear on the Excluded Parties List System. The Contractor shall include this requirement in each subcontract and require it to be included in all subcontracts regardless of tier. The Contractor shall maintain reasonable records to demonstrate compliance with these requirements."	01067-2

GENERAL/SUPPLEMENTARY CONDITIONS	Indicate Location/Page # or Not Applicable (NA)
17) Provisions for the following types of Contractor's Commercial General Liability insurance coverage must be included in the Specifications in no less than the limits required by law or the following limits whichever are greater: **A. Workman's Compensation and Employer's Liability Insurance in** **Worker's Compensation $100,000.** **Employer's Liability 500,000. Each accident** **500,000. Disease per employee** **B. Commercial General Liability Insurance with the following limits:** **Bodily Injury & $1,000,000. Each occurrence** **Property Damage 1,000,000. General aggregate** **C. Vehicle Liability Insurance** **Bodily Injury & $1,000,000. Each person** **Property Damage 1,000,000. Each accident** **D. Owner's Protective Liability equal to Contractor's required coverage stated in B if the project involves blasting.** **E. Builder's Risk (Fire Insurance) in an amount equal to the insurable value of the Contract.** **These coverages are stated in the SPECIFICATIONS at**	**20**
18) The EPA requires SRF loan recipients to create and maintain a list of all D/MBE & D/WBE and non-D/MBE & nonD/WBE subcontractors on the project. Within 90 days of the contract award, the LGU must submit an initial subcontractor list to MassDEP. A final updated subcontractor list will be submitted with the final payment request to MassDEP. **This form is incorporated in the SPECIFICATIONS at** See (Appendix E for Schedule of Subcontractor Participation Form)	**57**
19) "The Construction Bid Specifications SPECIAL PROVISIONS FOR DISADVANTAGED BUSINESS ENTERPRISES The Department of Environmental Protection Division of Municipal Services" Package shall be included in the Commonwealth of Massachusetts Requirement Section of the Contract Documents with the attached EEO-DEP forms: **Schedule of Participation (EEO-DEP-190C)** **Letter of Intent (EEO-DEP-191C)** **DBE Certification of United States Citizenship** **DBE Subcontractor Participation Form (EPA Form 6100-2)** **Request for Waiver (2 pages) (EEO-DEP-490C)** **This package is incorporated in the SPECIFICATIONS at** (See Appendix E for Forms)	**52-56**

GENERAL/SUPPLEMENTARY CONDITIONS - CONTINUED	Indicate Location/Page # or Not Applicable (NA)
20) The following permits, if applicable to this project, are the owner's responsibility and must appear in the Permits Section of the specifications.	N/A
A. U.S. Corps of Engineers Section 404 Permit	
B. MassDEP Air Quality	N/A
Sewer Extension/Connection Permit (314 CMR's 7.00 & 12.00)	N/A
Sludge Disposal	N/A
Water Quality Certification	N/A
Waterway Licenses	N/A
C. Local Conservation Commission Order of Conditions (Ch. 131, Sec. 40)	Appendix C
D. MassDOT	Appendix H
E. MBTA/Railroad	N/A
F. State/Federal (Crosscutters)	N/A
G. MassDCR	N/A
H. Specify other Permits and/or Licenses below: **1.** **2.** **3.** **4.** **5.**	N/A
This package is incorporated in the SPECIFICATIONS at	N/A

GENERAL/SUPPLEMENTARY CONDITIONS - CONTINUED	Indicate Location/Page # or Not Applicable (NA)
21) The following statutes regulating construction contracts for public buildings and public works projects are to be incorporated into <u>All Specifications</u> in the Commonwealth of Massachusetts Requirement Section. Those statutory references noted with (REQUIRED) type must be included (in their entirety) in the Contract Documents. The other statutes do not have to be printed but should be referenced. Copies of all the referenced statutes can be obtained from the following indicated internet links: **A. All BID LAW Contracts:** **M.G.L c.30 s 39F Payment to Subcontractor (REQUIRED)**	
c.30 s 39I Deviation from Plans and Specifications	
c.30 s 39J No Arbitrary Decisions are Final	
c.30 s 39L Construction Work by Foreign Corporations	
c.30 s 39M(b) Substitution of Equal Products	
c.30 s 39N Differing Site Conditions (REQUIRED)	
c.30 s 39O Equitable Adjustments for Delays (REQUIRED)	
c.30 s 39P Decision on Interpretation of Specifications	
c.30 s 39R Contractor's Records	
c.149 s 34 Limitations on Hours of Work	
c.149 s 44J Advertising Invitations to Bid	
c.82 s 40 Excavations; Notice; Penalties	
These statutes are included in the <u>SPECIFICATIONS</u> at	**01067 Attachment A**
B. Contracts bid under c.149, ss44A – 44J shall include: **M.G.L. c.30 s 39K Prompt Payment**	
c.149 ss44F and ss44G	
These provisions are included in the <u>SPECIFICATIONS</u> at	**N/A**
C. Contracts bid under c.30 s 39M shall include: **M.G.L. c.30 s 38A Price Adjustments for Certain Materials in Construction Projects**	
These provisions are included in the SPECIFICATIONS at See Appendix H for additional information regarding price adjustment legislation and required clauses.	**8, 1067-1**

GENERAL/SUPPLEMENTARY CONDITIONS - CONTINUED	Indicate Location/Page # or Not Applicable (NA)
22) American Iron and Steel Requirements **This project is subject to the American Iron and Steel requirements of P.L. 113-76, the Consolidated Appropriations Act of 2014. These provision (See Appendix I) are included in the SPECIFICATIONS at:**	**8, 1067-1**

CONSULTING ENGINEER'S CERTIFICATION SECTION PLAN AND SPECIFICATION CHECKLIST	Completed
23) Wage Rates **Massachusetts Wage Rates Request from Executive Office of Labor and Workforce Development** **Federal Davis Bacon Wage Rates Request from U.S. Department of Labor at www.beta.sam.gov** Due to time constraints it is recommended that Wage Rates be inserted in the Contract Specifications by revised pages prior to Contract advertising or by Addenda prior to bid opening.	☐ ☐
24) Project Identification **The cover sheet of the contract drawings and specifications must provide the following identification:** **Owner's Name** **Suitable Title** **Project No. (i.e. CWSRF-#### or DWSRF-####)** **Contract No.**	 ☑ ☑ ☑ ☑
25) P.E. Stamp and Signature **Each page of the contract drawings and the Title page of the specifications has been stamped and signed by a Massachusetts Professional Engineer.**	☑
26) Index - Note - Legend Sheet(s) (Plans) **The Index - Note – Legend Sheet(s) of the plans must provide the following minimum information:** **Locus Map** **North Arrow** **Index** **Symbols/Abbreviations Reference** **Vertical Datum Plans used for Design and Layout** **Municipal Wells/Reservoirs located within 1/2 mile of project site**	 ☑ ☑ ☑ ☑ ☑ ☑

To be provided at time of bid.

CONSULTING ENGINEER'S CERTIFICATION SECTION PLAN AND SPECIFICATION CHECKLIST – CONTINUED	Completed	Not Applicable
27) Policy memoranda are Implemented in Contract (Plans/Specifications)		
PM-1 **Easements and Rights of Way are shown on the contract drawings and have been obtained or will be in place prior to the contract advertising.**	☑	☐
PM-2 **Permits have been obtained by the LGU for the construction project except those which are the contractor's responsibility required for his equipment, work force or particular operations (such as blasting) in the performance of the contract.**	☑	☐
PM-3 **Field Controls will be furnished by the LGU with the necessary benchmarks and base lines for the contractor to lay out the work.**	☑	☐
PM-4 **Record Drawings will be prepared by the LGU or his representative. They may use the contractors and sub-contractor's certified As Built drawings along with their own marked up set in the preparation of the Record Drawings.**	☑	☐
PM-5 **Plan Scale used in the preparation of the plans is 1"= 40' horizontal and 1"= 4' vertical for all non-structural drawings.**	☑	☐
PM-6 **Boring Logs are numbered and shown on both the plan and corresponding profile of each layout sheet giving depth, or refusal, water and unsuitable material level of the boring. The full boring logs can be found in the specification.**	☑	☐
PM-7 **Breakdown of Bid Items for Sewer Pipe Installation where applicable have been incorporated in the bid documents.**	☐	☑
PM-8 **Pavement over new sewer trenches in existing paved roads will be done in accordance with the CG's width limits and thickness.**	☐	☑
PM-9 **Pipe testing requirements for the infiltration/exfiltration or low-pressure air test will be met prior to the release of pipe retainage monies.**	☑	☐
PM-10 **Change Orders will be submitted on the Department's forms with appropriate documentation listed in the PM.**	☑	☐
PM-11 **Utility Relocation has been minimized through communication with existing utilities prior to final design layout of the project.**	☑	☐
PM-12 **Refundable Deposits for Plans and Specifications are in place for the timely returns of plans and specifications received in good condition.**	☐	☑
PM-13 **Bid Opening Procedures of the Department are in place and will be followed for the contractor selection.**	☑	☐
PM-14 **Payment for Rock Excavation is consistent with the pay limits and definitions of the PM.**	☑	☐
PM-15 **Traffic Police are eligible as part of the administrative cost of the project.**	☑	☐

CONSULTING ENGINEER'S CERTIFICATION SECTION PLAN AND SPECIFICATION CHECKLIST – CONTINUED	Completed	Not Applicable
PM-16 **Documentation Required to Substantiate Contract Quantities** for Change Orders and Close Out have been incorporated in the Measure and Payment section of the specifications.	☑	☐
DWS Policy 88 – 02 **Review of Sewer Line/Water Supply Protection**. Public water supplies within the influence of construction have been delineated on the plans. Any special construction methods should be shown on the plans and incorporated in the specifications. See **Appendix F**	☑	☐
28) Design Criteria The contract drawings and specifications comply with the current edition of "Guides for the Design of Wastewater Treatment Works" (TR-16) prepared by the New England Interstate Water Pollution Control Commission and good Environmental Engineering practice.	☑	☐
29) M.G.L. Chapter 30, Section 39M(b) The contract drawings and specifications must either describe (spec) an item of Material which can be met by at least three (3) manufacturers or producers or NAME a MINIMUM of three (3) BRANDS of MATERIAL and in either case Provision for "or equal" has been provided.	☑	☐
30) Flood Insurance/Protection The plans and specifications are compatible with the Federal Emergency Management Agency Flood Insurance Program and designate the elements insurable by the Program (Wastewater Treatment Projects).	☑	☐
31) Building and Lot Identification The plans must provide the location of the dwelling/building, street number and sill elevation. Vacant or unbuildable lots must be identified.	☑	☐
The plans as submitted comply with the above.	☑	☐

Enter any comments and/or additional justifications for Not Applicable(s) (NA).		

III-1. Certificate As To Title To Project Site

CERTIFICATE AS TO TITLE TO PROJECT SITE

I, **Kathryn M. Fallon**, Attorney At Law, representing the City

of **Framingham**, Massachusetts, herein called the Applicant, as title counsel,

do hereby certify:

1. That I have investigated and ascertained the location of, and am familiar with the legal description of the site or sites being provided by the Applicant for all elements (treatment plant, interceptors, outfalls, pumping stations, force mains, and appurtenances) of the water pollution abatement project for which State Financial Assistance has been offered, identified as CWSRF No. **6999**

2. That I have examined the deed records of the county or counties in which this project is to be located and, in my opinion, the Applicant has a legal and valid fee simple title or other estate or interest in the site of the project, including the necessary easements and rights-of-way as are necessary to undisturbed use and possession for the purposes of construction and operation for the estimated life of the project.

3. That any deeds or documents required to be recorded, in order to protect the title of the owner and the interest of the Applicant, have been duly recorded or filed for record wherever necessary with reference to Contracts _____ through _____, inclusive.

Owner Deed Book 4633, Page 594 Middlesex South District Registry of Deeds
Order of Conditions Book 74979 Page 524 Middlesex South District Registry of Deeds

Dated this 11th day of October, 2022.

City of Framingham
Applicant

Kathryn M Fallon — City Solicitor
Type Name — Title

Kathryn M Fallon
Signature

III-2. CWMP

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
http://www.mass.gov/envir

November 8, 2007

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Framingham Comprehensive Wastewater Management Plan
PROJECT MUNICIPALITY	: Framingham
PROJECT WATERSHED	: SuAsCo
EEA NUMBER	: 14110
PROJECT PROPONENT	: **Town of Fra**mingham Department of Public Works
DATE NOTICED IN MONITOR	: October 9, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

As described in the Environmental Notification Form (ENF), the project consists of the upgrade, repair, or replacement of existing inadequate sewer infrastructure within the Town of Framingham. The project does not include an expansion in service to areas not presently sewered. Wastewater in the Town of Framingham is ultimately discharged into the Massachusetts Water Resources Authority (MWRA) sewer system and treated at the Deer Island wastewater treatment facility in Winthrop. The project consists of the implementation of the recommended Capital Improvement Plan (CIP), developed in accordance with the draft Comprehensive Wastewater Management Plan (CWMP). The CIP includes the elimination of seven (7) existing pump stations and over five miles of existing force main to improve system efficiency and operations and maintenance costs. Furthermore, the project will include the construction of 0.7 miles of new sewer mains and rehabilitation of 7.7 miles of existing sewer

mains. Approximately 0.53 miles of the total 8.4 miles of new/rehabilitated sewer mains are located within cross-country areas. The CIP presented in the ENF is anticipated to take place over the course of eight year at a cost of just over 92 million dollars.

The project is undergoing review pursuant to Section 11.03(5)(b)(3)(c) because the project requires a State Agency action and will result in the construction of new sewer mains ½ or more miles in length not located in the right of way of existing roadways. The project will require a Sewer Extension Permit from the Massachusetts Department of Environmental Protection (MassDEP). The project will also require several Orders of Conditions from the Framingham Conservation Commission, or in the case of an appeal, a Superseding Order of Conditions from MassDEP.

The project will be financed in full or in part by State Revolving Funds issued by the Commonwealth. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment.

Future Projects

The CWMP outlined a CIP that consists of a series of critical improvement projects planned for the next eight years. The majority of these projects are repair or replacement projects within existing roadways and will not require new cross county sewer components. It is possible that during the implementation of the CIP that non-critical projects recommended for the years 2014-2023 in the CWMP may need to be expedited. The proponent should review the MEPA Regulations at 301 CMR 11.00 prior to commencement of any project not explicitly outlined in the ENF to determine if a Notice of Project Change will be required. Additionally, a similar review of the regulations should be conducted at the conclusion of the initial eight year improvement plan if funds are allocated to pursue the subsequent phase of the CWMP in the years 2014 and beyond.

Wastewater

The project includes the upgrade, repair, or replacement of existing inadequate sewer infrastructure within the Town of Framingham. As noted in the MassDEP comment letter, since 2004, the Town of Framingham has reported more than 67 sanitary sewer overflow (SSO) events. Each of the SSO events violates M.G.L. c. 21 §§ 26-53, 314 CMR 12.03(8), and 314 CMR 7.06(1). MassDEP indicated that SSOs are generally attributed to inadequate capacity of the sewer system, sewer system structural failure, excessive infiltration and inflow into the sewer system, and decreased reliability due to exceedance of design life of pump stations.

The Town of Framingham entered into an Administrative Consent Order (ACO) with MassDEP on March 8, 2007, to explore how to reduce SSOs, address street flooding, and reduce corrosion of the sewer pipes due to high hydraulic residence time in some pipes. The CWMP has been developed in response to this ACO and made numerous recommended improvements as outlined in the CIP. The recommended improvements include: eliminating long reaches of force

mains to address chronic sewer system collapses and breaks by reducing hydraulic residence time and the formation and buildup of hydrogen sulfide; SSO mitigation; elimination of identified hydraulic restriction points through the rehabilitation or replacement of existing infrastructure; and the elimination or consolidation of sewage pump stations to reduce energy and operations and maintenance costs.

Information presented in the CWMP has considered the existing capacity and flows generated by adjacent communities that currently have Intermunicipal Agreement (IMAs) with the Town of Framingham (most notably Ashland). The CWMP is primarily directed towards repairing and replacing existing infrastructure, not expanding service capacity. However, the CWMP does note that the hydraulic analysis of the sewer collection system assumed that there would be a modest increase in sewer flows from the Town of Ashland. Under current conditions, Ashland has not reached its full allocation under the existing IMA with Framingham. The proponent should work with the Town of Ashland to determine estimated future flows into the system (based on Ashland's draft CWMP which is being prepared at this time) to confirm that sufficient hydraulic capacity will be available to effectively convey flows and not result in SSOs or surcharging. Should the result of these studies indicate that an increase in capacity is necessary, the proponent is reminded to review the MEPA regulations at 301 CMR 11.00 to confirm whether or not a Notice of Project Change (NPC) would need to be filed prior to project commencement.

MassDEP's comment letter noted that given the importance of the proposed project to the protection of the environment, it is supportive of the scope, analysis, and recommendations that were presented in the CWMP. As the design of infrastructure improvements and system modifications are finalized, the proponent should investigate ways to limit environmental impacts to the extent practicable, balanced with improving system efficiencies and complying with the ACO issued to the Town. Furthermore, the MWRA comment letter is supportive of the CIP, as it will assist the community in complying with MWRA sulfide limits and improve the hydraulic performance of the collection system. The proponent should work with MWRA's Toxic Reduction and Control (TRAC) Department to ensure that requirements and goals are met during the implementation of the project.

Wetlands

It is anticipated that the majority of work associated with the replacement or construction of sewer mains will be located outside of wetland resource areas, thereby limiting permanent impact to the 100-foot buffer zone to wetlands. The proponent has indicated that trenchless technologies will be investigated to reduce the likelihood of wetland alteration. The majority of work areas will be located within the existing paved street rights of way, further reducing potential impact to wetland resource areas. Likely wetland resource area impacts will be temporary in nature. A primary goal of final infrastructure location criteria should be to avoid direct wetland resource area impact to the maximum extent practicable. Consideration should be given to maintaining existing flood storage capacities within areas classified as Bordering Land Subject to Flooding (BLSF) during the finalization of infrastructure design and elevations. The proponent should prepare an erosion and sedimentation control plan during each Notice of Intent

filing outlining mitigation measures to be implemented on-site during the construction period to reduce runoff into sensitive resource areas.

Historic Resources

Various individual projects within the CWMP will be located within designated State Historic Districts. The Massachusetts Historical Commission (MHC) has indicated in its comment letter that the following activities may have historical or archaeological impacts: the replacement of the existing Michaud Drive pump station; the replacement of the existing Cypress Drive pump station pump; the installation of 4,500 feet of new sewer line in Ransom Road, Winter Street, and Fountain Street, including the abandonment of the existing Ransom Road pump station and sewer line; the replacement of existing sewer lines and siphons in Concord and School Streets; and the replacement of 90 feet of sewer and culvert at Herbert Street.

The proponent should work with MHC during the final design stages, and in accordance with the MHC request, provide additional information, including a USGS topographic map clearly locating the project area and scaled project plans showing existing and proposed conditions prior to project commencement in designated Historic Districts. The proponent should continue to consider feasible design and locational alternatives that meet the engineering requirements, while also seeking to avoid or minimize impacts to historic and archaeological properties and areas.

Rare Species

A portion of the Eaton/Chalis Pump Station component of the CWMP/CIP falls within *Priority* and *Estimated Habitat* according to the most recent Natural Heritage and Endangered Species Program (NHESP) Atlas. According to information shared at the MEPA Consultation Session by the Framingham Conservation Agent, it appears that this area contains Blue Spotted Salamander (*Ambystoma laterale*) habitat. The Eaton/Chalis Pump Station project includes the abandonment of the existing Eaton Pump Station and force main and the construction of a new gravity sewer connection to the Chalis Pump Station. Approximately 400 linear feet of new sewer is proposed within the roadway within the priority and estimated habitat area. The proponent should investigate the possibility of abandoning existing cross country force mains located within designated habitat areas to reduce the likelihood of future impacts due to maintenance requirements.

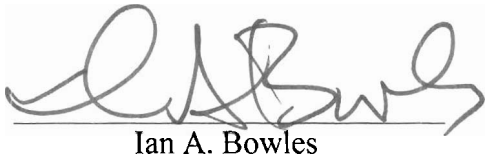
The proponent is reminded that additional review by NHESP may be necessary pursuant to the Massachusetts Endangered Species Act (MESA, MGL c131A) and its implementing regulations (321 CMR 10.00). Additional studies or investigation may be required as part of the Wetlands Protection Act Notice of Intent process or in accordance with the MESA regulations.

Stormwater

The project is not anticipated to result in the creation of new impervious areas. In fact, the project may result in a minor reduction in overall impervious areas through the demolition of several pump station buildings. The proponent should minimize potential stormwater impacts during the construction period by implementing Best Management Practices (BMPs) as described in the Town of Framingham's NPDES Phase II Stormwater Management Plan.

Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required at this time. The project may proceed with obtaining required State permits.

November 8, 2007
Date



Ian A. Bowles

Comments received:

10/22/2007	Massachusetts Historical Commission
10/29/2007	Massachusetts Department of Environmental Protection – NERO
10/29/2007	Water Supply Citizens Advisory Committee
11/05/2007	Massachusetts Water Resources Authority

IAB/HSJ/hsj

III-3. Water Resources Certification

WATER RESOURCES AND WASTEWATER PLANNING CERTIFICATION

I, the undersigned, being duly authorized to act on behalf of the Applicant, certify that to the best of my knowledge this project is consistent with current existing state, regional, and local water resource and wastewater planning requirements including but not limited to:

1. River basin water quality management plans pursuant to section 303(e) of the Federal Clean Water Act;
2. nonpoint source management plans pursuant to section 319 of the Federal Clean Water Act;
3. estuaries management plans pursuant to section 320 of the Federal Clean Water Act;
4. Area-Wide Water Quality Management Plans pursuant to section 208 of the federal Clean Water Act;
5. local water resource management plans pursuant to regulations of the Water Resources Commission;
6. water emergency planning pursuant to c.21G of the Massachusetts General Laws;
7. Phase II Storm Water General Permit.

City of Framingham	
Applicant	
William Sedewitz	Chief Engineer
Type Name	Title
William R. Sedewitz	10/31/2022
Signature	Date

III-4. Land Use Certification

LAND USE CERTIFICATION

I, the undersigned, being duly authorized to act on behalf of the Applicant, certify that the land use regulations, zoning and other controls identified below are consistent with the wastewater system service populations as projected in the Applicant's wastewater management plan:

as per 5/22 Memo of Beta, Consultant,
Worcester Road Pump Station Replacement 100% Design
and
City of Framingham Wastewater Management Plan
as implemented and updated per
Stantec, Consultant 3/31/2017

City of Framingham

Applicant	
Kathryn M. Fallon	City Solicitor Attorney representing City
Type Name	Title
Kathryn M Fallon	10/11/22
Signature	Date

III-5. Inter-municipal Agreement

TOWN OF FRAMINGHAM

MASSACHUSETTS

Office of the
TOWN COUNSEL

Christopher J. Petrini

Town Office
Office of the Town Counsel
Memorial Building
150 Concord Street, Room 129
Framingham, MA 01702
(508) 532-5406
Facsimile (508) 620-5910
cpetrini@framinghamma.gov

Framingham Office
Petrini & Associates, P.C.
The Meadows
161 Worcester Road, Suite 304
Framingham, MA 01701
(508) 665-4310
Facsimile (508) 665-4313
cpetrini@petrinilaw.com

January 31, 2007

John Petrin
Town Manager
Town of Ashland
Ashland Town Hall
101 Main Street
Ashland, MA 01721

Re: Intermunicipal Agreement and Side Letter

Dear John:

Enclosed herewith please find an original Intermunicipal Agreement executed by the Boards of Selectmen of Framingham and Ashland, as well as an original executed Side Letter relative to the 90' pipe replacement project at Herbert Street/Eames Street. Please note that you should add Exhibits A and B to the IMA that I previously provided to you electronically.

Please further note that the first of the five $200,000 settlement payments is due February 28, 2007, in accordance with Section 3.1 of the IMA. After the settlement payment is received, I will file a Stipulation of Dismissal of the lawsuit pending in Middlesex Superior Court. Ashland will need to decide who will sign this stipulation on behalf of Ashland.

I am copying Steve Madaus on this letter so that he has copies of the executed IMA and Side Letter.

I believe congratulations are in order to both communities for bringing this long-standing dispute and uncertainty to a successful resolution. Thank you.

Very truly yours,

Christopher J. Petrini

Enclosure

cc: Board of Selectmen (w/o enclosures)
Julian M. Suso, Town Manager (w/o enclosures)
Peter A. Sellers, Director of Public Works (w/enclosures)
Steven Madaus, Esq., Special Counsel (w/enclosures)

2007.01.31 Let to Petrin With Original IMA (600-12)

INTERMUNICIPAL AGREEMENT BETWEEN THE TOWN OF FRAMINGHAM AND THE TOWN OF ASHLAND FOR WASTEWATER RECEPTION FROM ASHLAND'S SEWERAGE SYSTEM

This intermunicipal agreement ("IMA" or "agreement") is entered into this 1st day of January 2007, by and between the Town of Framingham, a Massachusetts Municipal Corporation with its principal place of business at 150 Concord Street, Framingham, MA 01702 ("Framingham"), and the Town of Ashland, also a Massachusetts Municipal Corporation with its principal place of business at 101 Main Street, Ashland, MA 01721 ("Ashland"), both acting by and through their respective, duly authorized Boards of Selectmen.

WITNESSETH:

WHEREAS, Framingham has constructed and owns the Framingham Sewerage System ("Framingham System"), which connects directly into the Massachusetts Water Resources Authority's ("MWRA") System at the Arthur Street Pump Station;

WHEREAS, Ashland desires to transport wastewater from Ashland through the Framingham System into the MWRA System;

WHEREAS, pursuant to the provisions of Chapter 86 and Chapter 546 of the Acts of 1946 and of Chapter 406 of the Acts of 1960, Ashland may make an agreement for such wastewater transport; and

WHEREAS, G.L. c. 40, §4A authorizes communities to enter into intermunicipal agreements for the purposes set forth in that statute for up to twenty-five (25) years, upon approval of the respective Boards of Selectmen and the Town Meetings of each Town;

NOW THEREFORE, Framingham and Ashland, as parties to this IMA, hereby agree as follows:

SECTION 1. DEFINITIONS

For the purposes of this Agreement, the following terms are defined:

1.1 "Average Daily Flow" ("ADF") shall mean the total annual flow divided by the number of days in the year, expressed as million gallons per day. The calendar year shall define the calculation period for the ADF.

1.2 "Capital Cost" shall mean building modifications or additions, fixtures, machinery, equipment, accessories, appurtenances, or other changes to the existing the Framingham System which are intended to substantially replace or expand the capacity of the existing facilities in an amount costing $50,000.00 or more. Capital Costs do not include routine equipment replacement or maintenance.

1.3 "Current Facility Value" shall mean the monetary value of the asset at the time of replacement, improvement, or modification. The value will be based upon the purchase cost of the asset less depreciation that has occurred over the use of the asset. The depreciation rate shall be established upon construction of the asset.

1.4 "Direct Connections" shall mean any pipe or other conveyance device, which allows wastewater flow from locations in Ashland, which are not metered through the two existing metered connections.

1.5 "Maximum Daily Flow" ("MDF") shall mean the highest volume recorded during a 24- hour period during the term of this agreement. For the purposes of this agreement, a new 24-hour period will begin each day at 12:00 a.m. midnight.

1.6 "The MWRA System" shall include all pipes, pumping stations, treatment works, and other necessary appurtenances, which are under the control of the Massachusetts Water Resources Authority. They include the Arthur Street Pumping Station, the Framingham Extension Sewer ("FES") and the Framingham Extension Relief Sewer ("FERS").

1.7 "Peak Flow" ("PF") shall mean the peak hourly rate of flow as defined by *Guides for the Design of Wastewater Treatment Works,* New England Interstate Water Pollution Control Commission, recorded during the term of this agreement measured in million gallons per day. Peak Flow will be used for purposes of Capital Cost Allocation.

1.8 "Sulfates" shall mean the total amount of sulfate as determined by approved laboratory methods in milligrams per liter (mg/l). The maximum discharge concentration limitation will be those set by the MWRA from time to time or those in Framingham's Sewer Rules and Regulations, whichever is more stringent.

1.9 "Sulfides" shall mean the total amount of dissolved and undissolved sulfide compounds as determined by approved laboratory methods in milligrams per liter (mg/l). The maximum discharge concentration limitation will be those set by the MWRA from time to time or those in Framingham's Sewer Rules and Regulations, whichever is more stringent.

SECTION 2. COMMENCEMENT AND TERM OF THIS IMA

2.1 This IMA shall commence on **January 1, 2007**, in view of the respective approvals of this IMA by the Town Meetings of Ashland and Framingham in the spring of 2006, provided that the Boards of Selectmen of Ashland and Framingham have executed this IMA on behalf of each Town by said date. This IMA shall extend for a term of twenty (20) years, up to and including **December 31, 2026.** The parties intend that the municipal corporations entering into this Agreement to be the sole and exclusive beneficiaries of this IMA.

2.2 In addition to the 20-year term, referenced above, Framingham and Ashland shall have the right to extend this agreement for an additional five (5) year period, provided that both Boards of Selectmen agree to such renewal period. The Towns agree to decide whether or not to extend this IMA within one (1) year of the expiration of the initial 20-year term described herein, or on or before January 1, 2026, assuming that the commencement date of the IMA is January 1, 2007. If one party does not provide written notice of its intention not to continue the IMA within one (1) year of the expiration of the initial 20-year term, then this IMA will be deemed automatically extended for an additional five years beyond the termination date of the initial 20-year term.

2.3 The parties further agree and understand that unless the Town Meetings for both Framingham and Ashland approve this IMA, and unless the Boards of Selectmen of Framingham and Ashland both vote to approve this IMA and execute the same, then this IMA shall be null, void and of no legal effect.

2.4 This IMA may be terminated by either party upon provision of one (1) year advance written notice for the reason that Ashland and/or the MWRA develop Ashland's own direct connection to the MWRA System, and said direct connection is designed, constructed, completed and opened for beneficial use by Ashland. Ashland shall be responsible for all disconnection, termination, and transition costs incurred in disconnecting from the Framingham system and connecting to its own connection to the MWRA system, and agrees to pay said costs within thirty (30) days of receipt of an invoice or demand of payment from Framingham. All disputes relating to an invoice issued or demand for payment made under this section will be subject to and governed by Section 16.2 of this IMA.

SECTION 3. OBLIGATIONS AND RESPONSIBILITIES

3.1 Separate and apart from its other obligations as set forth in this IMA, and specifically separate and distinct from Ashland's obligation to pay Framingham based on the ratio of flows of wastewater that Ashland transports through the Framingham system as set forth in Section 5 below, Ashland agrees to pay Framingham a total of One Million Dollars ($1,000,000.00), paid in five equal annual installments of Two Hundred Thousand Dollars ($200,000.00) per year for purposes of settling the litigation pending in Middlesex Superior Court and entitled Town of Framingham v. Town of Ashland, Middlesex Superior Court Civil Action No. 2004-2030 ("the litigation"), and all claims raised therein, including claims for reimbursement of capital expenses incurred by Framingham. The first $200,000 payment under this paragraph shall be due on or before February 28, 2007, with subsequent $200,000 payments due on the thirty-first day of January of 2008, 2009, 2010 and 2011 respectively, until such time as One Million Dollars ($1,000,000.00) plus applicable interest (if any) has been paid. The parties agree herein that if Ashland fails to make any payment due under this paragraph by February 15th of each year that said payments are due, then Framingham will be entitled to an additional payment of $2000 on the amount due, with an additional $2000 due on the last day of each successive month beginning on February 28th if the required payment still has not been received. Upon receipt of the first payment of $200,000.00 on or about

February 28, 2007 as required by this paragraph, Framingham agrees to dismiss the litigation, with the express understanding that either party shall have the right to commence a legal action to enforce any provision of this IMA, including the receipt of payments required by this paragraph. Any disputes arising from this section shall be subject to and governed by Section 16.1 of this IMA.

3.2 Characteristics of waste transported from Ashland through the Framingham System into the MWRA System shall at all times conform to standards set by the MWRA, the Rules and Regulations of the U.S. Environmental Protection Agency, the Massachusetts Department of Environmental Protection and Framingham's wastewater regulations, and other permit provisions.

3.3 Ashland agrees to comply with Framingham's wastewater regulations and to require its users to comply with said regulations. Within six months of the effective date of this IMA, Ashland shall adopt sewer use regulations at least as stringent as Framingham's sewer use rules and regulations, if such by-law or regulations are not currently in effect. Ashland agrees to add a provision to its sewer use rules and regulations requiring Ashland sewer users to comply with the latest Framingham sewer rules and regulations. If Framingham amends its sewer use rules and regulations, Framingham shall notify Ashland of such amendments within sixty (60) days of the amendment date of Framingham's sewer use rules and regulations, and Ashland agrees to amend its sewer use by-laws or regulations as soon as practicable, but in no case more than six (6) months after receipt of notice of changes of Framingham's sewer use rules and regulations to ensure that Ashland's by-laws or regulations are at least as stringent as Framingham's sewer use rules and regulations, as amended. Failure of Ashland to comply with Framingham's wastewater regulations or the repeated failure of Ashland to enforce these regulations and the terms of this Agreement shall constitute grounds for default and termination of this IMA.

3.4 Ashland agrees to abide by MWRA sulfide/sulfate limits. Ashland further agrees to conduct periodic monitoring of sulfides/sulfates following industry-accepted protocols and promptly remedy any violation of such limits. Ashland agrees to reimburse Framingham within forty-five (45) days of receipt of a request from Framingham for any penalties issued on or subsequent to January 1, 2007 resulting from violations of said limits which result from actions by Ashland, and to compensate Framingham within thirty (30) days of receipt of a request from Framingham for any and all damage caused to the Framingham System from the emission of sulfides/sulfates or other non-compliance with this IMA. All disputes relating to penalties ordered or invoices issued will be subject to and governed by Section 16.2 of this IMA.

3.5 Ashland agrees to provide to Framingham, all access, cooperation and assistance necessary and relevant to Ashland's System, including access to or provision of Ashland Town records pertinent to the continuation and administration of this IMA, including flow data and records that will allow identification of all users in Ashland for which wastewater is transported through the Framingham System through Direct Connections. Ashland, within six (6) months of the commencement date of this IMA,

will provide Framingham with a list of all properties and connections points from Direct Connections to the Framingham system of the Ashland System. Ashland agrees that any future Direct Connections to the Framingham system beyond those in existence as of the effective date of this IMA shall be subject to approval by Framingham. Ashland further agrees to cooperate and provide Framingham with reasonable assistance in its efforts to collect overdue sewer bills from the owners or beneficiaries of Direct Connections, including but not limited to placing liens on the real estate of the owner(s) of the Direct Connections, commencing shut-off procedures against owners or beneficiaries of the Direct Connections where applicable and permissible, and forwarding payment(s) received by Ashland from the owners of the Direct Connections to the Framingham Public Works Department within ten (10) days of receipt of the same.

3.6 Framingham shall require its employees, staff, consultants, contractors and engineers to keep and maintain accurate records of time spent and costs incurred for all Capital Projects, as defined herein, pursued or completed pursuant to this Agreement. Framingham shall provide Ashland, upon request, with Framingham Town records reasonably necessary to verify the invoices or billing communications or memoranda that Framingham sends to Ashland pursuant to this IMA.

3.7 Wastewater facilities owned and operated by Ashland, including the pipelines (force mains, gravity sewers, and ancillary structures) for the Brackett Road and Chestnut Street pumping stations located in Framingham and discharging to the Bates Road connection and the Farm Pond Interceptor connection, are the responsibility of Ashland. Wastewater facilities owned by Framingham are the responsibility of Framingham.

SECTION 4. TRANSPORTATION OF WASTEWATER

4.1 Framingham agrees to receive and transport from Ashland up to 3.2 million gallons per day ("mgd") ADF of wastewater through the Framingham System to the MWRA System, subject to the terms and conditions set forth in this IMA; and for the purpose of allowing Ashland to continue to transport its wastewater through a connection with the Framingham System at the Farm Pond Interceptor, situated approximately 300 feet west of the intersection of Pearl and Park Streets and through the connection at the Beaver Dam Brook Interceptor, situated approximately 200 feet east of the intersection of Bates Road with Beaver Dam Brook. Framingham and Ashland believe that they have the right and legal authority to execute this Agreement in full. However, Framingham and Ashland agree that to the extent required by law or regulation, the increase of Ashland's total gallonage of wastewater from the 2.288 mgd allowed under the Intermunicipal Agreement dated December 9, 1963 up to the 3.2 mgd permitted by this IMA may be dependent upon approval from the Massachusetts Department of Environmental Protection ("DEP"). Framingham agrees to work in good faith with Ashland to seek approval from the DEP to transport up to 3.2 mgd through the Framingham System, consistent with the ability of Framingham's system to transport such additional flows.

4.2 Framingham agrees to work in good faith with Ashland and the MWRA to determine whether up to three (3) million gallons of additional flow from Framingham's Inter Basin Transfer Allocation ("IBTA") may be transferred to Ashland, subject to approval by regulatory agencies having jurisdiction, consistent with Framingham's present needs and projected and potential future needs, for a compensation to be determined at a later time. The parties expressly acknowledge and agree that nothing in this IMA requires Framingham to transfer additional IBTA gallonage to Ashland, and further that the payments to be made by Ashland pursuant to this IMA (including those set forth in Sections 3.1 and 5 herein), do not include compensation for any future transfer of IBTA gallonage from Framingham and Ashland, to the extent such a transfer is possible and Framingham agrees to such a transfer at a later time.

SECTION 5. GALLONAGE CHARGE BASED ON DTE RATE METHOD

5.1 In exchange for transportation of its wastewater through the Framingham System, Ashland agrees that the fee to be paid by Ashland to Framingham for this service will be paid on a quarterly basis and shall be determined by utilization of the rate method defined by the Division of Telecommunications and Energy ("DTE") in its February 13, 2004 Decision ("DTE Decision"), which is expressly incorporated herein by reference and is attached hereto as **Exhibit A**. Under the DTE O&M Rate Method as set forth in Appendix A to the DTE Decision attached as Exhibit A, Ashland's Cost for the transportation of its wastewater through the Framingham System will equal the total amount of wastewater flowing from the Ashland System into the Framingham System at the Farm Pond Interceptor and the Bates Road Sewer Junction, divided by the total flow amount of wastewater through the Framingham System plus the total flow amount of wastewater coming from the Ashland System into the Framingham System, multiplied by Framingham's Operation and Maintenance ("O&M") Costs; expressed in the DTE Decision as:

$$\text{Ashland's Cost} = \frac{\text{Ashland Flow}}{\text{Ashland Flow} + \text{Framingham Flow}} \times \text{Total Framingham O\&M}$$

Framingham's Total O&M cost will be based on Framingham's total sewer budget less capital expenditures, debt service fees, and MWRA fees, but inclusive of indirect costs, defined in Appendix A to the DTE Decision as:

Framingham O&M Costs = Total Cost – (Capital Expenditures + MWRA Fees)

5.2 Ashland's Cost as defined in Section 5.1 above will be recalculated by the parties annually according to the above rate method by using budget data from the most current year for which Framingham's O&M has been certified by Framingham's auditors and flow data from the corresponding period.

5.3 Ashland shall pay Framingham its proportionate share of O&M costs on a quarterly basis. At least thirty (30) days prior to the commencement of a new fiscal year,

a memorandum, invoice or other communication will be sent by Framingham to Ashland for Ashland's share of O&M costs. This invoice will be based on a yearly estimation of costs and flows, prorated to a quarterly basis. Four quarterly payments shall be due from Ashland in each fiscal year, and such payments shall be due on July 31st for the period of July 1-September 30, October 1 for the period of October 1-December 31, January 1 for the period of January 1-March 31 and April 1 for the period of April 1-June 30 of the fiscal year in question ("quarterly payment due dates"). At the end of each fiscal year the actual cost will be determined and Ashland will be required to pay the difference (or receive a credit) between the estimated cost and the actual cost for that year, if any, by way of issuance of a reconciliation invoice ("reconciliation invoice"). Ashland shall have forty-five (45) days from the quarterly payment due dates and the reconciliation invoice to remit payment. If Ashland fails to pay a quarterly invoice or reconciliation invoice within forty-five (45) days of the date of the same, Framingham shall be entitled to statutory interest of 14% per annum pursuant to the provisions of G.L. c. 59, §57C, and Ashland agrees to pay such charges.

5.4 All disputes relating to quarterly payments, reconciliation invoices, and other invoices issued or payments due under Section 5 shall be subject to and governed by Section 16.2 of this IMA.

SECTION 6. CAPITAL PROJECT COSTS

6.1 Ashland agrees to contribute a share of the capital cost for projects as required by the DTE Decision and Appendix A thereto. Ashland expressly agrees to contribute to Capital Costs related to the subset of pipes and facilities listed on Exhibit B and expressly incorporated herein by reference, as further defined in the DTE Decision and Appendix A thereto. Ashland agrees that these costs shall include the following:

6.1.a. Definition of Capital Projects. "Capital Projects" are defined to include all projects cost that have a Capital Cost in excess of $50,000 (including Additional Included Costs) for facilities with an expected useful life of at least five (5) years, and shall include projects involving the subset of pipes and facilities listed in the DTE decision attached hereto and incorporated by reference as Exhibit A. "Additional Included Costs" shall include all project-related costs, which include, but are not limited to the cost of engineering, design, bidding, construction and resident engineering services, owner's project manager charges, other professional services related to the Capital Project, including legal fees and the cost of recordings, police details, the pro rata cost of Framingham staff management salaries attributable to oversee or coordinate the Capital Project. The cost of debt service shall not be included in "Additional Included Costs." "Facilities" are defined to include all structures that are appurtenant to the eligible pipe segments undergoing repair or replacement, including treating equipment or structures, which shall be included as components of the same overall project as a single unit for cost recovery.

6.1.b. General Formula for determining Ashland's Share of Cost. In calculating Ashland's share of the costs of a capital project will be based on the formula established

in the DTE Decision and expressed as:

$$\text{Ashland Share} = \frac{\text{Ashland's Peak Flow}}{\text{Total Capacity of Pipe}} \times \text{Cost of Project}$$

"Total Capacity of Pipe" is defined as the capacity of the pipe calculated in accordance with Manning's formula for gravity sewers or Hazen-Williams formula for submerged flow pipes, all as further defined in Exhibit B hereto.

6.1.c. Ashland's Share of Cost for Parallel Pipes along Eames and Beaver Street. If Framingham undertakes a capital project in the Eames Street to Beaver Street area, which would involve parallel pipes, the Total Capacity of Pipe will be calculated as the sum of the capacity of the pipe being repaired or replaced plus the capacity of the parallel pipe.

6.1.d Ashland's Share of Cost for Larger Capacity Pipe. For those instances in which a larger-capacity pipe must be installed to accommodate increased flow from only one Town ($Town_R$), the Town not requesting ($Town_{NR}$) the increased capacity will be credited a share of the remaining value of the existing Facility. The credit will be determined by using the remaining value of the existing Facility, then allocating that value to the Town in accordance with the percentage of their the flow used for the original cost allocation of the project when constructed. The Town not needing the additional capacity would still be responsible for sharing in the cost of the increased capacity project based on an updated flow ratio, but a credit for the unused value of the Facility would be given to the Town not requesting additional capacity. The credit value will be applied after the initial allocation of new project costs. The formula for the allocation is expressed as:

$$Town_R \text{ Cost Share} = \left(\frac{Town_R \text{ Flow}}{\text{Total Capacity of New Pipe}} * \text{Project Costs}\right) + \left(\frac{Town_{NR} \text{ Flow}}{\text{Original Pipe Capacity}} * \text{Current Facility Value}\right)$$

$$Town_{NR} \text{ Cost Share} = \left(\frac{Town_{NR} \text{ Flow}}{\text{Total Capacity of New Pipe}} * \text{Project Costs}\right) - \left(\frac{Town_{NR} \text{ Flow}}{\text{Original Pipe Capacity}} * \text{Current Facility Value}\right)$$

6.1.e Capital Project Construction. Capital Projects under this agreement will be completed on the shared pipe system as determined in the DTE decision. Framingham shall have primary responsibility for the implementation of Capital Projects. The implementation of Capital Projects shall include management and coordination of all design, public bidding and construction phase services. As the owner of the collection system, Framingham shall be responsible for obtaining funding for the full amount of the Capital Project, subject to Ashland's timely reimbursement of its pro rata share of Capital Costs as Section 6.1.herein and in the DTE Decision and Appendix A thereto attached as Exhibit A.

6.1.f. Capital Project Schedule. The process to develop and implement a Capital

Project shall occur in the following sequential order. Failure of achievement of any of the following steps in sequential order shall not allow the next step to proceed, subject to the parties' dispute rights as set forth in Section 6.2 below:

(1) The Towns shall agree that the Capital Project is necessary for achieving, implementing, maintaining or the continuation of the IMA and the permitted flows set forth herein. The Towns shall develop and agree upon in writing a preliminary scope of work, budget, cost sharing allocation and timeline for the Capital Project.

(2) The Town requiring increased capacity shall first obtain the necessary approvals from that Town's appropriating authority authorizing that Town to fund its portion of the Capital Project.

(3) The Town not requiring the Capital Project shall obtain authorizations and appropriations from that Town's appropriating authority.

(4) The design shall be completed. Project details and cost estimates for the Capital Project shall be reviewed by the parties and any adjustments to the cost sharing must be mutually agreed upon before the construction phase of the project is initiated.

(5) Payments for the Capital Project shall be made on the basis of the allocation determined in accordance with this Section 6 of the IMA and the DTE decision and will be made on a monthly basis or otherwise as the parties agree.

(6) Framingham shall deliver written notice to Ashland upon learning of any previously unanticipated change in the scope or cost of the Capital Project, when such change is deemed to alter or likely to alter the original scope of work or the cost of the Capital Project by more than 10%. Upon learning of significant, unanticipated cost overruns (more than 10%), either party shall notify the other if it must seek an additional appropriation to provide the required supplemental funding for the Capital Project.

(7) Within thirty (30) days of final completion of the Capital Project, a complete accounting of the costs and sharing shall be issued by Framingham for review and acceptance by the parties. Provided a supplemental appropriation is not required, any additional payments made or credits due shall be issued within thirty (30) days of the completion of such accounting.

6.2 All disputes relating to invoices issued or payments due under Section 6 shall be subject to and governed by Section 16.2 of this IMA.

SECTION 7. TOTAL GALLONAGE OF WASTEWATER AND FLOW LIMITS

7.1 Ashland agrees that the ADF into the Framingham System shall not exceed 3.2 mgd. For the two connection points specified in this agreement, the flow rates shall not exceed the values listed in the table below:

	Farm Pond Interceptor Connection	Beaver Dam Brook Interceptor Connection *	Total
Average Daily Flow	2.1mgd	1.1mgd	3.2 mgd
Maximum Daily Flow	3.5mgd	1.8mgd	5.3 mgd
Peak Flow	4.4mgd	2.4mgd	6.8 mgd

* It has been determined that the Ashland flow to the Beaver Dam Brook Interceptor shall be limited until specific upgrades to the interceptor are completed. Three sections of the pipe in the interceptor do not have adequate capacity to convey the total flow in the table. The three sections of pipe with limited capacity are as follows:

a. - 18-inch Beaver Dam Brook Interceptor sewer from the Bates Road connection to the Thayer Street connection: flows from Ashland shall not exceed 2.0 peak mgd

b. - 18-inch Beaver Dam Brook Interceptor sewer from the Thayer Street connection to the manhole at the intersection of Eames Road and Herbert Street: flows from Ashland shall not exceed 1.0 peak mgd

c. - 14-inch Beaver Dam Brook Interceptor sewer from the manhole at the intersection of Eames Street and Hebert Street extending across the Beaver Dam Brook: flows from Ashland shall not exceed 0.4 peak mgd.

The flow limitations in each section shall remain in effect until the pipe sections are upgraded to provide capacity to convey the flows in the table. These sewer pipes are also identified in the DTE Decision attached as Exhibit A.

7.2 Should either the maximum daily flow or peak hourly flow exceed the limits set forth in Section 7.1, Ashland shall pay Framingham a charge double (two times) regular gallonage charge paid by Ashland for any gallonage transported in excess of the maximum daily flow or peak hourly flow rate, plus reimburse Framingham promptly for any costs, expenses and damages incurred as a result of Ashland transporting gallonage through the Framingham system in excess of the maximum daily flow or peak daily flow permitted under this IMA The calculation of surcharge rate is as follows:

$$\text{Rate for Excess Flow} = \left(\frac{\text{Ashland Costs (Share of O\&M Costs)}}{\text{Total Annual Ashland Flow}} \times 2\right) + \text{Costs for damages incurred}$$

All disputes relating to invoices issued or payments due under Section 7.2 shall be subject to and governed by Section 16.2 of this IMA.

SECTION 8. FLOW MONITORING

8.1 Both parties agree to make available to the other party access to existing flow meters relevant to this IMA. Framingham has the right to inspect and test any equipment which Ashland is required to install and/or maintain under the Agreement. Framingham reserves the right to install its own metering devices at the points where Ashland's wastewater crosses into Framingham, and to utilize said results to determine the appropriate charges as set forth in Section 5 and 6 above and in determining whether Ashland is exceeding the limits established in Section 7 of this IMA.

Ashland is required at its own expense to arrange for calibration of the Ashland monitoring devices by an independent testing firm on a semi-annual basis, and to provide copies of said calibration reports to Framingham. If Ashland fails to repair or replace any defective monitoring device within ten (10) days, Framingham may repair or replace the device and bill Ashland for the cost thereof and the daily flow for the period beyond ten (10) days that the defective device has not been repaired shall be set at the MDF for purposes of O&M charges. Payment of repair invoices shall be due within thirty (30) days after Framingham mails or delivers a billing statement to Ashland. All disputes relating to invoices issued or payments due under Section 8.1 shall be subject to and governed by Section 16.2 of this IMA.

8.2 Framingham shall have the right to inspect facilities and equipment in Ashland which may affect the Framingham System. These inspections and any inspections permitted under this Agreement may include any and all reasonable tests Framingham deems necessary. Ashland hereby consents to Framingham's entry onto or into property of Ashland for the purpose of performing any test or inspection (including of Direct Connections) that Framingham may require under this IMA. Prior to entry onto the property of Ashland to perform a test or inspection, Framingham agrees to give Ashland twenty-four (24) hours oral notice and Ashland shall have the right, if desired, to have an employee of the Ashland Department of Public Works accompany Framingham during the period of time Framingham enters upon the property of Ashland.

8.3 For the calculation of wastewater transportation charges pursuant to this IMA, the volume of wastewater flow from Ashland and Framingham shall be measured using the existing MWRA metering devices currently identified as ASFR1, ASFR2, and FRNA1. The gallonage will be based upon flow calculation reports as developed by the MWRA. ADF and PF measurements will be based upon individual readings taken and recorded by equipment designated ASFR1 and ASFR2. If the equipment in Ashland is out of order or service for any reason for a period of up to ten (10) days, the volume of such wastewater flow for each such day shall be based on the daily average of the flow measurements for the previous 90 days or such other method as the parties agree on.

SECTION 9. LIABILITY AND INDEMNITY

9.1 To the fullest extent permitted by law, Ashland agrees to indemnify and hold Framingham harmless against any and all liabilities, losses, costs, forfeitures, or damages, and all out-of pocket expenses, including reasonable attorney's fees and court costs (collectively, "Liabilities"), actually incurred, suffered, or sustained by, or sought to be imposed on, Framingham that arise from the negligence, acts or omissions of Ashland in connection with this IMA.

9.2 Ashland shall defend any lawsuits with regard to claims for such Liabilities, to the extent said Liabilities arise from the negligence, acts or omissions of Ashland, and shall pay any judgments which result from the lawsuits, provided Framingham provides Ashland with adequate notice to enable Ashland to defend any lawsuits. "Lawsuits" include arbitration proceedings, administrative proceedings, and all other governmental or quasi-governmental proceedings. The obligations of Ashland under this Section arising by reason of any such occurrence taking place during the term of this Agreement shall survive any termination of this IMA.

9.3 To the fullest extent permitted by law, Framingham agrees to indemnify and hold Ashland harmless against any and all liabilities, losses, costs, forfeitures, or damages, and all out-of pocket expenses, including reasonable attorney's fees and court costs (collectively, "Liabilities"), actually incurred, suffered, or sustained by, or sought to be imposed on, Ashland that arise from the negligence, acts or omissions of Framingham in connection with this IMA.

9.4 Framingham shall defend any lawsuits with regard to claims for such Liabilities, to the extent said Liabilities arise from the negligence, acts or omissions of Framingham, and shall pay any judgments which result from the lawsuits, provided Ashland provides Framingham with adequate notice to enable Framingham to defend any lawsuits. "Lawsuits" include arbitration proceedings, administrative proceedings, and all other governmental or quasi-governmental proceedings. The obligations of Framingham under this Section arising by reason of any such occurrence taking place during the term of this Agreement shall survive any termination of this IMA.

SECTION 10. EXERCISE OF REMEDIES

10.1 In addition to any remedies specifically granted in this IMA, the parties shall have any and all remedies at law and in equity, subject to the jurisdiction, arbitration and mediation provisions of Section 16 herein. A party may exercise its rights and remedies at law and in equity. A party may exercise its rights and remedies without regard to whether the exercise of one right or remedy precedes, concurs with, or succeeds, the exercise of another. No delay or omission in exercising a right or remedy shall exhaust or impair the right or remedy or constitute a waiver of, or acquiescence to, a breach or default under this IMA.

SECTION 11. FORCE MAJEURE

11.1 In the event that Framingham or Ashland shall be delayed, hindered in, or prevented from the performance of any act required under this IMA by reason of strikes; stoppages of labor, shortages of material or equipment; fire; war; civil commotion; flood or other casualty; breakage or accident to machinery or pipe; governmental regulations; the binding order of any court or governmental authority; the exercise of power of eminent domain; or other contingencies beyond the reasonable control of the parties; then performance of such act shall be excused for the period of the delay and the period for the performance of any such act shall be extended for a period equivalent to the period of such delay.

11.2 The occurrence of any force majeure event within the meaning of Section 11.1 above shall not excuse Ashland from liability for payments owed under this IMA for services rendered prior to or subsequent to said occurrence.

SECTION 12. NOTICES

12.1 Notices and communications hereunder shall be in writing and shall be personally delivered or mailed by certified mail, return receipt requested, or by confirmed facsimile transmission to Framingham or Ashland, as the case may be, at the following addresses:

Town of Framingham	Town of Ashland
Board of Selectmen	Board of Selectmen
Memorial Building	Ashland Town Hall
150 Concord Street	101 Main Street
Framingham, MA 01702	Ashland, MA 01721

Each party shall have the right to change its address for purposes of receiving notice from time to time by giving the other party notice as herein provided. Separate copies of any notices issued pursuant to this section also shall be delivered or mailed to the Framingham and Ashland Town Counsel at the addresses noted above, or such subsequent address(es) that may be provided in accordance with this section.

12.2 A notice shall be deemed received on the date of hand delivery (with signed acknowledgement of receipt), the date of receipt of facsimile transmission, or the date noted on the return receipt in cases where notice was sent by certified mail, return receipt requested.

SECTION 13. EMERGENCIES

13.1 Each party shall notify the other of any emergency or condition in either party's system which may affect wastewater disposal system in either municipality. Notice shall be given as soon as practicable after the proper municipal official has knowledge of said emergency or condition.

SECTION 14. SEVERABILITY

14.1 If any of the provisions of this IMA or the application thereof to any persons or circumstances shall, to any extent, be invalid or unenforceable, the remainder of this IMA or the application of such provision or provisions to persons or circumstances other than those as to whom or which it is held invalid or unenforceable shall not be affected thereby, and every provision of this IMA shall be valid and enforceable to the fullest extent permitted by law.

SECTION 15. AMENDMENTS

15.1 No officer, official, agent, or employee of Framingham or Ashland shall have the power to amend, modify or alter this Agreement or waive any of its provisions or to bind Framingham or Ashland by making any promise or representation not contained herein except by an amendment, in writing, executed by both municipal corporations in the same manner as this Agreement is executed. Neither party may rely on any conduct, statements, action, inaction or course of conduct of the employees, agents or officers of the other party as having changed, modified or amended this Agreement. Neither party shall be construed as waiving any provision of the Agreement unless the waiver is executed in writing as an amendment to this Agreement.

15.2 No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach. Forbearance or indulgence in any form or manner by either party shall not be construed as a waiver of any term or condition hereto nor shall it limit the legal or equitable remedies available to that party.

SECTION 16 VENUE, JURISDICTION AND CHOICE OF LAW; ARBITRATION AND MEDATION

16.1 VENUE, JURISDICTION AND CHOICE OF LAW: The parties hereto agree that, with the exception of billing, invoice or pricing disputes subject to Section 16.2 herein, disputes arising under this IMA shall be adjudicated and resolved by the filing of an action in Middlesex Superior Court in Cambridge, Massachusetts. The parties agree that said Middlesex Superior Court has jurisdiction over such claims and that venue is proper. The parties hereto agree that disputes arising under this IMA shall be governed by the laws of the Commonwealth of Massachusetts. The parties hereto agree that the prevailing party in any litigation filed pursuant to this Section 16.1 shall be entitled to reimbursement of its reasonable attorney's fees and costs from the non-prevailing party in an amount not to exceed Fifty Thousand Dollars ($50,000.00). The Middlesex Superior Court shall determine which Town is the prevailing party and the reasonableness of the attorney's fees claimed.

16.2 ARBITRATION OF BILLING, INVOICING AND PRICING DISPUTES: The parties hereto agree to binding arbitration of disputes arising under this agreement relating to billing, invoicing and pricing. The party receiving a disputed invoice agrees to

pay the undisputed portion of any invoice submitted to it within the time frame required by the relevant section of this IMA. To the extent that a party disputes all or a part of an invoice, the parties hereto agree to submit such disputed invoice, bill or pricing to binding arbitration. The parties hereto agree to select a mutually agreeable arbitrator within thirty (30) days of notification of a billing, pricing or invoicing dispute governed by this section. In the event that the parties cannot agree on a mutually acceptable arbitrator, the parties agree to submit the billing, invoicing or pricing dispute to the American Arbitration Association ("AAA") for appointment of an arbitrator. The arbitration held pursuant to this section, whether or not before an arbitrator appointed by the AAA, shall be conducted in accordance with the Commercial Arbitration Rules of the AAA. The arbitration shall be held in a mutually convenient locale in Framingham or Ashland. If the parties cannot agree on a mutually convenient locale, the locale shall be selected by the arbitrator. The arbitrator shall have all rights and powers ordinarily accorded to arbitrators under the Commercial Arbitration Rules of the AAA, including but not limited to the right and power to hear disputes, require written submissions and testimony, enter orders allowing or denying relief, and ordering monetary damages, costs and attorney's fees, to the extent required or appropriate If the arbitrator orders Ashland to pay all or portion of a disputed bill or invoice, the arbitrator shall order Ashland to pay interest on such invoice or portion thereof from the date it should have been paid to the date of the arbitration award issued by the arbitrator. The decision or award of the arbitrator is final and non-appeasable, except to the extent appeals are permitted pursuant to G.L. c. 258. The parties hereto agree that the non-prevailing party in any arbitration held pursuant to this Section 16.2 shall pay for the cost of such arbitration (including arbitrator compensation and filing or administrative fees, if any), along with the reasonable attorney's fees and costs of the prevailing party, in a total amount not to exceed Seventy Five Thousand Dollars ($75,000.00). The arbitrator shall determine which Town is the prevailing party and the reasonableness of the attorney's fees claimed.

16.3 VOLUNTARY MEDIATION: Prior to the commencement of a court action as permitted by Section 16.1 or a binding arbitration as permitted by Section 16.2, the parties hereto shall have the right (but not the obligation) to attempt to resolve disputes by way of non-binding, voluntary mediation. If the parties agree to proceed with voluntary mediation to attempt to resolve a dispute, then the parties agree to work in good faith to promptly designate a mutually acceptable mediator, and schedule and hold the mediation as soon as reasonably practicable. The parties hereto agree to split equally the cost of mediation and to bear their own attorney's fees incurred in preparing for and participating in such mediation.

SECTION 17. ENTIRE AGREEMENT

17.1 The terms and provisions, together with all the attachments referenced herein, constitute the entire agreement between the parties and shall supersede all previous communications, representations, or agreements, either oral or written, between the parties with respect to the subject matter hereof and thereof. No agreement or

understanding varying or extending the same shall be binding upon either party unless in writing signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this IMA through their duly authorized representatives as of the day and year first above written.

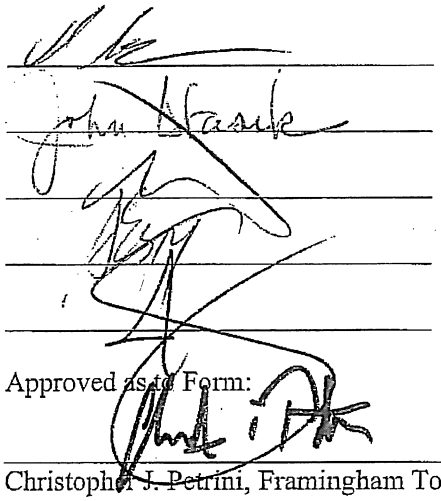
TOWN OF ASHLAND
BY ITS BOARD OF SELECTMEN

Approved as to Form:

Stephen F. Madaus, Special Counsel
Town of Ashland

Dated: January 16, 2007

TOWN OF FRAMINGHAM
BY ITS BOARD OF SELECTMEN



Approved as to Form:

Christopher J. Petrini, Framingham Town Counsel

Dated: January 24, 2007

2007.01.11. Framingham-Ashland IMA [FINAL] (600-12)

Side Letter to Framingham-Ashland January 1, 2007 Intermunicipal Agreement re Herbert Street/Eames Street Sewer Expansion Project Identified at Table 7.1(c)

Relative to the agreement entitled "Intermunicipal Agreement between the Town of Framingham and the Town of Ashland for Wastewater Reception from Ashland's Sewerage System," dated January 1, 2007 ("the Intermunicipal Agreement"), the Town of Framingham ("Framingham") and the Town of Ashland ("Ashland"), for good and valuable consideration, including the mutual exchange of promise and covenants set forth herein, enter this Side Letter regarding Alternative Funding to Expedite Sewer Capacity Expansion Project Identified at Table 7.1 (c) of the Intermunicipal Agreement ("Side Letter").

Framingham and Ashland hereby agree as follows:

1. The Capital Project identified in Table 7.1 (c), which concerns the replacement of a ninety-foot section of a 14-inch sewer line near the intersection of Herbert Street and Eames Street in Framingham ("the Capital Project"), should be accelerated to the extent possible. The existing pipe within the Capital Project has insufficient capacity to convey the total volume of wastewater that Ashland seeks under the Intermunicipal Agreement. The pipe section also crosses the drainage system known as the Beaver Dam Brook.

2. In order to expedite the Capital Project identified in Paragraph No. 1 above, Ashland may elect to advance the required engineering/design work for the Capital Project by appropriating monies for the entirety of the engineering/design work and making them available to Framingham, provided the parties have mutually agreed upon the cost of such engineering/design work.

3. Upon execution of the Intermunicipal Agreement and the Side Letter, Framingham Town Meeting approval of the acceptance of design funds from Ashland scheduled on the warrant for a February 13, 2007 Special Town meeting in Framingham, and receipt of said funds from Ashland, Framingham shall endeavor to, without delay, hire a registered, professional engineer/designer to complete the required engineering/design work for the Capital Project. The contract for engineering/designer services shall provide that time is of the essence for the completion of the Capital Project.

4. Upon receipt of the professional engineer/designer's estimated construction cost for the Capital Project, Ashland shall seek an appropriation of its share of the construction cost as determined in accordance with the formula set forth in Paragraph 6.1.b. of the Intermunicipal Agreement, but less Framingham's pro rata share for the engineering/design costs expended by Ashland, if any. The parties shall

then proceed to complete the Capital Project in accordance with subparagraphs 2 – 7 of Paragraph 6.1.f of the Intermunicipal Agreement.

The cost allocation ratio for the Capital Project that is the subject of this Side Letter shall be based upon the following:

a. Peak Flow from Ashland – 2.48 mgd
b. Peak Flow from Framingham – 0.89 mgd
c. Existing Pipe capacity – 1.3 mgd
d. Ashland base allocation – 74%
e. Framingham base allocation – 26%
f. Remaining Value for existing facilities (based upon GASB34 for assets subject to replacement under this Capital Project) - $11,000.

5. If Framingham is unable to obtain sufficient funding for its share of the Capital Project at the next available Town Meeting, Ashland may seek an appropriation for the entire estimated cost to complete the Capital Project.

6. If Ashland alone funds the total estimated cost to complete the Capital Project, Framingham shall, at the next available Town Meeting, seek an appropriation of sufficient funds to reimburse Ashland for Framingham's pro rata share of the cost of the Capital Project, as determined pursuant to the formula in subparagraph 6.1.b of the Intermunicipal Agreement. For purposes of this Side Letter, "Framingham's pro rata share" shall be the sum of the "Cost of Project" less the "Ashland Share." If Framingham Town Meeting fails to appropriate funding for the Capital Project pursuant to this section, Ashland may seek to induce Framingham to commence the work and appropriate the funds by way of the remedies available under Section 16.2 of the Intermunicipal Agreement.

7. The terms and conditions herein are subject to and conditioned upon review and approval by Ashland's and Framingham's respective bond counsel, as may be deemed necessary. Either Town shall, without delay, send written notice to the other if it learns that its bond counsel has disapproved any provision of this Side Letter.

8. All disputes related to this Side Letter shall be subject to and governed by Section 16.2 of the Intermunicipal Agreement.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized representatives to execute this Side Letter to the Intermunicipal Agreement, on the day and year set forth below.

TOWN OF ASHLAND
By its Board of Selectmen

Approved as to Form:

Stephen F. Madaus, Special Counsel
Town of Ashland

Dated: January 17, 2007

TOWN OF FRAMINGHAM
By its Board of Selectmen

Approved as to Form:

Christopher J. Petrini, Town Counsel
Town of Framingham

Dated: January 24, 2007

2007.01.12 IMA Side Letter re Herbert Street Sewer Project [Final] (600-12)

III-6. User Charge System

Framingham (W/S)

Residential Water Rates:

Last adjusted:	July 2018
Next adjustment scheduled:	July 2019
Fund:	Enterprise
0 – 12 HCF	$ 6.15/HCF
>12 – 27 HCF	$ 6.84 "
>27 – 51 HCF	$ 7.95 "
>51 – 750 HCF	$ 9.37 "
>750 HCF	$11.35 "
Billing Frequency:	Quarterly

Residential Sewer Rates:

Last adjusted:	July 2018
Next adjustment scheduled:	July 2019
Fund:	Enterprise
0 – 12 HCF	$ 7.98/HCF
>12 – 27 HCF	$ 8.23 "
>27 – 51 HCF	$ 11.05 "
>51 – 750 HCF	$ 15.81 "
>750 HCF	$ 22.96 "

Based on 100% of water usage.
Billing Frequency: Quarterly

Annual Cost
AWWA Standard for Historical Comparison
(120 HCF ≈ 90,000 gals.)

Utility	Rate	Change from 2017
Water	$801.00	2.36%
Sewer	$1,009.44	2.27%
Combined	**$1,810.44**	**2.31%**

Annual Cost Based on
Local, State & Federal Data
(60.7 HCF – See Appendix C for Data & Calc.)

Water	$382.25
Sewer	$487.78
Combined	**$870.03**

Commercial Water Rates:

Same as residential

Commercial Sewer Rates:

Same as residential

Additional 2018 Data by Community

Does this Community Use Second Meters?	Yes
Does this Community Offer Senior and/or Low Income Discounts?	Yes, Senior

Water System	
MWRA Charges as % of Total Community Water Expenses	25-50%
Miles of water pipeline replaced/rehabilitated in FY18	3-6 miles
Water Capital Needs over Next Five Years	Over $50 million
Anticipated Water Capital Spending over Next Five Years	Over $10 million

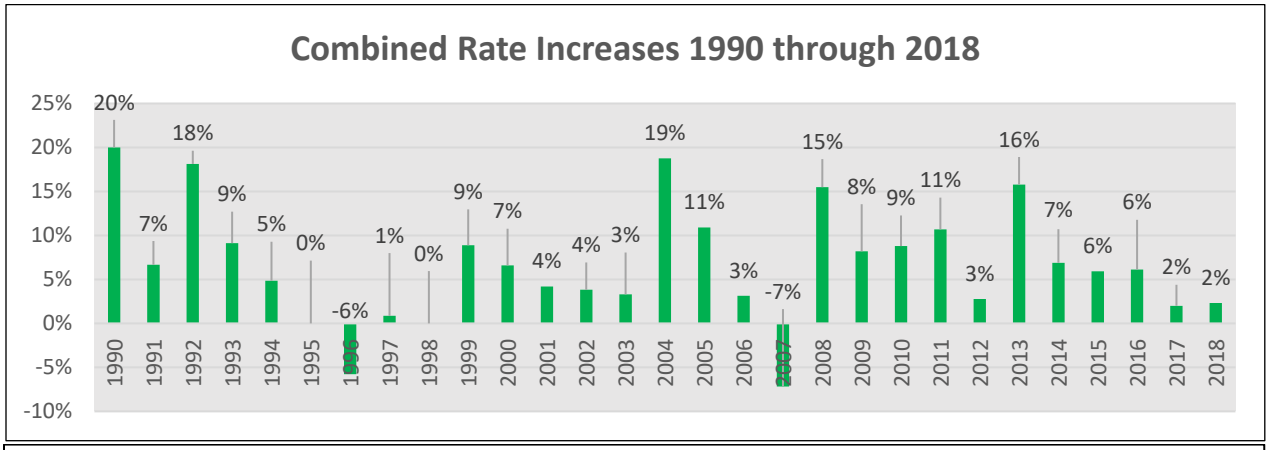
Sewer System	
MWRA Charges as % of Total Community Sewer Expenses	25-50%
Miles of sewer pipeline replaced/rehabilitated in FY18	3-6 miles
Sewer Capital Needs over Next Five Years	Over $50 million
Anticipated Sewer Capital Spending over Next Five Years	Over $10 million

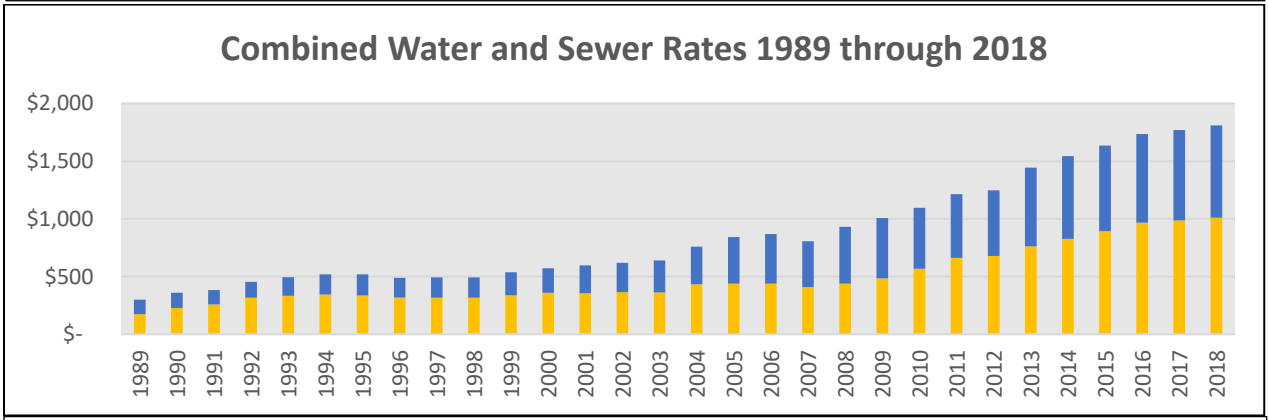
Stormwater

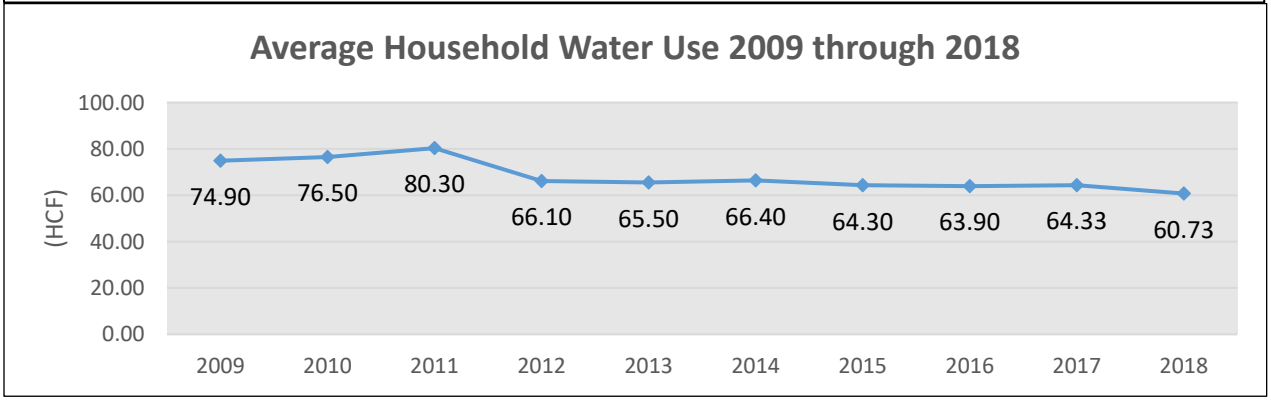
Current Funding Source of Stormwater-Related Costs:	Tax Levy (DPW Budget)

Framingham (W/S)

FY 2019 MWRA Assessments			
	FY18	**FY19**	**% Change**
Water	$8,003,044	$8,205,353	2.50%
Sewer	$13,063,056	$13,423,226	2.80%
Combined	$21,066,100	$21,628,579	2.70%







III-7. Sewer Use Ordinance

Attached, please find the cover and index for the City of Framingham's Sewer Rules and Regulations. The full document is available upon request.

Town of Framingham

Department of Public Works

Wastewater Regulations

May 2015

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III-10c. Order of Conditions

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
158-1599
MassDEP File #

eDEP Transaction #

Framingham
City/Town

A. General Information

Please note: this form has been modified with added space to accommodate the Registry of Deeds Requirements

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. From: Framingham
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Robert — a. First Name
Marchesseault, P.E. — b. Last Name
City of Framingham Department of Public Works — c. Organization
110 Western Ave — d. Mailing Address
Framingham — e. City/Town
MA — f. State
01702 — g. Zip Code

4. Property Owner (if different from applicant):

a. First Name
b. Last Name
City of Framingham — c. Organization
150 Concord Street — d. Mailing Address
Framingham — e. City/Town
MA — f. State
01702 — g. Zip Code

5. Project Location:

730 Worcester Road — a. Street Address
Framingham — b. City/Town
101-63 — c. Assessors Map/Plat Number
0610-000 — d. Parcel/Lot Number

Latitude and Longitude, if known: d. Latitude e. Longitude

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
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Provided by MassDEP:
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Framingham
City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Middlesex South
a. County

b. Certificate Number (if registered land)

4633
c. Book

594
d. Page

7. Dates: 11/3/2021 (a. Date Notice of Intent Filed) 12/1/2021 (b. Date Public Hearing Closed) 12/22/2021 (c. Date of Issuance)

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Worcester Road Sewer Pumping Station Replacement (Cover Sheet, G-1, C-1, C-2, C-3, CD-1, CD-2)

BETA Group
b. Prepared By

Alan J. Gunnison (Civil No. 51332)
c. Signed and Stamped by

10/28/2021
d. Final Revision Date

1" = 10'
e. Scale

f. Additional Plan or Document Title

g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

a. ☒ Public Water Supply
b. ☐ Land Containing Shellfish
c. ☒ Prevention of Pollution
d. ☐ Private Water Supply
e. ☐ Fisheries
f. ☒ Protection of Wildlife Habitat
g. ☒ Groundwater Supply
h. ☒ Storm Damage Prevention
i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
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Framingham
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B. Findings (cont.)

Denied because:

b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) — a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☐ Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. ☐ Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. ☐ Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. c/y dredged	f. c/y dredged		
7. ☒ Bordering Land Subject to Flooding	4062 a. square feet	4062 b. square feet	4062 c. square feet	4062 d. square feet
Cubic Feet Flood Storage	0 e. cubic feet	0 f. cubic feet	0 g. cubic feet	0 h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. ☒ Riverfront Area	9237 a. total sq. feet	9237 b. total sq. feet		
Sq ft within 100 ft	1588 c. square feet	1588 d. square feet	1588 e. square feet	1588 f. square feet
Sq ft between 100-200 ft	7649 g. square feet	7649 h. square feet	7649 i. square feet	7649 j. square feet

Massachusetts Department of Environmental Protection
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Framingham
City/Town

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. ☐ Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. ☐ Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. ☐ Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		
22. ☐ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

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Provided by MassDEP:
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B. Findings (cont.)

* **#23.** If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. ☐ Restoration/Enhancement *:

a. square feet of BVW | b. square feet of salt marsh

24. ☐ Stream Crossing(s):

a. number of new stream crossings | b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. The work is a maintenance dredging project as provided for in the Act; or
   b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
   c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on 12/22/2024 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

Massachusetts Department of Environmental Protection
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C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.

10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number 158-1599 "

11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.

12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.

13. The work shall conform to the plans and special conditions referenced in this order.

14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.

15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.

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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

19. The work associated with this Order (the "Project")
    (1) ☒ is subject to the Massachusetts Stormwater Standards
    (2) ☐ is NOT subject to the Massachusetts Stormwater Standards

    If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

    a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

    b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
    i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
    ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
    iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement) for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
158-1599
MassDEP File #

eDEP Transaction #
Framingham
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):
See Page 13-16

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
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MassDEP File #

eDEP Transaction #

Framingham
City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No

2. The Framingham Conservation Commission hereby finds (check one that applies):

   a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

   1. Municipal Ordinance or Bylaw | 2. Citation

   Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

   b. ☒ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

   Framingham Wetlands Protection Ordinance (1. Municipal Ordinance or Bylaw) | Article V, Section 18 (2. Citation)

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.
   The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):
   See Page 13-16

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
158-1599
MassDEP File #

eDEP Transaction #

Framingham
City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

12/22/2021
1. Date of Issuance

Please indicate the number of members who will sign this form.
This Order must be signed by a majority of the Conservation Commission.

6
2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Robert D. McArthur, Conservation Administrator
Duly authorized to sign by a vote recorded with the Middlesex South Registry of Deeds in Book 74510, Page 461.

☒ by hand delivery on
12/22/2021
Date

☐ by certified mail, return receipt requested, on
Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
158-1599
MassDEP File #

eDEP Transaction #

Framingham
City/Town

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Framingham
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Framingham
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

730 Worcester Road
Project Location

158-1599
MassDEP File Number

Has been recorded at the Registry of Deeds of:

Middlesex
County

Book

Page

for:
Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
Framingham Wetlands Protection Bylaw, Article V, Section 18

Provided by MassDEP:
158-1599
MassDEP File #

eDEP Transaction #

Special Conditions Under The State Wetlands Protection Act and Framingham Wetlands Protection Ordinance 730 Worcester Road

Final Approved Plans and Other Documents:

1. *Notice of Intent, Worcester Road Sewer Pumping Station Improvements, 730 Worcester Road, Framingham, MA,* Prepared by BETA Group. Dated 11/3/2021
2. *Worcester Road Sewer Pumping Station Replacement, City of Framingham, MA, Department of Public Works.* Prepared by BETA Group. Dated 11/3/2021

Plan of Record Sheet	Sheet Title	Correct Revision Date	Stamped by Engineer	Stamped by Surveyor	Scale
Cover Sheet	Cover Sheet	10-28-2021	Alan J. Gunnison (Civil No. 51332)	N	none
G-1	Legend, General Notes & Index	September 2021	N/A	N	none
C-1	Existing Conditions Site Plan	September 2021	N/A	N	1" = 10'
C-2	Demolition, Proposed Piping, & Restoration Site Plans	September 2021	N/A	N	1" = 10'
C-3	Bypass Plans – Phase I & Phase II	September 2021	N/A	N	1" = 10'
CD-1	Construction Details - 1	September 2021	N/A	N	none
CD-2	Construction Details - 2	September 2021	N/A	N	none

Findings of Fact:

This project will consist of the rehabilitation of the Worcester Road Sewer Pumping Station (WRSPS) at 730 Worcester Road, as well as associated site improvements.

Approved activities include the demolition of the existing WRSPS, the construction of a new pumping station within the existing foundation footprint, installation of a new sewer bypass structure, reconfiguration of bituminous areas, management of contaminated soils in accordance with state and local regulations, and installation of fencing.

A Licensed Site Professional will be overseeing the excavation and dewatering activities to ensure that contamination is removed to the maximum extent practicable as outlined in the Release Abatement Measure Plan (RAM).

All excavated material and groundwater collected during the dewatering process shall be properly disposed of. Documentation shall be provided to the Conservation Commission confirming the proper disposal of contaminated soils and water prior to issuing the Certificate of Compliance (Special Condition #39 and 42).

Approved Alterations within Jurisdictional Areas

Work will take place in

- Riverfront Area (previously developed)
- Bordering Land Subject to Flooding
- 100-Foot Buffer Zone regulated under the State's Wetlands Protection Act
- 125-Foot Buffer Zone regulated under the City's Wetlands Protection Ordinance

Special Conditions

General Requirements

20. The findings of fact are incorporated as a special condition and given equal status as a special condition of this Order.
21. All Conditions (Sec. C. above) Under Massachusetts Wetlands Protection Act apply under the Framingham Wetlands Protection Bylaw.
22. The Commission or Agent of the Commission reserves the right to require additional conditions if deemed necessary to protect resource areas and interests as defined in MGL Chapter 131 Section 40 (310 CMR 10.00) and/or the Framingham Wetlands Protection By-Law (Article V, Section 18), or regulations promulgated thereunder.
23. This document shall be included in all construction contracts, subcontracts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. The Applicant shall ensure that all contractors, subcontractor and other personnel performing the permitted work are fully aware of the permit's terms and conditions. Thereafter, the contractor will be held jointly liable for any violation of this Order resulting from failure to comply with its conditions. Nothing in this paragraph shall limit or restrict the liability of the Applicant for violations of this order.
24. This Order and a copy of approved drawings and plans shall be available at the project site at all times for easy reference.
25. Work orders associated with the Operations and Management Plan of stormwater features and utilities shall be retained by the property owner and available to the Commission and/or its Agents, by request. In addition, stormwater infrastructure shall be inspected quarterly and receipts of these inspections shall also be available to the Commission and/or its Agents by request.
26. To apprise the permittee, a Notice of Intent (NOI) for stormwater discharges associated with construction activity should be filed under the US EPA NPDES General Permit. In addition, the Permittee must prepare a Stormwater Pollution Prevention Plan (SWPPP) as required by the NPDES General Permit. This applies to projects that disturb one acre (1 Ac.) of land or more.

Prohibitions and Violations

27. No work, storage, or alterations of any kind are permitted before, during, or after construction within the 30 foot No Alteration Zone (defined in Section III. C. of the Framingham Wetland Regulations) up-gradient from the edge of wetland Resource Areas, unless otherwise approved at public hearings by the Conservation Commission and demarcated on the Plan of Record.
28. If unforeseen problems occur during construction which may affect the statutory interests of the Wetlands Protection Act, the Bylaw or regulations promulgated thereunder, the Commission shall immediately be notified, and an immediate meeting shall be held between the Commission or its Agent, the Applicant, and other concerned parties to determine the correct measures to be employed. The Applicant shall then act to correct the problems using the corrective measures agreed upon. Subsequent to resolution, the activity and resulting actions shall be documented in writing.
29. Any damage caused as a result of this project to any wetland resource areas, shall be the responsibility of the Applicant to repair, restore and/or replace. Sedimentation or erosion into these areas shall be considered damage to wetland resource areas. If sediment reaches these areas the Commission shall be contacted and a plan for abatement of the problem and proposed restoration/mitigation measures shall be submitted for approval and implementation by the Agent of the Commission.

30. Work shall be halted on the site if an Agent of the Commission or DEP determines that any of the work is not in compliance with this Order of Conditions.
31. Violation of any condition may result in fines (Section VI of the Framingham Wetland Regulations) and other enforcement actions.
32. Any changes to approved plans desired by the Applicant or Contractor must first be approved by the Conservation Commission or Agent of the Commission.

Conditions Prior to Construction

33. Within thirty (30) days of the issuance of this Order of Conditions, the applicant, property owner, project representative, or other applicable party must record the original copy of the Order with the Registry of Deeds. Proof of recording is required to be submitted to the Commission or Agent of the Commission prior to the Pre-Construction Meeting and commencement of work.
34. The applicant, representative, contractors and sub-contractors associated with this project shall sign an Order of Conditions Acknowledgement Form, stating that they have received and understand this Order of Conditions. This Form shall be submitted to the Commission during the pre-construction site visit. Should any of the aforementioned parties change after submitting said Form, then a new Order of Conditions Acknowledgement Form must be signed and submitted to the Agent of the Commission.
35. Prior to the commencement of any activity on this site, other than the marking of locations for erosion controls, there shall be a Pre-Construction Meeting between the project supervisor, the contractor responsible for the work, and a member of the Conservation Commission or its Agent. Please contact the Conservation Commission office at (508) 532-5460 at least seventy-two (72) hours prior to any activity to arrange for the pre-construction meeting. The meeting shall:
    a. Ensure that the requirements of the Order of Conditions are understood;
    b. Check administrative requirements (DEP file number sign, recording info, contact information, etc.);
    c. Adjust, if necessary, the erosion control line.
36. Based on the Agent's judgment rendered at the pre-construction site visit, a sedimentation barrier may be required and, if so, shall serve as the limit of work. No alterations shall be permitted beyond the installed siltation barrier.
37. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The Applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary.
38. The erosion controls shall be properly installed as shown on the Plan of Record. All erosion controls shall be invasive free (salt marsh hay, straw wattles, or other invasive-free product). No clearing of vegetation, including trees, or disturbance of soil shall occur prior to the Pre-Construction Meeting. Minimal disturbance of shrubs and herbaceous plants shall be allowed prior to the Pre-Construction Meeting if absolutely necessary in order to place erosion control stakes where required. Silt retention fabric must be staked and entrenched at least six (6") inches for maximum siltation control prior to any construction or site preparation.
39. If there is a need for de-watering, the applicant shall provide a detailed plan to be approved by the Commission or Agent of the Commission. All contaminated groundwater collected during the dewatering process shall be properly disposed of. Documentation shall be provided to the Conservation Commission confirming the proper disposal of contaminated water prior to issuing the Certificate of Compliance.

Conditions During Construction

40. All plantings within Areas Subject to Jurisdiction under the Framingham Wetlands Protection Bylaw shall be native species.
41. The applicant shall inspect and maintain all erosion controls including silt sacs within the catch basins on a weekly basis and after every storm event of a ½ inch of rain or more.

42. The applicant is responsible for the containment and proper relocation/disposal for all unearthed soils, clays and other organic debris as well as the construction waste associated with this project. Additionally, all contaminated groundwater collected during the dewatering process shall be properly disposed of. Documentation shall be provided to the Conservation Commission confirming the proper disposal of contaminated soils and water prior to issuing the Certificate of Compliance.

Final Site Stabilization and Removal of Erosion Controls

43. Once the site has been stabilized, the Applicant/Owner/Assign shall remove and properly dispose of all erosion controls.
44. The applicant shall place storm fencing or other suitable barriers on the lot to help prevent the migration of treated snow melt toward the wetlands.
45. The applicant shall retain all receipts for annual operation and maintenance activities on-site. Receipts shall be made available to the Conservation Commission and/or its Agents, upon request.
46. Prior to planting and seeding, final grades shall be surveyed by a licensed land surveyor to ensure that grades have been achieved as shown on the plan or as agreed to by the Commission to meet the performance based conditions subject to this Order. If any changes in grade elevations were amended, the Commission shall be notified of the purpose for the change for review and approval
47. Vegetation planted as part of mitigation, replication or restoration and in accordance with approved plans, shall be monitored and maintained for a period of two growing seasons and 75% of the plantings shall survive. If less than 75% of species planted survive, then they shall be replaced at the discretion of the Conservation Commission or Agent of the Commission.

Conditions related to Certificate of Compliance

48. Upon completion of construction and final stabilization, the Applicant/Owner/Assign shall submit the following to the Conservation Commission to request a Certificate of Compliance (COC):
    a. A completed Request for a Certificate of Compliance form (WPA Form 8A or other form if required by the Conservation Commission at the time of request);
    b. A stamped as-built plan and letter from a Registered Professional Engineer certifying compliance of the property with this Order of Conditions, and detailing any deviations from the approved plans, and their potential effect on the project. A statement that the work is in "substantial compliance" with no detailing of the deviations shall not be accepted.
49. Once items from 48a. and 48b. are submitted in full compliance, the Applicant, Contractor or Consultant shall schedule a site visit with the Conservation Administrator(s) to verify compliance with this Order of Conditions and affiliated documents.

Conditions in Perpetuity – None

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Request for Departmental Action Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

Provided by DEP

A. Request Information

1. Location of Project

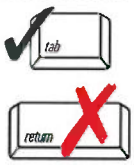
a. Street Address

b. City/Town, Zip

c. Check number

d. Fee amount

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



2. Person or party making request (if appropriate, name the citizen group's representative):

Name

Mailing Address

City/Town

State

Zip Code

Phone Number

Fax Number (if applicable)

3. Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):

Name

Mailing Address

City/Town

State

Zip Code

Phone Number

Fax Number (if applicable)

4. DEP File Number:

B. Instructions

1. When the Departmental action request is for (check one):

☐ Superseding Order of Conditions – Fee: $120.00 (single family house projects) or $245 (all other projects)

☐ Superseding Determination of Applicability – Fee: $120

☐ Superseding Order of Resource Area Delineation – Fee: $120

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Request for Departmental Action Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

Provided by DEP

B. Instructions (cont.)

Send this form and check or money order, payable to the *Commonwealth of Massachusetts,* to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/).

4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

III-10d. MassDOT Access Permit

To be provided to MassDEP once finalized.

ENGINEERING SUCCESS **TOGETHER**

August 18, 2022

Barry Lorion
MassDOT District 3, Director
499 Plantation Parkway
Worcester, MA 01605

Attention: Christopher Chambers, Permit Engineer

Re: Proposed Sewer Pump Station Replacement – Worcester Road (Route 9)
Access Permit Application No. 3-2022-0424
Framingham, Massachusetts

Dear Director Lorion:

BETA Group, Inc. (BETA) in cooperation with the City of Framingham has been retained to prepare the necessary documentation for a MassDOT Access Permit, required for a property along Route 9 in the City of Framingham. The proposed project is a replacement of a sewer pump station which requires the installation of a utility pole within state highway layout and associated driveway and sidewalk improvements as well as gas service relocation.

75%/100% Submission documents have been prepared in accordance with MassDOT's requirements for a Category I Access Permit submission. The submittal documents have been uploaded to the SHAPS site and consist of the following:

1. 75/100% Plans
2. Responses to 25% comments (completed on SHAPS site)

If you have any questions, please do not hesitate to contact our office.

Very truly yours,
BETA Group, Inc.

Matthew Shute, PE
Senior Associate

cc: Robert Marchesseault, PE, City of Framingham

BETA GROUP, INC.
701 George Washington Highway, Lincoln, RI 02865
P: 401.333.2382 | F: 401.333.9225 | W: www.BETA-Inc.com

III-11. Protection of Water Supplies

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP - CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement – CWSRF		

PROTECTION OF WATER SUPPLIES

The Worcester Road Sewer Pumping Station Replacement project will construct all wastewater pipelines in conformance with DWP Policy #BRP/DWM/WS/P03-1, the Policy for Sewer Line/Water Supply Protection

Alan J. Gunnison

Alan Gunnison, P.E.

Project Manager

III-13. MEPA Compliance

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP - CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement – CWSRF		

STATEMENT OF COMPLIANCE WITH MEPA

The Worcester Road Sewer Pumping Station Replacement project has been determined to be below all MEPA review thresholds as outlined in 301 CMR 11.00. No Environmental Notification Form is necessary.

Alan J. Gunnison

Alan Gunnison, P.E.

Project Manager

III-14. Flood Insurance Participation

CITY OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS | CAPITAL PROJECTS

OPERATIONS CENTER
100 Western Avenue
Framingham, MA 01702

508-532-6040
dpwprojects@framinghamma.gov
www.framinghamma.gov

MEMORANDUM

DATE: July 11, 2022

TO: Files

FROM: Robert A. Lewis
Director of Public Works

RE: **Worcester Road Sewer Pump Station Replacement Project**
Commitment to maintaining constructed improvements

The Worcester Road Sewer Pump Station is critical to the operation of Framingham's sewer system. It handles over 25% of the City's wastewater and is the City's second largest pump station, making it essential that it be fully operable at all times. Should any part of the upgraded station be damaged from flooding or any other circumstance, the City is fully committed to providing necessary resources to keep the upgraded station in operation by restoring it to its original upgraded condition. The design for the upgraded station also includes safeguards to prevent damage from anticipated catastrophic conditions such as earthquakes and flooding. This includes sealing concrete to prevent flood water from entering the structure and equipping wastewater pumps with motors that can be operated while submerged in the unlikely event that flood water were to enter the pump room. Major electrical equipment such as variable frequency drives and controls will be located well above the 100-year flood stage.

III-15. Historic Preservation

RECEIVED
AUG 25 2021
MASS. HIST. COMM

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

RC. 70255

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Worcester Road Sewer Pumping Station Replacement

Location / Address: 730 Worcester Road

City / Town: Framingham, MA

Project Proponent

Name: Robert Marchesseault Framingham Department of Public Works

Address: 110 Western Avenue

City/Town/Zip/Telephone: Framingham, MA 01702

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
MassDEP	CWSRF Loan

Project Description (narrative):

Project includes the demolition of the existing superstructure and replacing the building on the existing foundation

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

Yes. The existing sewer pump station building that was constructed in 1966 is proposed to be demolished.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

Yes. The existing foundation will be rehabilitated and re-used.

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

No.

After review of MHC files and the materials you submitted, it has been determined that this project is unlikely to affect significant historic or archaeological resources.

RC. 70255

9/7/21

Jonathan K. Patton Date
Archaeologist / Preservation Planner
Massachusetts Historical Commission

xc: Maria Pinaud, DEP-SRF

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

No.

What is the total acreage of the project area?

Woodland	_____ acres	Productive Resources:	
Wetland	_____ acres	Agriculture	_____ acres
Floodplain	_____ acres	Forestry	_____ acres
Open space	_____ acres	Mining/Extraction	_____ acres
Developed	0.338 acres	Total Project Acreage	_____ acres

What is the acreage of the proposed new construction? 0.018 acres

What is the present land use of the project area?

Worcester Road sewer pumping station.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

Attached.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Alan J. Gunnison Date: 8/19/2021

Name: Alan Gunnison, P.E.

Address: 701 George Washington Highway

City/Town/Zip: Lincoln, RI 02865

Telephone: 401-333-2382

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

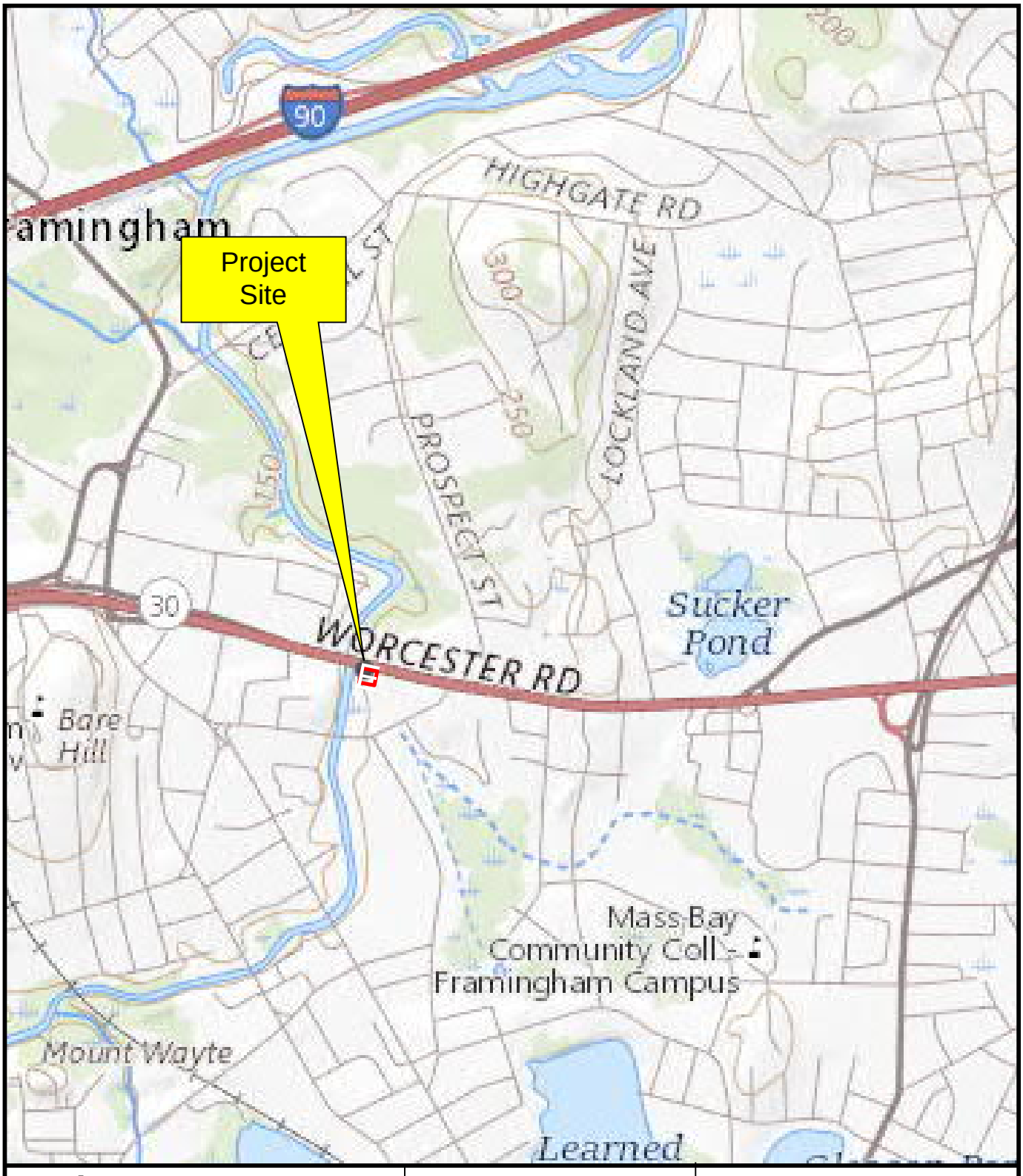
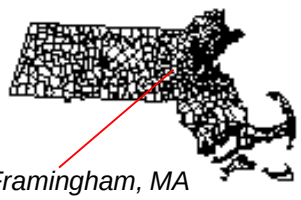


Fig. 1: Locus Map

Worcester Road Sewer
Pumping Station Replacement
Framingham, MA



Scale: Not to Scale

BETA
www.BETA-Inc.com

III-17a. Professional Services Agreement

AGREEMENT BETWEEN
THE CITY OF FRAMINGHAM AND BETA GROUP, INC.
FOR
PROFESSIONAL CONSULTANT AND ENGINEERING SERVICES

THIS IS AN AGREEMENT made on the **6th day of December, 2021** by and between the **City of Framingham**, in the County of Middlesex and the Commonwealth of Massachusetts, a municipal corporation located at 150 Concord Street, Framingham, Massachusetts (hereinafter referred to as "City"), and **BETA Group, Inc.,** an engineering company incorporated in the State of Massachusetts and located at **315 Norwood Park South, Second Floor, Norwood, MA 02062** (hereinafter referred to as "Consultant").

City and Consultant agree to the performance and furnishing of certain professional services by Consultant for certain consideration to be paid to Consultant by City, as set forth more specifically in the mutual covenants set forth below.

This Agreement will become effective on the date that the last party fully executes the same.

1.0 CONTRACT DOCUMENTS

This Agreement and the Exhibits identified in this Section, all of which are attached to and form a part of this Agreement, constitute the entire agreement between City and Consultant and supersede any and all prior written or oral understandings between City and Consultant.

Exhibits:

A. Further Description of Consultant's Services and Related Matters.
B. Certificate(s) of Insurance and Licenses Required by this Agreement.
C. Consultant's Corporate Authorization.
D. Summary of Conflict of Interest Law for Municipal Employees.
E. Acknowledgments of Receipt of Summary.
F. Certificates of Completion of Online Ethics Training, to be signed and completed by key employees in accordance with Section 13.13.below.
G. City of Framingham Department of Public Works Capital Improvement Program Engineers Duties and Responsibilities.

The parties hereby agree that in the event of any conflict or discrepancy between the terms or requirements of this Agreement and those of the **Exhibit A-**Further Description of Consultant's Services and Related Matters, or any other Exhibit, or a Task Order, such discrepancy shall be resolved in the manner determined by the City acting in good faith. As a general matter, the City anticipates that it will interpret the above documents and provisions on the basis of the following priorities, although the City reserves the right to determine otherwise in its discretion:

(1) This Agreement for procurement between City and Consultant;
(2) Further Description of Consultant's Services and Related Matters;
(3) City of Framingham Department of Public Works Capital Improvement Program Resident Engineers Duties and Responsibilities;
(4) The Consultant's Statement of Qualifications, all documents enclosed therewith and

all attachments and addenda thereto;
(5) Consultant's Corporate Authorization;
(6) Task Order; and
(7) The Summary of Conflict of Interest Law for Municipal Employees attached hereto as **Exhibit D**, as well as the acknowledgement of receipt of summary attached hereto as **Exhibit E** and confirmation of completion of online training attached hereto as **Exhibit F**.

2.0 CONSULTANT'S SERVICES

The full execution of this Agreement by City and Consultant constitutes City's written authorization for Consultant to proceed with the professional services described in this section (hereinafter referred to as "Consultant's Services"), which are to be conducted in connection with the general engineering services (hereinafter referred to as the "Project").

Consultant agrees to commence work under this Agreement immediately upon receipt of an executed copy of the Agreement. Consultant shall use its best efforts to perform all services under this Agreement as expeditiously as is consistent with professional skill and care and the orderly progress of the work,

Consultant shall perform for or furnish to City professional engineering services in all phases of the Project to which this Agreement applies, as hereafter provided. Consultant shall serve as City's prime engineering professional for the Project, providing professional engineering consultation and advice with respect thereto.

2.1 Task Orders

This Agreement is a Task Order Professional Services Agreement. The City hereby retains Consultant, and Consultant agrees to perform professional services in accordance with the general provisions of this Task Order Professional Services Agreement. Specific assignments will be authorized in the form of Letters of Understanding to document the scope of work, schedule, and fee structure, which will be prepared by Consultant after consultation with the City. The City will formally acknowledge receipts and approval of Consultant's Letter of Understanding by signing the Letter of Understanding, through issuance of a Purchase Order, or by similar binding instrument, in a timely fashion.

2.2 Character and Extent of Professional Services

Consultant shall furnish professional services in connection with Task Order projects, for which a scope, schedule and fee are mutually agreed upon by City and Consultant, as indicated in **Exhibit A** through a Letter of Understanding. It shall be the joint responsibility of City and Consultant to delineate the scope and to monitor each project for changes in scope.

3.0 CONSULTANT'S STANDARD OF CARE

Consultant shall perform Consultant's Services in accordance with the degree of

professional skill, quality and care ordinarily exercised by members of the same profession currently practicing in the same location under comparable circumstances and as expeditiously as is consistent with professional skill and the orderly progress of the Project. If during the three-year period following the completion of Consultant's Services, it is shown that there is an error in Consultant's Services as a result of Consultant's failure to meet these standards, Consultant shall re-perform such substandard services as may be necessary to remedy such error at no cost to the City.

4.0 RECORDS, REPORTS AND DATA

Consultant shall submit to City such schedule of quantities and costs, progress schedules, timecards, reports, estimates, shop drawings, manufacturers' product specifications, records and other data as City may request concerning or generated in connection with the Consultant's Services, including without limitation any and all field reports, daily reports or logs or any notes prepared by or on behalf of the Consultant in connection with the Project, whether such materials are in tangible or electronic form. All records, whether in tangible or electronic form, shall be retained by the Consultant during and for a period of seven (7) years from completion of Consultant's Services.

5.0 OWNERSHIP OF DOCUMENTS AND WORK PRODUCT

All documents produced pursuant to this Agreement shall be the property of City upon full payment of all monies owned to the Consultant. All information acquired from City, or from others at the expenses of City, in the performance of this Agreement shall be and remain the property of City. This includes, but is not limited to, all records, data files, computer records, work sheets, deliverable products (complete and incomplete) and all other types of information prepared or acquired by Consultant in the performance of Consultant's Services.

Any reuse of Consultant's prepared documents, except for the specific purpose intended hereunder or with written consent of Contractor, will be at the City's sole risk and without liability or legal exposure to Consultant and its subconsultants.

6.0 CITY'S RESPONSIBILITIES

City, acting by and through its Director of Public Works, shall appoint a person to serve as liaison between City and Consultant with respect to the Project and Consultant's Services. In addition to serving as City liaison, this person shall be responsible for scheduling all meetings between Consultant and City's representatives. This person, however, shall have no authority to bind City to make payments in excess of the specific appropriation for this Agreement. City shall provide all information requested by Consultant that is necessary for the completion of Consultant's Services. However, City shall not be required to provide information not readily available to it.

7.0 PAYMENT BY THE CITY FOR CONSULTANT'S SERVICES

In consideration for Consultant's Services, City agrees to pay Consultant for the completion of specific Task Orders requested by and approved by the City. Payment is to be made by the City within thirty (30) days of receipt of invoice from the Consultant. Reasonable expenses such as mileage and printing charges shall be reimbursed by the City. The acceptance by Consultant of its final payment under this Agreement shall operate as a release to City of all claims and all liability to Consultant. No payment, however, final or otherwise, shall operate to release Consultant from its obligations under this Agreement.

8.0 DELAY DAMAGES

It is expressly understood and agreed by and between Consultant and City that the time for the completion of Consultant's Services is a reasonable time for the completion of the same, taking into consideration the climatic range and industrial conditions prevailing in this locality.

If Consultant neglects, fails, or refuses to complete its services within the time specified in Section 2.0 above, or pursuant to any extensions granted by the City in accordance with this Agreement, then the Consultant shall reimburse the City for the damages due to such negligent delay.

Consultant shall not be responsible for delay damages when the delay in completion of such services is due to conditions or forces beyond the control, and without the fault or negligence, of Consultant, including but not limited to, acts of God or of the public enemy, acts of another party in the performance of a contract with City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or severe weather. However, Consultant shall, within ten (10) days from the beginning of any such delay, notify City in writing of the causes, circumstances, and anticipated extent of any such delay and the City reserves the right to contest a claim by the Consultant that the work was delayed due to causes beyond its control.

9.0 SUSPENSION OF WORK

If City is unable to proceed with the Project or its obligations under this Agreement either before or after the execution of this Agreement for any reason, regardless of whether such inability is caused by or is within the control of City, Consultant shall not be entitled to make or assert any claim for damage by reason of said delay; however, the time for completion of Consultant's Services shall be extended to such reasonable time as the City may determine that will compensate for time lost by such delay, with such determination to be set forth by City in writing.

10.0 TERMINATION

10.1 By City

10.1.1. In the case of any default on the part of Consultant with respect to any of the

terms of this Agreement, City shall give written notice thereof and if said default is not remedied by Consultant within such time as City shall specify in writing, City shall notify Consultant in writing that there has been a breach of this Agreement, and thereafter City shall have the right to secure the completion of Consultant's Services remaining to be done on such terms and in such manner as City shall determine, and Consultant shall pay City any money that City shall pay another Consultant for the completion of Consultant's Services, in excess of what City would have paid Consultant for the completion of Consultant's Services, and Consultant shall reimburse City for all expenses incurred by reason of said breach, including attorney's fees incurred by the City. In case of such breach, Consultant shall be entitled to receive payment only for work satisfactorily completed prior to said breach in good faith and the amount of any balance due Consultant shall be determined by City in good faith.

10.1.2. Notwithstanding any other provision of this Agreement, the City reserves the right at any time to suspend or terminate this Agreement in whole or in part for its convenience or due to an unavailability of funds upon fourteen (14) days written notice to Consultant. City shall incur no liability by reason of such termination for convenience except for the obligation to pay for work performed and accepted accruing through the date of termination less any offset or claim of City. Such obligation shall not exceed the available appropriation. Consultant shall have no right to recover other amounts, including but not limited to amounts for lost profits, indirect, incidental, or consequential damages.

10.1.3. In the event of termination by City, all finished work and documentation, complete and incomplete, shall be delivered to City. Consultant shall be entitled to receive payment for any work performed and accepted under this Agreement, which was completed prior to the date of termination. In the event of termination prior to the completion of the work, Consultant shall have no right to recover other amounts, including but not limited to amounts for lost profits, indirect, incidental, or consequential damages.

10.1.4. If after the notice of termination for cause under Section 10.1.1 above, it is determined that said cause was invalid, the termination shall be deemed to have been effected for the convenience of City under Section 10.1.2. In such event, a payment adjustment shall be made as provided in Section 10.1.2.

10.1.5. Any termination or suspension of this Agreement shall not impair City's right to recover damages occasioned by the fault of Consultant. Any suspension shall not limit the right of City to terminate this Agreement.

10.2 By Consultant

Consultant shall have no damages for delay or hindrance. In the event of delay or hindrance not the fault of the Consultant, an extension of time shall be the Consultant's sole remedy, which extension shall be accomplished only by way of a change order executed by all parties. Consultant also shall have the right to terminate this Agreement if City fails to make timely payment of the amounts due to Consultant under this Agreement.

10.3 Force Majeure

Neither party shall be liable to the other or deemed to be in breach under this Agreement for any failure to perform, including, without limitation, a delay in rendering performance due to causes beyond its reasonable control, such as an order, injunction, judgment, or determination of any Court of the United States or the Commonwealth of Massachusetts, an Act of God, war, civil disobedience, extraordinary weather conditions, labor disputes, or shortages, or fluctuation in electric power, heat, light, or air conditioning. Dates or time of performance shall be extended automatically to the extent of such delays, provided that the party whose performance is affected promptly notifies the other of the existence and nature of such delay.

11.0 INSURANCE

Consultant shall provide and maintain insurance at its own expense until the completion of Consultant's Services as set forth below:

11.1 Worker's compensation insurance, as required by the laws of the Commonwealth of Massachusetts, including employer's liability insurance in the amount of at least $1,000,000 for each occurrence and at least $3,000,000 in the aggregate. The policy shall contain a Waiver of Subrogation in favor of the City.

11.2 RESERVED.

11.3 Commercial general liability insurance with limits of at least $1,000,000.00 for each occurrence and at least $3,000,000.00 in the aggregate. The City must be named as an additional insured under this policy. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds, and shall include a Waiver of Subrogation in favor of the City. Consultant also shall maintain an excess umbrella policy of at least $5,000,000.

11.4 A pollution liability endorsement in the amount of $1,000,000.00 per occurrence and $3,000,000.00 aggregate must be added to the Consultant's professional liability policy, or alternatively the Consultant shall obtain and maintain occurrence-based contractors' pollution liability coverage of $1,000,000.00 per occurrence and $3,000,000.00 aggregate naming the City as an additional insured. The Consultant shall also provide copies of the applicable policies or endorsements upon the City's request.

11.5 Automobile bodily injury and property damage liability insurance at least $1,000,000.00 combined single limit per occurrence. The policy shall name the City as an additional insured, and shall contain a Waiver of Subrogation in favor of the City.

11.6 Contractual liability coverage insuring against Consultant's obligations under this Agreement with a limit of at least $1,000,000.00 for each occurrence and at least $3,000,000.00 in the aggregate. Consultant also shall maintain umbrella coverage in this regard in the amount of at least $5,000,000.00.

11.7 Professional liability insurance covering Consultant's errors and omissions with limits of at least $1,000,000.00 for each claim and at least $3,000,000.00 in the aggregate.

11.8 Consultant shall furnish to City a Certificate(s) of Insurance showing coverage as set forth above prior to performing Consultant's Services. All insurance coverage required herein shall be issued by companies licensed and authorized to do business in the Commonwealth of Massachusetts. The City shall be a named Certificate Holder on all coverage set forth above with the additional requirement that the City be named as an additional insured under the Commercial General Liability, Pollution Liability and Automobile Liability insurance coverage required under section 11.3, 11.4 and 11.5 herein. The City's status as additional insured and/or certificate holder for each coverage shall be referenced on the Certificate of Insurance issued to the City. The Certificate Holder shall be the City of Framingham, c/o Procurement Administrator, 110 Western Avenue, Framingham, MA 01702. The Certificate(s) of Insurance shall be attached to this Agreement within **Exhibit B**. The Consultant shall provide any additional evidence of insurance coverage, including policies and endorsements, at the request of the City.

INDEMNIFICATION

Consultant hereby agrees to indemnify, defend, and hold harmless City, and its officers, employees, attorneys, and agents from and against any and all claims (including workers' compensation and wage claims) demands, suits, actions, liabilities, damages, penalties, judgments, and costs and expenses, including without limitation the costs and expenses of litigation and attorney's fees, of or by anyone that in any way is caused by, arises out of, or is occasioned by, the acts, omissions, or provision of Consultant's services, or any activities, operations, conducts, negligence, or omissions of Consultant or its agents, regardless of whether same is caused in part by City or any third party.

13.0 MISCELLANEOUS PROVISIONS

13.1 Entire Agreement

Unless contained in this Agreement, or the Exhibits incorporated into and made a part of this Agreement, no warranties, statements, promises, or representations shall be considered a part of this Agreement or a basis upon which Consultant or City entered into this Agreement.

13.2 Amendments

This Agreement may be amended, supplanted, modified, or canceled only by prior written amendment executed by both parties upon the City Accountant's certification as to the availability of appropriate funds.

13.3 Agreement Binding Upon Others

This Agreement shall be binding upon City and Consultant, and the partners, successors,

heirs, executors, administrators, assigns and legal representatives of City and Consultant.

13.4 Assignment of Interest

Consultant shall not assign, transfer, or convey any interest in this Agreement without the prior written consent of City, which consent shall not be unreasonably withheld.

13.5 Subcontractors

Consultant shall not assign, subcontract, or delegate the performance of its services to any person, corporation, or entity without the prior written consent of City. Provided that such consent is obtained, it is understood and agreed that any such persons, corporations, or entities hired by Consultant shall be deemed agents of Consultant and that Consultant shall be responsible for the methods, means, and materials used in connection with the performance of any such services, and for any breach of this Agreement or any delays or damages occasioned by such work.

13.6 Inspection by City

The authorized representatives and agents of City shall be permitted to inspect all work, materials, timecards, records of personnel, invoices of materials and other relevant data and records of Consultant upon demand.

13.7 Incorporation of Applicable Law

Each and every provision of law required to be included in this Agreement shall be deemed to be included in this Agreement, and this Agreement shall be read and enforced as though such provisions were included herein. If through mistake or otherwise any such provision has not been included in this Agreement, or is not correctly inserted, then upon the application of either party to this Agreement, the Agreement shall forthwith be physically amended to make such inclusion or insertion.

13.8 Equal Opportunity

City is an Equal Opportunity Employer. Consultant shall not discriminate on account of race, color, religion, ancestry, national origin, age, gender, handicap, or other protected class, as identified by law, in its performance of this Agreement. Violation of this paragraph shall be deemed a material breach of this Agreement and the City may terminate this Agreement as a result of same.

13.9 Governing Law

City and Consultant shall perform its services in conformity with the requirements and standards of City, and with all applicable laws and regulations of the Commonwealth of Massachusetts and its political subdivisions, and with all applicable laws and regulations of the Federal Government.

In the event of any dispute concerning the meaning or application of this Agreement, any

such dispute shall be resolved pursuant to law of the Commonwealth of Massachusetts and, if necessary, by a Court of the Commonwealth of Massachusetts. Both parties hereby consent to the jurisdiction of any such Court.

13.10 Licensure and Compliance with Massachusetts Tax Law

By executing this Agreement, Consultant agrees and certifies that it is licensed to perform the services required by this Agreement, and that it will secure such licensure for so long as it is bound to perform services under this Agreement. Documentation of such licensure shall be attached to this Agreement as part of **Exhibit B**. Consultant also agrees and certifies that it has filed all state tax returns and paid all state taxes required under the laws of the Commonwealth of Massachusetts. Violation of this paragraph shall be deemed a material breach of this Agreement and the City may cancel, terminate, or suspend this Agreement as a result of same.

13.11 Interpretation & Severability

For purposes of interpreting this Agreement in the context of a dispute over its terms or otherwise neither party shall be considered the drafter of this Agreement and neither party shall have any provision of this Agreement construed in its favor as a result of its role in drafting this Agreement or its bargaining power with respect to this Agreement, Consultant's Services, the Project, or otherwise.

Should any provision of this Agreement be held illegal or unenforceable, then such provision shall be stricken from this Agreement and the remainder of this Agreement shall remain in full force and effect

13.12 Consultant's Participation in Dispute Resolution Proceedings

Consultant is obligated to prepare for or appear in any litigation or other dispute resolution proceeding at the request of, and upon behalf of, City in connection with any disputes arising from or related to the Project. Consultant will be paid a reasonable fee based on its usual and ordinary charges for providing such assistance.

13.13 Ethics Training

A summary of the Conflict of Interest Law is attached hereto as **Exhibit D** and must be distributed to all key employees of the Consultant whose services are specifically required by name, implication, or understanding of the parties. Pursuant to Chapter 28 of the Acts of 2009, as amended, all key employees must complete online ethics training on the State Ethics Commission's website, www.mass.gov/ethics. Within thirty (30) days of the date of this Agreement, each key employee must provide to the City Clerk (with a copy to the Department of Public Works) a signed acknowledgement of receipt of the summary of the Conflict of Interest Law, in the form attached hereto as **Exhibit E**, and a certificate of completion of the online training which must be printed at the completion of the training. In the event that the term of this Agreement extends for more than two (2) years, all continuously employed key employees shall repeat the online training and provide the City with a new certificate of completion within ninety (90) days before or

ninety (90) days after the two-year anniversary of the date of this Agreement. Any new key employee who becomes employed by the Consultant after the date of this Agreement must complete the online training and provide the City with a certificate of completion within thirty (30) days of the date on which his services commence pursuant to this Agreement. Satisfaction of these requirements is the sole responsibility of the Consultant and its key employees, and the City shall have no liability for the Consultant's or its key employees' failure to meet these requirements.

THE REMAINDER OF THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY

IN WITNESS WHEREOF the parties hereto have executed copies of this Agreement the day and year first above written. *

*If a Corporation, attach to each signed copy of this Contract an attested copy of the vote of the Corporation on authorizing the said signing and sealing.

CONSULTANT: BETA Group, Inc.

BY**:** _____
Joseph D'Alesio, P.E.

Title: President

Dated: _____

Corporate Seal:

_____
William R. Sedewitz, P.E.
Chief Engineer
Department of Public Works

Dated:_____

Approved As To Form:

_____
Jennifer A. Pratt
Chief Procurement Officer

Dated:_____

_____
Christopher J. Petrini
City Solicitor

Dated: _____

Funds Availability will be confirmed by Issuance
Of official City of Framingham Purchase Order(s)

_____
Richard G. Howarth
City Accountant

Dated:_____

_____
Thatcher W. Kezer III
Chief Operating Officer

Dated:_____

Funding Source: N/A On Call Engineering Contract

All DPW Orgs including Operating and Capital

City of Framingham Contracts - Information and Signature Form

Vendor/Company Name *	BETA Group, Inc.
First Name *	Joseph
Last Name *	D'Alesio
File Upload * (?)	PW-ENG#5-BETA MSA Contract TrafficTrans. and Utility R.1 _ 12.6.2021-6.30.2023.doc.pdf 799.82KB Exhibit C.pdf 24.99KB Exhibit E.pdf 14.17KB Attestation of Tax Compliance.pdf 18.09KB Certificate of Non-Collusion.pdf 11.39KB Affirmative Action EEO Receipt.pdf 13.91KB Certificate of Insurance.pdf 38.75KB Please add Certificate of Insurance, Contract Document sent to you via email and any other pertinent documents.
Please Add Signature *	
Verification Check *	☑ By checking this box I hereby verify that I am the above signee and that the information provided is true to the best of my knowledge

Department Head Approval

Department DPW

First Name * William

Last Name * Sedewitz

Name of Contract PW-FY22-ENG#5 MSA Traffic-Trans.-Utility-BETA 12.6.2021-6.30.2023

The following link will allow you to access documents associated with this case.

Click here to view documents

Contract Type Unit Price Contract

Requisition Number

Req Number Info

	Org #	Object #	Project #
Row 1			

DPW Comments DPW signed 9/12/2021.

Project Comments No Requisition - Master Service Agreement

Signature *

City of Framingham Contracts - CPO Signature

First Name * Jennifer

Last Name * Pratt

Please click on the link below to log into Laserfice and find documents for this contract

View Documents Here

Name of Contract Unit Price Contract

Requisition Number

Comments/Info for Other Depts (?) No Requisition - Master Service Agreement

Department Head Comments DPW signed 9/12/2021.

Purchasing Comments V#10467

PW-FY22-ENG #5 MSA Traffic/Transportation & Utility

Contract Effective 12/06/2021-06/30/2023

Unit Price Contract

Signature *

Legal Signature

First Name * Christopher

Last Name * Brown

Name of Contract PW-FY22-ENG#5 MSA Traffic-Trans.-Utility-BETA 12.6.2021-6.30.2023

The following link will allow you to access documents associated with this case.

To View Documents Click Here

Project Comments (?) No Requisition - Master Service Agreement

Department Head Comments DPW signed 9/12/2021.

Purchasing Comments V#10467

PW-FY22-ENG #5 MSA Traffic/Transportation & Utility

Contract Effective 12/06/2021-06/30/2023

Unit Price Contract

Legal Comments

Approved As To Form * ☑ Yes

Signature * Christopher L. Brown

Accounting Dept Head Signature

First Name * Richard

Last Name * Howarth

Name of Contract PW-FY22-ENG#5 MSA Traffic-Trans.-Utility-BETA 12.6.2021-6.30.2023

The following link will allow you to access documents associated with this case.

To View Documents Click Here

Contract Type

Comments/Info for Other Depts (?) No Requisition - Master Service Agreement

Department Head Comments DPW signed 9/12/2021.

Purchasing Comments V#10467

PW-FY22-ENG #5 MSA Traffic/Transportation & Utility

Contract Effective 12/06/2021-06/30/2023

Unit Price Contract

Legal Comments

Accounting Comments Funding availability will be confirmed by Issuance of Official City of Framingham Purchase Order(s)

Signature *

COO/Mayor Signature

First Name *	Thatcher
Last Name *	Kezer
Name of Contract	PW-FY22-ENG#5 MSA Traffic-Trans.-Utility-BETA 12.6.2021-6.30.2023

The following link will allow you to access documents associated with this case.

To View Documents Click Here

Project Comments (?)	No Requisition - Master Service Agreement
Department Head Comments	DPW signed 9/12/2021.
Legal Comments	
Accounting Comments	Funding availability will be confirmed by Issuance of Official City of Framingham Purchase Order(s)
Mayor/COO Comments	
Signature *	

EXHIBIT A

DETAILED SCOPE OF SERVICES
FOR
GENERAL SERVICES ENGINEERING ASSIGNMENTS

This document is an exhibit that is attached to and made a part of the Agreement dated the **6th day of December, 2021** between The City of Framingham (the "City") and **BETA Group, Inc.** ("the Consultant").

CONSULTANT'S General Engineering Services described in Section 2.0 of this Agreement are amended and supplemented as follows:

The Scope of Services will be as requested by CITY and accepted by CONSULTANT for each assignment. The services requested will be defined in a Letter of Understanding for each Task Order. The nature of the general services that CONSULTANT will provide under this contract may include but in not necessarily limited to the following:

SCOPE OF SERVICES

Traffic/Transportation

1. Recommend and review traffic and roadway improvements, schematic design of multi-modal and streetscape improvements, collection of data, analysis, and public presentations on such topics.
2. Prepare plans and specifications associated with the design of streetscape improvement projects, including geometric improvements, traffic signal design, accessible wheelchair ramps and sidewalks, traffic calming, street lighting design, striping plans, parking layouts, signage plans.
3. Prepare right-of-way and layout plans. Selected consultant(s) shall have the ability to identify project constraints (existing underground and above ground utilities, necessary street layout modifications, temporary and permanent easements, etc.).
4. Prepare intersection-level traffic studies, including warrants for traffic control devices for pedestrian and bicycle crossings utilizing current best practices from a variety of different design guidelines and resources.
5. Perform site analysis including pedestrian, bicycle, parking, traffic, transit and related utilization and demand studies.
6. Surveying and mapping / GIS.
7. Geotechnical assessment and analysis.
8. Environmental assessment and analysis including wetlands permitting and Licensed Site Professional (LSP) services.
9. Management of asbestos-cement pipe.
10. Water distribution piping design (in the event of utility conflicts).
11. Sewer collection piping design (in the event of utility conflicts).
12. Stormwater drainage improvements with a focus on best management practices and low impact development techniques as outlined in the Massachusetts Stormwater Handbook.
13. Provide temporary and permanent easement acquisition assistance including title examination, appraisals and preparation of documents to be filed at the Registry of Deeds.
14. Bidding assistance in compliance with MGL 30 §39M, 30B, and 149, as appropriate.

Project Management Services may include, but are not limited to, managing the project through all phases, including:

1. Preliminary engineering and planning studies.
2. Assistance with state and federal funding when opportunities allow.
3. Assistance securing all necessary permits, such as Orders of Conditions issued by the local Conservation Commission, MADEP or MADOT permits.
4. Construction services to include Resident Engineering and Construction Administration, construction documentation, submittal review, change order recommendations, and preparation of tie-cards and As-Builts.

Utility

Utility project needs may include any of a broad range of services, including those related to water distribution piping, water pump stations, wastewater collection piping, wastewater pump stations and drainage improvements. The scope of each project will include obtaining approvals and competing all paperwork necessary to comply with all local, state and federal requirements.

1. Surveying and Mapping/GIS
2. Regulatory compliance support
3. Geotechnical assessment and analysis
4. Environmental assessment and analysis including wetlands permitting and Licensed Site Professional (LSP) services
5. Management of asbestos-cement pipe
6. Water distribution piping design
7. Sewer collection piping design
8. Water pumping station design
9. Wastewater pumping station design
10. Electrical engineering to support water and wastewater pumping station designs
11. Mechanical engineering to support water and wastewater pumping station designs
12. Supervisory Control and Data Acquisition (SCADA) design
13. Water distribution and wastewater collection planning and asset management
14. Hydrologic/Hydraulic modeling
15. Water storage design
16. Stormwater drainage improvements
17. Value Engineering, Owner's Project Manager and/or third party engineering review
18. Utility easement acquisition assistance including title examination, appraisals and preparation of documents to be filed at the registry of deeds
19. Bidding assistance in compliance with MGL 30 §39M, 30B, and 149, as appropriate

Project Management Services may include, but are not limited to, managing the project through all phases, including:

1. Preliminary engineering and planning studies.
2. Assistance with state and federal funding when opportunities allow.
3. Assistance securing all necessary permits, such as Orders of Conditions issued by the local Conservation Commission, MADEP or MADOT permits.

4. Construction services to include Resident Engineering and Construction Administration, construction documentation, submittal review, change order recommendations, and preparation of tie-cards and As-Builts.

COMPENSATION

For services under this Agreement CONSULTANT will bill CITY and CITY will pay CONSULTANT a fee based on CONSULTANT's Direct Labor Costs times a factor of 3.01, plus Reimbursable Expenses and charges for CONSULTANTS' services, unless another fee structure is agreed to for a specific assignment. CONSULTANT invoices will clearly identify the direct labor cost of individuals billing against a Task Order.

Reimbursable expenses for subconsultant resident engineering services will be billed by CONSULTANT to CITY and CITY will pay CONSULTANT a fee based on CONSULTANT's expenses for subconsultant resident engineering services times a factor of 1.07. CONSULTANT invoices will clearly identify subcontracted resident engineering fees when billing against a Task Order.

Reimbursable expenses include actual expenses incurred by CONSULTANT for such items including but not limited to transportation costs, printing, telephone, reproduction costs, and other reasonable expenses. CITY will pay CONSULTANT a fee based on CONSULTANT's expenses times a factor of 1.04.

For services of Resident Engineer/Resident Project Representative, CONSULTANT will bill CITY and CITY will pay CONSULTANT a fee based on CONSULTANT's Direct Labor Costs times a factor of 3.01. Consultant invoices will clearly identify the direct labor cost of Resident Engineer/Resident Project Representative when billing against a Task Order

Labor costs, including the 3.01 factor, will not exceed $275.00 per hour without the written authorization of CITY.

TIME OF COMPLETION

Consultant agrees to commence work under this Agreement immediately upon receipt of an executed copy of each Letter of Understanding. CONSULTANT shall use its best efforts to perform all services under this Agreement as expeditiously as is consistent with professional skill and care and the orderly progress of the work. The duration of this contract is for **Five Hundred and Seventy-One (571) Calendar Days (December 6, 2021-June 30, 2023)**.

III-17b. Fee Breakdown

EXHIBIT A

Of Agreement Between The City Of Framingham and Engineer/Architect for Professional Construction Services

FURTHER DESCRIPTION OF CONSULTANT'S SERVICES AND RELATED MATTERS

This document is an Exhibit that is attached to and made a part of the Agreement dated the **_____ day of _____, 2022** between The City of Framingham (the "City") and BETA Group, Inc. ("the Consultant").

Consultant's Services described in Section 2.0 of this Agreement are amended and supplemented as follows:

SCOPE OF SERVICES:

Construction Services
Construction services shall be provided for the replacement of the Worcester Road Sewer Pumping Station. It is anticipated to take approximately thirty months to complete the project.

Construction Services include construction oversight, assisting in review of Shop Drawings, attending preconstruction and construction progress meetings, preparing meeting minutes, review and approval of payment requisitions, review of change order requests, preparing and recommending change orders, review of Requests for Information (RFIs), and conducting site visits.

Construction Services also includes reviewing and approving samples, test results, inspections and Shop Drawings that are in compliance with the Contract Documents, reviewing and determining acceptability of deviations from specifications, substitute materials and equipment in consultation with City's Project Manager, making recommendation regarding such to City Project Manager in support of his/her final approval or rejection of such deviations or substitutions. Copies of field notes, calculations, photographs, etc. will be made available to the City's Project Manager upon request. Any contractor submittals and documentation of correspondence regarding such will be available upon request for review by City's Project Manager, with a copy of the current updated submittal status log provided electronically to City's Project Manager on a weekly basis. Resident Daily Reports will be made available upon request for review by City's Project Manager, with copies of the Reports being provided to the City's Project Manager on a weekly basis.

Construction Services include construction overview, coordinating the Contractors weekly updates to the construction schedule, assisting in review of shop drawings, attending preconstruction and construction progress meetings, preparing meeting minutes, review and approval of payment requisitions, coordination of SRF submittal paperwork, review of change order requests, preparing and recommending change orders, review of Requests for Information (RFIs), maintenance of a Web-based Document Repository, conducting site visits, attending traffic management meetings as necessary, and preparing documentation necessary required by the SRF funding.

The construction period of eight hundred and sixty (860) calendar days is anticipated, including the the waiting period for long lead-time equipment. We assume construction of the pump station will continue through the winter period of 2024 & 2025. The fee proposal presented is based on an active construction period of five hundred and ninety (590) working days for the Worcester Road Wastewater Pump Station. The following items are the Construction Services assumptions and exclusions:

1. Attend and facilitate one (1) project kickoff meeting, prepare agenda, and meeting minutes.
2. Attend one (1) preconstruction meeting, prepare agenda and meeting minutes.
3. Organize and attend up to ninety-six (96) construction progress meetings, prepare agenda and meeting minutes.
4. Attend one (1) start up meeting in the spring of 2023, prepare agenda and meeting minutes.
5. Attend two (2) end-of-season meetings
6. Attend one (1) final payment meeting
7. Attend one (1) Change Order meeting
8. Attend one (1) "lessons learned" meeting.
9. Attend two (2) site meetings with Conservation – one (1) pre-construction meeting and one (1) post-construction meeting prior to preparing and submitting a Certificate of Compliance to the Conservation Commission
10. Attend up to two (2) Traffic Management meetings.
11. Conduct up to two (2) reviews per shop drawing submittal.
12. Attend startup and testing of the Worcester Road Wastewater Pumping Station. It is assumed startup will take one week.
13. Attend equipment and systems training. It is assumed training will take one week.
14. Make recommendation to City for declaration of substantial completion within 14 calendar days of Contractor's written request.
15. Conduct an inspection to determine Substantial Completion and prepare a punch list.
16. Conduct a final inspection upon completion of the punch-list.

Environmental Services

BETA will provide specific environmental services to assist the City in managing and properly disposing excess soil, asbestos containing materials, and PCB abatement, including filings and reporting to MassDEP and EPA identified below. These services include:

1. Observation of soil sampling of excess soil for analytical testing required for contaminant identification and proper disposal. Soil sampling observation services will be provided for up to three (3) sampling sessions.
2. Review of Contractor-prepared applications for soil disposal to receiving facilities and coordination with City for execution of waste profiles / manifests. Up to three (3) disposal applications will be reviewed.
3. Periodic field-screening of excavations for potential contamination. Soils will be screened for the presence of total volatile organic compounds (TVOC) using a photoionization dectector (PID) calibrated to measure TVOCs as benzene in parts per million by volume (ppm_v). Field screening services will be provided for up to eight (8) eight-hour workdays.
4. Preparation and filing of up to one (1) Utility-Related Abatement Measure (URAM) Plan and subsequent Closure Report upon identification of contaminated soil and/or groundwater.
5. Preparation and filing of up to three (3) URAM status reports affiliated with the above referenced URAM.
6. Monitoring of asbestos abatement by a Certified Asbestos Inspector for the removal, handling, and disposal of AC containing materials for potential asbestos-containing material (ACM). Monitoring services shall be provided for up to two (2) eight-hour workdays, each scheduled at least 48 hours in advance.
7. Monitor compliance with the City's asbestos Standard Operating Procedures (SOP), as applicable to the Contract, and complete the City's asbestos SOP training (BETA Project Manager and Head Resident Representative).
8. Review up to two (2) submissions of the Contractor's Asbestos Work Plan by a Certified Asbestos Designer.
9. Review up to two (2) submissions of the Contractor's PCB abatement work plan.
10. Provide onsite monitoring of PCB abatement activities for up to thirty (30) 8-hour workdays by an environmental professional with 40-hour HAZWOPER training.

11. Complete confirmatory PCB sampling up to five (5) 8-hour workdays. Sampling will include up to 180 confirmatory samples.
12. A PCB abatement completion report will be completed and submitted to the EPA.

Excluded Services

BETA can provide additional environmental monitoring services at the City's request as an Amendment to the Agreement. BETA's services currently do not include:

1. Observation, monitoring, notification, or plan preparation services outside of those designated above.
2. Soil/groundwater sampling and/or laboratory analysis beyond those noted above.
3. Asbestos abatement activities

Resident Representative Services

Resident Representative Services include providing full-time resident observation for the duration of the project. Resident Representatives shall conduct their operations in accordance with the Resident Engineering Duties outlined in the City's Capital Improvement Program (CIP) guide, dated April 2017, where applicable. Resident Services will include providing daily reports of the Contractor's progress and compliance of work, monthly progress payment requests, and change orders, as necessary.

A total of three hundred (300) crew-days for resident observation have been used to estimate the fee for this task. All Resident Representatives for this project shall be approved by the City's Project Manager prior to the commencement of the project. The City shall be notified and approve of any changes in resident observation services prior to the change. Unless otherwise approved in writing by the City's Chief Engineer, all Resident Representatives shall have completed the 8-hour OSHA Class II Asbestos-Cement Pipe (ACP) Worker Safety training and the City's asbestos standard operating procedures (SOP) training.

Project Closeout

BETA will provide specific project closeout services for the project. These services include:

1. Preparation of draft record drawings. One (1) draft hardcopy and one (1) electronic copy (Adobe PDF) shall be submitted for the City's review and comment. Draft record drawings will be submitted to the City within 60 calendar days after Substantial Completion of the construction contract.
2. Preparation of draft water and sewer service tie cards. One (1) draft hardcopy of each water and sewer service tie card shall be submitted for the City's review and comment. Service tie cards shall be prepared in accordance with the requirements outlined in the Department of Public Works Capital Improvement Guide (CIP Guide), dated April 2017. Draft water and sewer service tie cards will be submitted to the City within 60 calendar days after Substantial Completion of the construction contract. Water and sewer service tie cards shall be neatly drawn and typed with an electronic program (e.g. AutoCAD).
3. Upon receipt of the City's comments on the draft record drawings / service tie cards, BETA will prepare the final record drawings and service tie-cards. Deliverables include:
    a. three (3) set of hardcopy record drawings, stamped by a Professional Engineer
    b. one (1) set of mylar record drawings, stamped by a Professional Engineer
    c. one (1) set of electronic record drawings, Adobe PDF format, stamped by a Professional Engineer
    d. one (1) set of electronic record drawings, AutoCAD 2017 format (and associated support files), unstamped
    e. one (1) set of hardcopy water and sewer service tie cards
    f. one (1) set of electronic water and sewer service tie cards, one file per service, TIFF file format.

4. Preparation of a Certificate of Compliance Application to close out the Order of Conditions.
5. Preparation of a Project Documentation Disk, in accordance with the CIP Guide, dated April 2017. Electronic "as-built" files identified above and previously provided will also be included in this Disk. All project related documents from the electronic document management system shall be stored on the project disk(s).

COMPENSATION:

For services performed, the City will pay the Engineer on a time charge plus expense basis monthly, as charges accrue, the sum of the following:

Employee Services direct cost times a multiplier of 3.01

Billings will be based on a 3.01 multiplier on Employee Services direct labor, direct labor being defined as the actual hourly rate without any other additional costs paid to personnel engaged directly to perform services under this agreement.

Labor costs, including the 3.01 factor, will not exceed $250.00 per hour without the written authorization of the City.

Sub-Consultant cost times a multiplier of 1.07

Billings will be based on a 1.07 multiplier on sub-consultant costs.

Non-salary expenses times a multiplier of 1.04

Non-salary expenses include reasonable cost of transportation, permits and local fees.

The scope and fee are based on an estimate of the level of effort. The total compensation shall not exceed **$_____**. The fee will not increase unless an Amendment to the Agreement is executed beforehand.

III-17c. Subcontracts

Subcontracts will be provided at a later date.

III-17d. Disadvantaged Business Enterprise

LETTER OF INTENT FOR PROFESSIONAL SERVICES

This form is to be completed by the MBE and WBE and must be submitted by the Prime Consultant as part of the proposal. A separate form must be completed for each MBE and WBE involved in the project.

Project Title: **Framingham CWSRF-6999 WRPS Pump Station Replacement** Project Location: **Framingham, MA**

TO: **BETA Group, Inc.**
(Prime Consultant)

FROM: **Absolute Resource Associates**
(Please Indicate Status [ ] MBE or [X] WBE)

° I/we intend to perform work in connection with the above project as (check one):

[ ] An individual
[ ] A corporation
[ ] Other (explain): _____
[ ] A partnership
[ ] A joint venture with: _____

° It is understood that if you are awarded the contract, you intend to enter into an agreement to perform the activity described below for the prices indicated.

WBE PARTICIPATION

Description of Activity	Date of Project Commencement	$ Commitment	% Total Engineering Cost
Laboratory Testing Services.	**10/1/2022**	**$20,000**	**1.0%**

° The undersigned certify that they will enter into a formal agreement upon execution of the contract for the above referenced project.

PRIME CONSULTANT		**WBE**	
Alan J Lennison 8/22/2022		6/22/22	
(Authorized Original Signature)	Date	(Authorized Original Signature)	Date
ADDRESS:	701 George Washington Highway Lincoln, RI, 02865	ADDRESS:	124 Heritage Ave, Unit 16 Portsmouth, NH 03801
TELEPHONE #:	401-333-2382	TELEPHONE #:	603-436-2001
FEIN:	05-0398907	FEIN:	

ORIGINALS:

- **Compliance Mgr. City/Town Project Location**
- **Mass DEP Program Manager for DEP's CRU Director**

*** Attach a copy of current (within 2 years) SOMWBA Certification**

If it is determined that one or more of the MBE/WBE subcontractors as submitted by the Prime Consultant on this form is not SOMWBA certified or certified by the Local Government Unit in accordance with the provisions of Executive Order 237, the Prime Consultant shall have an opportunity, following notification, to either find a certified MBE/WBE subcontractor to perform work equal to or greater than that of the uncertified subcontractor or to submit a waiver request.

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Secretary & CEO

massDOT
Massachusetts Department of Transportation

June 13, 2022

Ms. Sue Sylvester
Absolute Resource Associates, LLC
124 Heritage Avenue, Suite 16
Portsmouth, NH 03801

This letter serves as sole and exclusive proof of your firm's DBE certification

Dear Ms. Sylvester:

Congratulations! The Massachusetts Unified Certification Program (MassUCP), is pleased to notify you that we have renewed your company as a disadvantaged business enterprise (DBE). Your company continues to be assigned **NAICS Code(s) 541380 and 541620** with the certified business description of **ENVIRONMENTAL TESTING LAB OF SOILS AND WATER** and will remain listed in our certified business directory.

As a DBE, you must inform MassUCP in writing of any change in circumstances affecting your ability to meet size, disadvantaged status, ownership, control requirements or any material change in the information provided in your application form. Changes in management responsibility among members of a limited liability company are covered by this requirement. You must attach supporting documentation describing in detail the nature of such changes. The notice must take the form of an affidavit sworn to by the owners of the firm before a person who is authorized by state law to administer oaths or of an un-sworn declaration executed under penalty of perjury of the laws of the United States. You must provide the written notification within 30 days of the occurrence of the change. If you fail to make timely notification of such a change, you will be deemed to have failed to cooperate under 49 CFR 26.109(c).

To renew your firm's DBE certification and if it continues to meet the applicable criteria, on or before your firm's certification anniversary date of **June 6, 2023** and each year thereafter, please send the MassUCP the following documents:

(1) No Change Affidavit **(will be sent with reminder letter)**

(2) A **signed** copy of your company's, and all of its affiliates', U.S. Tax Returns including all schedules and attachments for the year(s) indicated.

(3) A **signed** copy of your personal tax returns for year(s) indicated.

(4) If a sole proprietor, **a signed** copy of your Schedule C. for year(s) indicated.

(5) A statement of the **number only** of full- and part-time employees (including owner) for each year indicated.

Ten Park Plaza, Suite 2600-B, Boston, MA 02116
Tel: 857-368-8656
www.mass.gov/unified-certification-program-ucp

If you have changed your company name or address, please notify Ms. Nedra D. White, in writing on the company's letterhead in order to update your state vendor file.

MassUCP reserves the right to monitor, perform random spot checks, re-evaluate the firm or revoke the firm's certification if it no longer meets the certification criteria.

During the period of your certification, if you have further questions regarding annual review, please contact Nedra D. White, Director, MassUCP at nedra.d.white@dot.state.ma.us or (857)368-8659.

Very truly yours,

Nedra D. White, Director
DBE Certification Program (MassUCP)

THE COMMONWEALTH OF MASSACHUSETTS
Executive Office for Administration and Finance
SUPPLIER DIVERSITY OFFICE
One Ashburton Place, Suite 1017
Boston, MA 02108-1552
Charles D. Baker
Governor
Karyn E. Polito
Lieutenant Governor
Michael J. Heffernan
Secretary
William M. McAvoy
Executive Director

June 17, 2021

Ms. Sue Sylvester
Absolute Resource Associates, LLC
124 Heritage Avenue, Suite 16
Portsmouth, NH 03801

Dear Ms. Sylvester:

Congratulations! Your firm has been renewed as a woman business enterprise (WBE) with the Supplier Diversity Office ('SDO') under the business description of **ENVIRONMENTAL TESTING LAB OF SOILS AND WATER**. Your firm will be listed in the SDO Certified Business Directory and the Massachusetts Central Register under this description. **This letter serves as the sole proof of your SDO certification**. Your designation as a WBE is valid for three (3) years unless revoked pursuant to 425 CMR 2.00.

Your firm's next renewal date is June 06, 2024. SDO will send written renewal notices to your business and/or e-mail address on file approximately thirty (30) business days prior to your firm's three (3) years certification anniversary. Additionally, every six (6) years, certified companies that wish to remain certified may undergo a substantive review which will require certain updated supporting documentation.

SDO also reserves the right to monitor your firm and to perform random spot checks to ensure the firm continues to meet the certification criteria. Your firm is required to notify the SDO in writing of any material changes. Examples include but are not limited to changes in its business description, as well as business phone number, fax number, business' physical location, webpage and e-mail addresses. Other reportable changes include business structure, ownership (the business is sold or transferred), control and outside employment. You also have a duty to report decertification and debarment notices from this or any other jurisdiction. Failure to abide by the continuing duty requirements shall constitute grounds for the firm's decertification.

We look forward to working with you and your firm to maximize its business opportunities. Should you have any questions, please feel free to contact us via email at wsdo@state.ma.us.

Sincerely,

William M. McAvoy
Executive Director

LETTER OF INTENT FOR PROFESSIONAL SERVICES

This form is to be completed by the MBE and WBE and must be submitted by the Prime Consultant as part of the proposal. A separate form must be completed for each MBE and WBE involved in the project.

Project Title: **Framingham CWSRF-6999 WRPS Pump Station Replacement** Project Location: **Framingham, MA**

TO: **BETA Group, Inc.**
(Prime Consultant)

FROM: **JK Muir, LLC**
(Please Indicate Status [ ] MBE or [X] WBE)

º I/we intend to perform work in connection with the above project as (check one):

[ ] An individual
[X] A corporation
[ ] Other (explain):
[ ] A partnership
[ ] A joint venture with:

º It is understood that if you are awarded the contract, you intend to enter into an agreement to perform the activity described below for the prices indicated.

MBE/WBE PARTICIPATION

Description of Activity	Date of Project Commencement	$ Commitment	% Total Engineering Cost
Construction Phase Assistance, Inspection, Startup and testing.	**10/1/2022**	**$70,000**	**3.5%**

º The undersigned certify that they will enter into a formal agreement upon execution of the contract for the above referenced project.

PRIME CONSULTANT		**MBE/WBE**	
Alan J Shannon 6/13/2022		Jennifer Muir 6/11/22	
(Authorized Original Signature) Date		(Authorized Original Signature) Date	
ADDRESS:	701 George Washington Highway Lincoln, RI, 02865	ADDRESS:	~~21 New Britain Ave, Suite 204 Rocky Hill, CT, 06067~~ 2275 Silas Deane Highway, Rocky Hill CT 06067
TELEPHONE #:	401-333-2382	TELEPHONE #:	860-249-0989
FEIN:	05-0398907	FEIN:	26-3652124

ORIGINALS:

- **º Compliance Mgr. City/Town Project Location**
- **º Mass DEP Program Manager for DEP's CRU Director**

*** Attach a copy of current (within 2 years) SOMWBA Certification**

If it is determined that one or more of the MBE/WBE subcontractors as submitted by the Prime Consultant on this form is not SOMWBA certified or certified by the Local Government Unit in accordance with the provisions of Executive Order 237, the Prime Consultant shall have an opportunity, following notification, to either find a certified MBE/WBE subcontractor to perform work equal to or greater than that of the uncertified subcontractor or to submit a waiver request.

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Acting Secretary & CEO

massDOT
Massachusetts Department of Transportation
DBE Certification Office | MassUCP

September 23, 2021

Ms. Jennifer Muir
JKMuir, LLC
2275 Silas Deane Highway
Rocky Hill, CT 06067

This letter serves as sole and exclusive proof of your firm's DBE certification

Dear Ms. Muir:

Congratulations! The Massachusetts Unified Certification Program (MassUCP), is pleased to notify you that we have renewed your company as a disadvantaged business enterprise (DBE). Your company continues to be assigned **NAICS Code(s) 541620 and 541690** with the certified business description of **ENVIRONMENTAL AND ENERGY ENGINEERING AND CONSULTING SERVICES TO THE ENVIRONMENTAL, WATER, AND WASTEWATER INDUSTRIES** and will remain listed in our certified business directory.

As a DBE, you must inform MassUCP in writing of any change in circumstances affecting your ability to meet size, disadvantaged status, ownership, control requirements or any material change in the information provided in your application form. Changes in management responsibility among members of a limited liability company are covered by this requirement. You must attach supporting documentation describing in detail the nature of such changes. The notice must take the form of an affidavit sworn to by the owners of the firm before a person who is authorized by state law to administer oaths or of an un-sworn declaration executed under penalty of perjury of the laws of the United States. You must provide the written notification within 30 days of the occurrence of the change. If you fail to make timely notification of such a change, you will be deemed to have failed to cooperate under 49 CFR 26.109(c).

To renew your firm's DBE certification and if it continues to meet the applicable criteria, on or before your firm's certification anniversary date of **September 9, 2022**, and each year thereafter, please send the MassUCP the following documents:

(1) No Change Affidavit **(will be sent with reminder letter)**

(2) A **signed** copy of your company's, and all of its affiliates', U.S. Tax Returns including all schedules and attachments for the year(s) indicated.

(3) A **signed** copy of your personal tax returns for years(s) indicated.

(4) If a sole proprietor, **a signed** copy of your Schedule C for year(s) indicated.

(5) A statement of the **number only** of full and part-time employees (including owner) for each year indicated.

Ten Park Plaza, Suite 2600-B, Boston, MA 02116
Tel: 857-368-8656
www.mass.gov/unified-certification-program-ucp

If you have changed your company name or address, please notify Ms. Nedra D. White, in writing on the company's letterhead in order to update your state vendor file.

MassUCP reserves the right to monitor, perform random spot checks, re-evaluate the firm or revoke the firm's certification if it no longer meets the certification criteria.

During the period of your certification, if you have further questions regarding annual review, please contact Ms. Nedra D. White, Director, MassUCP at (857) 368-8659.

Very truly yours,

Nedra D. White, Director
MassUCP/DBE Certification Program

THE COMMONWEALTH OF MASSACHUSETTS
Executive Office for Administration and Finance
OPERATIONAL SERVICES DIVISION
One Ashburton Place, Suit 1017
Boston, MA 02108-1552
Charles D. Baker
Governor
Karyn E. Polito
Lieutenant Governor
Michael J. Heffernan
Secretary
Gary J. Lambert
Assistant Secretary for Operational Services Division

August 2, 2019

Ms. Jennifer Muir
JKMuir, LLC
2275 Silas Deane Highway
Rocky Hill, CT 06067

Dear Ms. Muir:

Congratulations! Your firm has been renewed as a woman business enterprise (WBE) with the Supplier Diversity Office ('SDO') under the business description of **ENVIRONMENTAL AND ENERGY ENGINEERING AND CONSULTING SERVICES TO THE ENVIRONMENTAL, WATER, AND WASTEWATER INDUSTRIES**. Your firm will be listed in the SDO Certified Business Directory and the Massachusetts Central Register under this description. **This letter serves as the sole proof of your SDO certification**. Your designation as a WBE is valid for three (3) years unless revoked pursuant to 425 CMR 2.00.

Your firm's next renewal date is August 05, 2022. SDO will send written renewal notices to your business and/or e-mail address on file approximately thirty (30) business days prior to your firm's three (3) years certification anniversary. Additionally, every six (6) years, certified companies that wish to remain certified may undergo a substantive review which will require certain updated supporting documentation.

SDO also reserves the right to monitor your firm and to perform random spot checks to ensure the firm continues to meet the certification criteria. Your firm is required to notify the SDO in writing of any material changes. Examples include but are not limited to changes in its business description, as well as business phone number, fax number, business' physical location, webpage and e-mail addresses. Other reportable changes include business structure, ownership (the business is sold or transferred), control and outside employment. You also have a duty to report decertification and debarment notices from this or any other jurisdiction. Failure to abide by the continuing duty requirements shall constitute grounds for the firm's decertification.

We look forward to working with you and your firm to maximize its business opportunities. Should you have any questions, please feel free to contact us via email at wsdo@state.ma.us.

Sincerely,

William M. McAvoy
Deputy Assistant Secretary and
Chief Legal Counsel

LETTER OF INTENT FOR PROFESSIONAL SERVICES

This form is to be completed by the MBE and WBE and must be submitted by the Prime Consultant as part of the proposal. A separate form must be completed for each MBE and WBE involved in the project.

Project Title: **Framingham CWSRF-6999 WRPS Pump Station Replacement** Project Location: **Framingham, MA**

TO: **BETA Group, Inc.**
(Prime Consultant)

FROM: **Bryant Associates, Inc.**
(Please Indicate Status [X] MBE or [ ] WBE)

° I/we intend to perform work in connection with the above project as (check one):

[ ] An individual
[X] A corporation
[ ] Other (explain): _____
[ ] A partnership
[ ] A joint venture with: _____

° It is understood that if you are awarded the contract, you intend to enter into an agreement to perform the activity described below for the prices indicated.

MBE/WBE PARTICIPATION

Description of Activity	Date of Project Commencement	$ Commitment	% Total Engineering Cost
Construction Phase Assistance, Inspection, Startup and testing.	**10/1/2022**	**$84,000**	**4.2%**

° The undersigned certify that they will enter into a formal agreement upon execution of the contract for the above referenced project.

PRIME CONSULTANT		**MBE**	
Alan J Lennison	6/22/2022	Todd E	6/21/22
(Authorized Original Signature)	Date	(Authorized Original Signature)	Date
		Todd E. Brayton, PE/Director of Operations-RI	
ADDRESS:	701 George Washington Highway Lincoln, RI, 02865	ADDRESS:	640 George Washington Hwy, Bldg C, Ste 100 Lincoln, RI 02865
TELEPHONE #:	401-333-2382	TELEPHONE #:	401-834-1063
FEIN:	05-0398907	FEIN:	04-2595252

ORIGINALS:

- **Compliance Mgr. City/Town Project Location**
- **Mass DEP Program Manager for DEP's CRU Director**

*** Attach a copy of current (within 2 years) SOMWBA Certification**

If it is determined that one or more of the MBE/WBE subcontractors as submitted by the Prime Consultant on this form is not SOMWBA certified or certified by the Local Government Unit in accordance with the provisions of Executive Order 237, the Prime Consultant shall have an opportunity, following notification, to either find a certified MBE/WBE subcontractor to perform work equal to or greater than that of the uncertified subcontractor or to submit a waiver request.

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Secretary & CEO

massDOT
Massachusetts Department of Transportation
DBE Certification Office | MassUCP

February 14, 2022

Mr. Jeffrey C. Bryant
Bryant Associates, Inc.
90 Canal Street, Suite 301
Boston, MA 02114-2127

This letter serves as sole and exclusive proof of your firm's DBE certification

Dear Mr. Bryant:

Congratulations! The Massachusetts Unified Certification Program (MassUCP), is pleased to notify you that we have renewed your company as a disadvantaged business enterprise (DBE). Your company continues to be assigned **NAICS Code(s) 237110, 541990, 236220, 541330, 237310, 237990 and 541370** with the certified business description of **CIVIL ENGINEERING CONSULTING, SPECIALIZING IN TRANSPORTATION, CIVIL, SITE, STRUCTURAL, TRAFFIC, AND MARINE ENGINEERING, SURVEYING AND MAPPING, MARINE SURVEYING AND CONSTRUCTION MANAGEMENT** and will remain listed in our certified business directory.

As a DBE, you must inform MassUCP in writing of any change in circumstances affecting your ability to meet size, disadvantaged status, ownership, control requirements or any material change in the information provided in your application form. Changes in management responsibility among members of a limited liability company are covered by this requirement. You must attach supporting documentation describing in detail the nature of such changes. The notice must take the form of an affidavit sworn to by the owners of the firm before a person who is authorized by state law to administer oaths or of an un-sworn declaration executed under penalty of perjury of the laws of the United States. You must provide the written notification within 30 days of the occurrence of the change. If you fail to make timely notification of such a change, you will be deemed to have failed to cooperate under 49 CFR 26.109(c).

To renew your firm's DBE certification and if it continues to meet the applicable criteria, on or before your firm's certification anniversary date of **February 16, 2023**, and each year thereafter, please send the MassUCP the following documents:

(1) No Change Affidavit **(will be sent with reminder letter)**

(2) A **signed** copy of your company's, and all of its affiliates', U.S. Tax Returns including all schedules and attachments for the year(s) indicated.

(3) A **signed** copy of your personal tax returns for years(s) indicated.

(4) If a sole proprietor, **a signed** copy of your Schedule C for year(s) indicated.

(5) A statement of the **number only** of full and part-time employees (including owner) for each year indicated.

Ten Park Plaza, Suite 2600-B, Boston, MA 02116
Tel: 857-368-8656
www.mass.gov/unified-certification-program-ucp

If you have changed your company name or address, please notify Ms. Nedra D. White, in writing on the company's letterhead in order to update your state vendor file.

MassUCP reserves the right to monitor, perform random spot checks, re-evaluate the firm or revoke the firm's certification if it no longer meets the certification criteria.

During the period of your certification, if you have further questions regarding annual review, please contact Ms. Nedra D. White, Director, MassUCP at (857) 368-8659.

Very truly yours,

Nedra D. White, Director
MassUCP/DBE Certification Program

THE COMMONWEALTH OF MASSACHUSETTS
Executive Office for Administration and Finance
OPERATIONAL SERVICES DIVISION
One Ashburton Place, Suit 1017
Boston, MA 02108-1552
Charles D. Baker
Governor
Karyn E. Polito
Lieutenant Governor
Michael J. Heffernan
Secretary
Gary J. Lambert
Assistant Secretary for Operational Services Division

February 19, 2020

Mr. Jeffrey C. Bryant
Bryant Associates, Inc.
90 Canal Street, Suite 301
Boston, MA 02114-2127

Dear Mr. Bryant:

Congratulations! Your firm has been renewed as a minority business enterprise (MBE) with the Supplier Diversity Office ('SDO') under the business description of **CIVIL ENGINEER CONSULTING, SPECIALIZING IN TRANSPORTATION, CIVIL, SITE, STRUCTURAL, TRAFFIC, AND MARINE ENGINEERING, SURVEYING AND MAPPING, MARINE SURVEYING AND CONSTRUCTION MANAGEMENT**. Your firm will be listed in the SDO Certified Business Directory and the Massachusetts Central Register under this description. **This letter serves as the sole proof of your SDO certification**. Your designation as a MBE is valid for three (3) years unless revoked pursuant to 425 CMR 2.00.

Your firm's next renewal date is February 16, 2023. SDO will send written renewal notices to your business and/or e-mail address on file approximately thirty (30) business days prior to your firm's three (3) years certification anniversary. Additionally, every six (6) years, certified companies that wish to remain certified may undergo a substantive review which will require certain updated supporting documentation.

SDO also reserves the right to monitor your firm and to perform random spot checks to ensure the firm continues to meet the certification criteria. Your firm is required to notify the SDO in writing of any material changes. Examples include but are not limited to changes in its business description, as well as business phone number, fax number, business' physical location, webpage and e-mail addresses. Other reportable changes include business structure, ownership (the business is sold or transferred), control and outside employment. You also have a duty to report decertification and debarment notices from this or any other jurisdiction. Failure to abide by the continuing duty requirements shall constitute grounds for the firm's decertification.

We look forward to working with you and your firm to maximize its business opportunities. Should you have any questions, please feel free to contact us via email at wsdo@state.ma.us.

Sincerely,

William M. McAvoy
Deputy Assistant Secretary and
Chief Legal Counsel

III-17e. BETA Statement of Tax Compliance

STATEMENT OF TAX COMPLIANCE

Under the laws of the Commonwealth of Massachusetts, Chapter 233; Section35, Acts of 1983, the LGU Consultant Engineer is required to complete the following:

I, **Joseph D'Alesio** (Title), as **President** (Position) of **Beta Group, Inc.** (Business), whose principal place of business is located at **701 George Washington Hwy, Lincoln, RI 02865**, do hereby certify that the above named **BETA Group, Inc.** has complied with all laws of the Commonwealth of Massachusetts relating to taxes, in accordance with the provisions of Massachusetts General Laws, Chapter 62C, 49A, as amended.

Signed under the penalties of perjury this 29th day of Sept, 2022.

DATED: 9/29/2022

Joseph D'Alesio
(Authorized Signature)

III-18. Map of Project

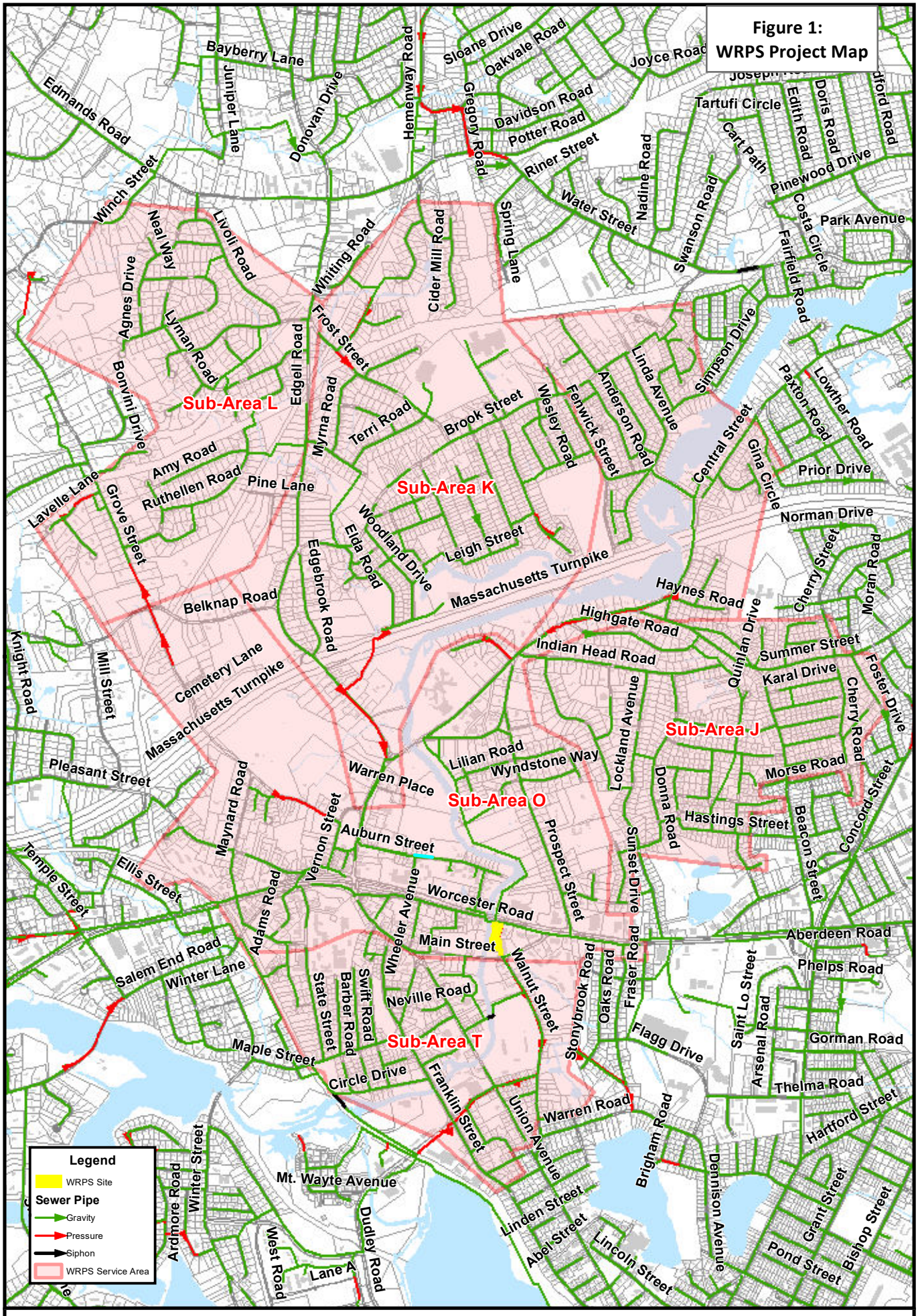


Figure 1:
WRPS Project Map
Sub-Area L
Sub-Area K
Sub-Area J
Sub-Area O
Sub-Area T
Bayberry Lane
Edmands Road
Juniper Lane
Donovan Drive
Hemenway Road
Sloane Drive
Oakvale Road
Joyce Road
Gregory Road
Davidson Road
Potter Road
Riner Street
Tartufi Circle
Cart Path
Edith Road
Doris Road
Pinewood Drive
Nadine Road
Swanson Road
Water Street
Spring Lane
Winch Street
Neal Way
Livoli Road
Agnes Drive
Lyman Road
Bonvini Drive
Whiting Road
Cider Mill Road
Frost Street
Edgell Road
Myrna Road
Terri Road
Brook Street
Wesley Road
Fenwick Street
Anderson Road
Linda Avenue
Simpson Drive
Fairfield Road
Costa Circle
Park Avenue
Paxton Road
Lowther Road
Prior Drive
Gina Circle
Central Street
Norman Drive
Cherry Street
Moran Road
Lavelle Lane
Grove Street
Amy Road
Ruthellen Road
Pine Lane
Elda Road
Woodland Drive
Leigh Street
Edgebrook Road
Belknap Road
Massachusetts Turnpike
Haynes Road
Highgate Road
Indian Head Road
Quinlan Drive
Summer Street
Karal Drive
Foster Drive
Cherry Road
Knight Road
Mill Street
Cemetery Lane
Massachusetts Turnpike
Lilian Road
Wyndstone Way
Lockland Avenue
Donna Road
Morse Road
Hastings Street
Beacon Street
Concord Street
Pleasant Street
Warren Place
Maynard Road
Vernon Street
Auburn Street
Prospect Street
Sunset Drive
Temple Street
Ellis Street
Adams Road
Wheeler Avenue
Worcester Road
Main Street
Walnut Street
Aberdeen Road
Phelps Road
Salem End Road
Winter Lane
State Street
Barber Road
Swift Road
Neville Road
Stonybrook Road
Oaks Road
Fraser Road
Saint Lo Street
Arsenal Road
Flagg Drive
Gorman Road
Maple Street
Circle Drive
Franklin Street
Union Avenue
Warren Road
Thelma Road
Hartford Street
Brigham Road
Dennison Avenue
Grant Street
Bishop Street
Pond Street
Lincoln Street
Abel Street
Linden Street
Mt. Wayte Avenue
Ardmore Road
Winter Street
West Road
Lane A
Dudley Road
Legend
WRPS Site
Sewer Pipe
Gravity
Pressure
Siphon
WRPS Service Area
This map is intended to support the inventory of real property of the City of Framingham. Map data should not be interpreted as the actual field survey data. This data should not be used for legal description or conveyance purposes.
City of Framingham, MA
Date:
August 2021
Scale: 1" = 600'
N
W
E
S
BETA
Document Path: J:\7385 - Framingham WRPS Improvements\DrawingFiles\GIS\Projects\Attachment A WRPS Project Map.mxd

III-19. Basic Design Data

Framingham, MA

Worcester Road Pump Station Replacement

Project 7385

May 2022

100-PERCENT DESIGN MEMORANDUM

701 George Washington Hwy
Lincoln, Rhode Island 02865
401.333.2382
www.BETA-Inc.com

Worcester Road Pump Station Replacement

Framingham, MA

Project 7385

100-PERCENT DESIGN MEMORANDUM

Prepared by: BETA GROUP, INC.
Prepared for: City of Framingham

May 2022

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1.0 INTRODUCTION

1.1 PURPOSE

The intent of this memorandum is to describe existing conditions related to the Worcester Road Pumping Station (WRPS) and to summarize the proposed 100-percent design.

To facilitate the review the 100-percent design is broken down into the following disciplines:

- Civil
- Architectural
- Structural
- Mechanical Process
- HVAC
- Plumbing
- Instrumentation and Control (I&C)
- Electrical
- Environmental

The following documents were referenced while preparing this memorandum:

- "Worcester Road Pump Station Elimination Project"; AECOM; September 22, 2017
- "Town of Framingham Wastewater Master Plan" by Stantec March 31,2017
- "Preliminary Design Report for the Worcester Road Pump Station Replacement Project"; Wright-Pierce.; June 2013
- "Final Comprehensive Wastewater Management Plan"; SEA; March 2008
- "Final Report on Odor and Corrosion Control Study of the Framingham Sewer System"; SEA; March 2002
- "Town of Framingham Master Plan"; Framingham Planning Board; August 2008
- "Population and Housing Demand Projections for Metro Boston"; Metropolitan Area Planning Council; January 2014
- "Economic Development Strategies; Phase 1, City of Framingham, MA"; RKG Associates; February 2019
- "Summary of U.S. Census Bureau's 2019 Population Estimates for Massachusetts Cities and Towns"; UMass Donahue Institute; May 2020

2.0 EXISTING CONDITIONS

2.1 GENERAL

The WRPS is located off the east bound lane of Route 9 between Main Street and Curve Street. The pump station site is located at 730 Worcester Road on a City-owned 2.61-acre parcel adjacent to the Sudbury River. Constructed in 1965 the building consists of a concrete substructure and a masonry block with brick veneer superstructure. The WRPS handles wastewater from approximately 28 percent of the City's sewered service area. The WRPS service area consists of a mixture of residential properties, businesses, commercial properties and institutional facilities.

Zoning for the WRPS and the surrounding properties is business. This is consistent with current property uses in the area. A strip mall abuts the WRPS to the east and a vehicle repair facility is located across the Sudbury River to the west.

The WRPS is constructed with a drywell/wet well configuration. The footprint of the drywell portion of the pump station measures approximately 41-feet by 23-feet. The drywell consists of an upper and a lower level. The upper level contains the main electrical panel, emergency power generators, and other ancillary equipment. The lower level contains three pumps, mechanical piping, chemical dosing pumps, and chemical storage. The building upper level can be accessed through a single door on the west side of the building off the front parking area. A double door on the east side of the building with an overhead beam is available for removing pumps and equipment. The wet well is located within a fenced area west of the drywell and measures approximately 18.5-feet long by 6-feet wide. Access to the wet well is off the rear parking area through two hatches.

The WRPS is equipped with two 50 horsepower (hp) electric pumps, each with a design capacity of approximately 2,500 gallons per minute (gpm). The pumps operate in a lead/lag configuration with both pumps required to meet current peak flows. The lead pump is manually selected by City operations staff, with no automatic alternation available. Pump speed and output can be controlled by variable speed drives. Pumps are turned on/off based on wet well levels measured with a bubbler type level control system. A third pump (Pump No. 3) is driven by a natural gas-fired engine via a right-angle drive engaged with a manual clutch. Pump No. 3 is manually operated when required during power outages. City Operations personnel have indicated that the existing electric pumps have historically handled all wet-weather wastewater flows (including site flooding) without the need for Pump No. 3.

The wet well is only equipped with passive ventilation. There are no measures to mechanically evacuate air and control the quality of air above the water surface. Means of odor control of the wet well vent is not present. A calcium nitrate solution (Bioxide) is added to the wet well to reduce odors, corrosion, and limit sulfide formation in the force main. The chemical feed system consists of two polyethylene storage tanks and three chemical feed pumps located in the lower level of the drywell.

Wastewater is pumped approximately 4,700 linear feet (LF) through a 16-inch diameter cast iron force main from the WRPS to the Farm Pond Interceptor at Mt. Wayte Avenue.

2.2 WRPS Wastewater Metering & Flow Estimates

2.2.1 2008 Comprehensive Wastewater Management Plan (CWMP) Inflow and Infiltration Analysis

As part of the CWMP, SEA conducted an Inflow and Infiltration (I/I) analysis of the entire City's wastewater collection system. As part of the analysis, the City's collection system was divided into 31 sub areas and a total of 36 flow meters were utilized to measure wastewater flows from March 15, 2003 to April 15, 2003. Out of the 31 sub areas metered, only five subareas (J, K, L, O, and T) discharge to the WRPS. A summary of the average daily flows (ADF) for the WRPS are shown in **Table 2-1**. Subsequent to completing the 2008 CWMP the western portion of sub-area T was re-directed to the Farm Pond interceptor, which decreased its contribution to the WRPS by approximately 25-percent.

Groundwater conditions were monitored weekly during the flow metering effort. Measurements at eleven piezometers throughout the City found groundwater levels above the sewer manhole inverts. Readings from USGS monitoring well MA-WKW 2R in Wayland, Massachusetts indicated that groundwater levels were above average during this timeframe. Having groundwater elevations above normal conditions should result in conservative infiltration estimates.

Table 2-1: 2003 Average Daily Flows			
Sub-Area	Exist Sanitary ADF (gpd)	Infiltration (gpd)	Total ADF (gpd)
J	146,000	75,900	221,900
K	60,000	81,800	141,800
L	80,000	56,700	136,700
O	463,000	122,100	585,100
T (75%)	133,500	76,875	210,375
Totals =	882,500	413,375	1,295,875
ADF from SEA CWMP, 2008.			

2.2.2 2013 Preliminary Design Report (PDR) Flow Metering

In the June 2013 PDR, prepared by Wright-Pierce, wastewater flows to the WRPS were estimated based on metering the influent gravity sewers between March and May of 2013. The metered average daily wastewater flow was determined to be 1.41 MGD. Typically, metering data would be compared to pump discharge flowmeter data. However, discharge flow data from the pump station was found to be unusable by Wright-Pierce for the following reasons.

- The City indicated that the ultrasonic transit time flowmeter had historically been unreliable. Based on a review of the flow meter user's manual this meter is not suitable for wastewater flow measurement.
- Wastewater flows could not be estimated based on pump runtimes since the pumps operate on variable frequency drives (VFDs).

Future wastewater flows presented in **Table 2-2** were obtained from the 2008 CWMP residential buildout flow estimates. Minimum dry weather nighttime wastewater flow between 12 am to 6am was attributed to infiltration within the WRPS service area. The 2013 PDR noted that historical peak wastewater flows did not occur during the metering period due to below average rainfall. This is accounted for in the estimated peak hourly wastewater flow by applying a peaking factor of 3.5 to the average daily sanitary flows and the future sanitary flows. The resulting design wastewater flow was approximately 5.4 MGD. Note, the contributory wastewater flow from the Kitteridge service area has been removed.

Table 2-2: 2013 PDR Estimate Future Flows	
WRPS	Proposed Flow
	gpd
Existing ADF	1,410,000
Future Additional ADF	512,725*
Total ADF	1,922,725
Infiltration	(557,590)
Sanitary ADF (only)	1,365,135
TR-16 Peaking Factor (sanitary flow)	3.5
Sanitary Peak Hourly Flow	4,777,972
I/I Contribution Flow	586,600
Total Peak Hourly Flow	**5,364,572**
Estimated flows from Wright-Pierce PDR, June 2013. *Flows from Kittredge Road pump station are not included.	

2.2.3 2017 Wastewater Master Plan Inflow and Infiltration Analysis

The 2017 Master Plan metering was conducted in the fall of 2015 and the groundwater table was lower than normal, therefore levels of I/I listed in the report may not be representative of existing I/I conditions. Also, sewer sheds were reconfigured between the initial I/I study performed by SEA in 2003 and the subsequent metering conducted in 2015. This makes it difficult to assess if measures taken to reduce I/I have been successful.

2.2.4 2020 Force Main Flow Metering

Since the WRPS does not have the equipment or instrumentation required to measure wastewater flows, BETA rented and installed a portable Greyline DFM 5.1 ultrasonic doppler flow meter on the 12-inch discharge header located in the drywell. The flow meter was installed from May 22, 2020 through June 28, 2020.

Flow metering was not able to be conducted during periods of high groundwater levels (March/April) and no significant rain events occurred while metering, therefore the data is not conducive to making direct correlations with previous rain fall induced I/I results. It is also important to note that the stay-at-home order in place at the time of flow metering due to the COVID-19 pandemic could have potentially altered flow patterns.

The metering performed during the last week of May in both 2013 and 2020 occurred during a dry weather period which is defined as three to five days without a rain event. A comparison of the data from 2013 to 2020 during this time frame indicates that the average maximum and average minimum flows were of similar magnitude (see **Table 2-3**).

Table 2-3: Flow Trends		
Date	Average Maximum Flow (mgd)	Average Minimum Flow (mgd)
May 2013	1.54	0.50
May 2020	1.78	0.41

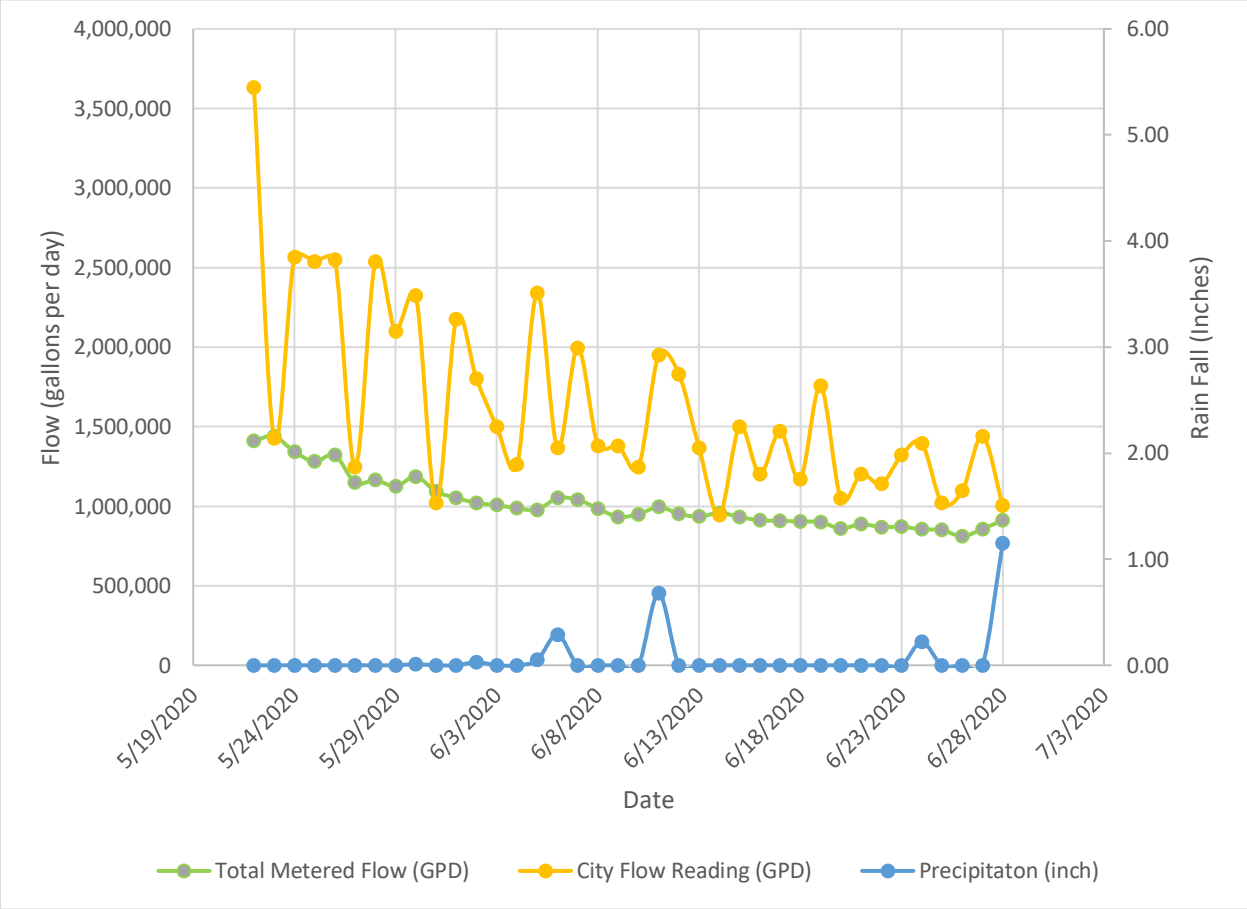
Collected flow meter data is shown in **Table 2-4: Effluent Flows** below. The flow meter data was utilized to evaluate the number of pump starts per hour. The maximum number of pump starts per hour measured during the metering period was thirteen. Pump cycle times are expected to be at peak levels when the inflow rate is fifty percent of the pump capacity. On several days during the metering period the average flow rate was approximately fifty percent of the existing pump capacity.

Table 2-4: Effluent Flows

Date	Lead Pump	Number of Starts per day	Max Starts/Hour	Total Metered Flow (GPD)	City Flow Record(GPD)	Run Time (Hours)	Metered Average Flow (GPM)	Metered Max Flow (GPM)	Rain Fall (inch)
5/22/2020	1	82	11	1,411,097	3,630,000	19.8	1,168	2,402	0.00
5/23/2020	2	193	13	1,439,422	1,425,000	16.3	1,468	3,362	0.00
5/24/2020	1	99	12	1,341,885	2,565,000	19.2	1,161	2,519	0.00
5/25/2020	2	179	13	1,280,778	2,535,000	15.9	1,346	2,604	0.00
5/26/2020	1	89	11	1,320,282	2,550,000	19.3	1,138	2,409	0.00
5/27/2020	2	264	13	1,148,746	1,245,000	13.2	1,445	3,292	0.00
5/28/2020	1	112	13	1,163,476	2,535,000	18.7	1,047	2,522	0.00
5/29/2020	2	262	13	1,125,008	2,100,000	12.7	1,469	2,600	0.00
5/30/2020	1	112	12	1,185,943	2,325,000	18.0	1,100	2,467	0.01
5/31/2020	2	254	13	1,091,747	1,020,000	12.5	1,454	3,431	0.00
6/1/2020	1	157	12	1,052,532	2,175,000	16.2	1,079	2,451	0.00
6/2/2020	2	261	13	1,020,126	1,800,000	11.8	1,440	2,638	0.03
6/3/2020	1	181	12	1,007,117	1,500,000	15.8	1,061	2,459	0.00
6/4/2020	2	257	13	986,748	1,260,000	11.3	1,453	2,649	0.00
6/5/2020	1	175	12	977,857	2,340,000	15.8	1,028	2,411	0.05
6/6/2020	2	259	13	1,050,869	1,365,000	11.7	1,496	2,664	**0.29**
6/7/2020	1	164	13	1,040,086	1,995,000	16.1	1,077	2,501	0.00
6/8/2020	2	254	13	985,001	1,380,000	11.4	1,437	2,643	0.00
6/9/2020	1	191	12	933,561	1,380,000	14.9	1,044	2,280	0.00
6/10/2020	2	250	13	949,628	1,245,000	11.0	1,437	2,628	0.00
6/11/2020	1	175	13	994,946	1,950,000	15.9	1,044	2,488	**0.68**
6/12/2020	2	252	13	952,033	1,830,000	10.7	1,490	2,634	0.00
6/13/2020	1	202	12	934,682	1,365,000	14.3	1,086	2,276	0.00
6/14/2020	2	249	13	957,199	945,000	11.2	1,431	2,642	0.00
6/15/2020	1	231	12	932,238	1,500,000	13.6	1,144	2,334	0.00
6/16/2020	2	249	13	910,881	1,200,000	10.6	1,426	2,697	0.00
6/17/2020	1	234	12	908,715	1,470,000	13.4	1,132	2,272	0.00
6/18/2020	2	246	12	903,286	1,170,000	10.3	1,452	2,625	0.00
6/19/2020	1	230	12	900,018	1,755,000	13.1	1,138	2,301	0.00
6/20/2020	2	240	13	860,016	1,050,000	10.0	1,436	2,651	0.00
6/21/2020	1	226	12	886,646	1,200,000	12.8	1,159	2,294	0.00
6/22/2020	2	241	12	868,836	1,140,000	9.9	1,460	2,636	0.00
6/23/2020	1	237	13	870,701	1,320,000	12.4	1,174	2,423	0.00
6/24/2020	2	240	12	854,456	1,395,000	10.2	1,400	2,618	**0.22**
6/25/2020	1	232	13	849,853	1,020,000	12.0	1,180	2,460	0.00
6/26/2020	2	235	13	811,142	1,095,000	9.7	1,399	2,643	0.00
6/27/2020	1	229	12	857,056	1,440,000	11.9	1,201	2,416	0.00
6/28/2020	2	247	13	911,954	1,005,000	10.5	1,454	2,654	**1.15**

The City's flow data listed in **Table 2-4** is also depicted in **Figure 2-1**. Flow data from the City is estimated based on multiplying pump runtimes by the pump rated flow rate of 2,500 gpm. Flow meter data indicated that pumps are operating at reduced speeds for extended periods of time throughout the day. This was also observed during BETA site visits. The City data is not able to account for the observed reduction in flow rate which results in significant variations in the City's daily flow records.

Figure 2-1: WRPS Flow Data



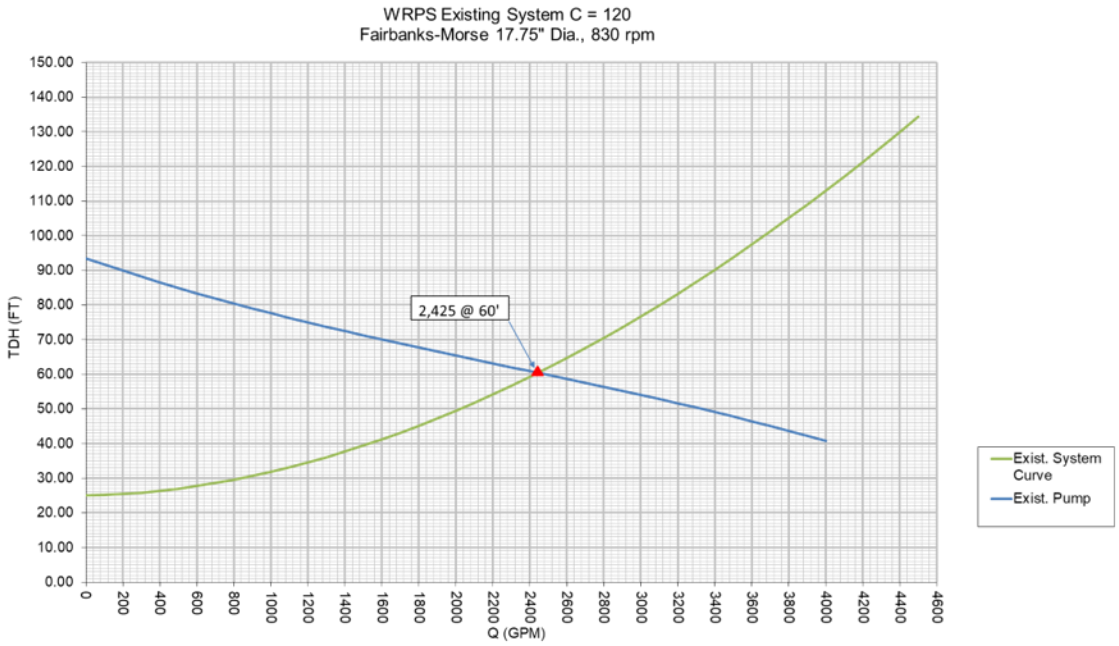
2.2.5 City Flow Data

BETA reviewed daily wastewater flow records provided by the City. The records include daily flows calculated from pump runtimes and an assumed pump capacity of 2,500 gpm. Actual means of flow measurement do not exist at the station. The station is not equipped with a flowmeter on the discharge piping and the instrumentation associated with the influent venturi flowmeter is no longer functional. Previous reports, by others, found flow estimates based on pump runtime to be considerably higher than metered influent flow. For this reason, BETA did not consider the flow data provided by the City representative of actual flows.

2.2.6 Estimated Existing Pump Flows

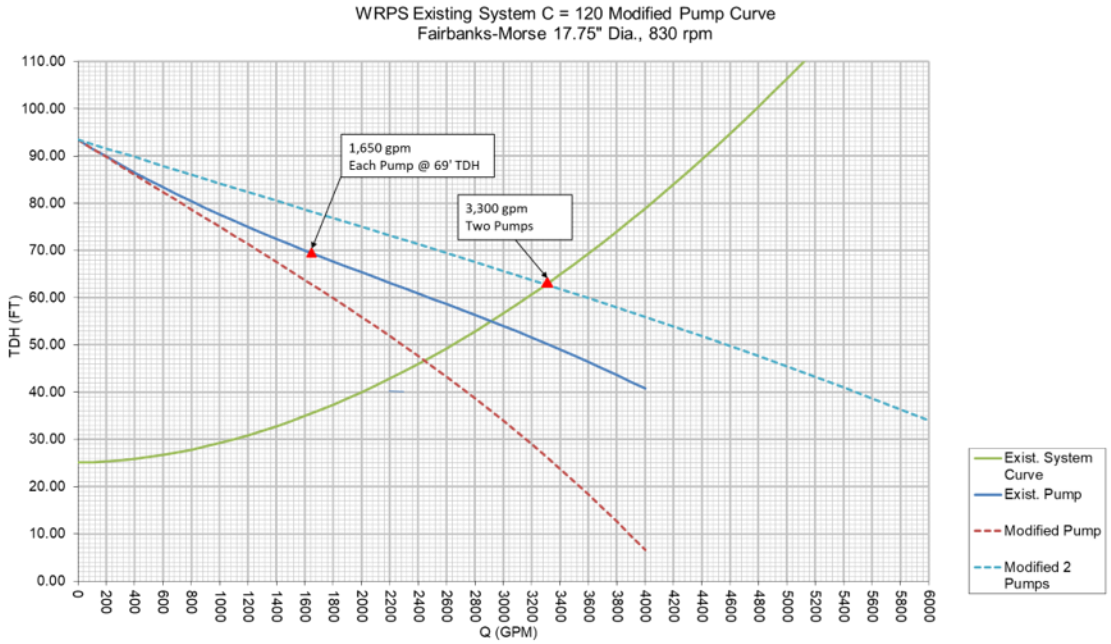
BETA developed a system curve for the existing pumps based on record information, including pump on/off elevations, force main alignment, an assumed force main condition (Hazen-Williams C-value = 120), and the force main discharge elevation. Overlaying the manufacturer's pump performance curve over the developed system curve resulted in an operating point of 2,425 gpm at 60-feet of total dynamic head (TDH) (Figure 2-2). The resulting flow is consistent with the flow rate listed on the pump nameplate. However, the resulting TDH is slightly higher than what is listed on the pump nameplate. BETA observed system pressure on a gauge located on the discharge header. The VFD was operating the pump at a reduced speed during the time of inspection so pressure readings at full speed were not observed.

Figure 2-2: Existing WRPS Pump Curve



BETA also developed a modified pump curve to evaluate parallel pump operation (**Figure 2-3**). According to the manufacturer's published performance data, with two pumps in operation the pump station capacity is approximately 3,300 gpm, which corresponds to a maximum daily flow of 4.75 million gallons. Dividing the maximum daily flow by a peaking factor of 3.5 results in an average daily flow (ADF) of 1.36 mgd. This flowrate is relatively consistent with the existing ADF of 1.41 MGD that was established by Wright-Pierce.

Figure 2-3: Existing WRPS Modified Pump Curve



2.3 SITE-CIVIL

2.3.1 REGULATED AREAS

Although the overall area of the parcel is listed at 2.61 acres, the usable area is considerably less since a large portion of the property is within jurisdictional areas associated with the Sudbury River and adjacent wetlands (**Figure 2-4: Site Plan**). In summary, the following regulated areas are present on the WRPS site:

- Bordering Vegetated Wetlands (MassDEP)
- 30-foot Wetland No Disturb Zone (Framingham Conservation)
- 50-foot Wetland No Build (Framingham Conservation)
- 100-foot Wetland Buffer Zone (MassDEP)
- 100-foot Riverfront Area (MassDEP)
- 100-Year Flood Plain (MassDEP)

2.3.2 FLOOD ELEVATION

According to the Flood Insurance Rate Maps for the City of Framingham (Community-Panel Number 25017C0516F dated July 7, 2014) the project area lies within Zone AE (**Figure 2-5: Flood Map**). The flood zone is associated with the Sudbury River. Areas within Zone AE are within the 100-year flood plain and the base flood elevation has been determined. The base flood elevation is given as elevation 155.0 (NAVD88). Since the FEMA flood elevations are listed in NAVD88 datum, a conversion is required to obtain elevations in the City's standard datum (NGVD29).

While reviewing record information, a discrepancy in the elevations between the original station drawings and site plans prepared as part of the Worcester Road Pump Station Elimination Project was identified. The original site plans show the top of foundation elevation for the drywell at elevation 157.4 while the site plans prepared by SEA and AECOM show the top of foundation as 161.4 and 161.5, respectively. The original site plans do not list a datum for the elevations provided. AECOM's "Existing Condition Notes" identify the elevation datum as NGVD 1929 (see below).

4. TOPOGRAPHIC SURVEY PROVIDED BY SCHOFIELD BROTHERS OF NEW ENGLAND, INC. SURVEY COMPANY OF FRAMINGHAM, MA. HORIZONTAL COORDINATES ARE IN MASSACHUSETTS STATE PLANE GRID COORDINATE SYSTEM (NAD 83) AND THE VERTICAL DATUM IS BASED ON NGVD 1929. TO CONVERT ELEVATIONS TO NAVD88, SUBTRACT 0.76 FEET.

BETA retained the services of DGT Associates to conduct a topographical survey of the WRPS site which confirmed the survey completed by previous consultants. Based on surveyed elevations the top of the drywell foundation elevation is approximately 5.7-feet above the 100-year flood elevation. TR-16 recommends critical infrastructure be constructed three feet above the 100-year flood plain to meet resiliency requirements. However, the top elevation of the wet well is approximately 1.8-feet below the 100-year flood elevation .

2.3.3 Existing Utilities

Wastewater flow enters the station through two 18-inch pipes. The piping entering the station from the west was replaced as part of the Central Street Siphon & Sudbury River Interceptor Rehabilitation project in 2011. Records indicate that the pipe entering the station from the south consists of an 18-inch cast iron pipe that was installed in 1924. The condition of this pipe is not known.

The WRPS discharges to a 16-inch cast iron force main that was constructed in 1965. The overall length of the force main is approximately 4,700 feet. The force main exits the pump station traveling south on City property crossing Main Street continuing down Walnut Street to Buckminster Street. At this point the force main heads west down Buckminster Street crossing Union Avenue continuing down Mount Wayte Avenue. The force main discharges to a sewer manhole on the Farm Pond interceptor at the CSX rail yard.

Electricity and natural gas are both supplied by Eversource. Natural gas is provided to the pump station through a 1-inch service from Worcester Road. Natural gas is utilized by gas-fired furnaces on the upper and lower level of the station. Natural gas is also utilized as a fuel source to operate the engine driven backup pump located on the upper level of the drywell. The electrical service is provided from a pole mounted transformer on the south side of the building.

Potable water for the pump station is provided through a 2-inch steel water service connected to an 8-inch cast iron water main in Worcester Road. The City replaced the water service from the water main including the curb stop.

2.4 Structural

Structural components of the WRPS were inspected, and existing conditions documented. The pump station super structure was found to be in poor condition with several structural deficiencies while the foundation was found in fair condition with only the minor issues noted. The structural evaluation and seismic analysis of the WRPS is provided for reference in **Appendix A**.

2.4.1 Roof

The roof of the pump station is constructed of prestressed precast concrete beams. Above the beams, the roofing system consists of 2-inch rigid foam insulation, tongue and groove sheathing, and a stone ballasted asphalt roofing membrane. Evidence that the roof system was leaking was noted on both the interior and exterior of the building. Cracking and bubbling of the roof membrane and peeling paint with staining on the ceiling were observed. Cracking on one beam was also identified.

2.4.2 Main Level Masonry Walls

Masonry walls are constructed of 8-inch concrete masonry unit (CMU) blocks on the interior with a 4-inch brick on the exterior. Existing plans indicate that the CMU walls contain horizontal wire reinforcement

for each course while vertical reinforcement was not provided. Lateral movement of the masonry walls was noted on the interior and exterior of the pump station. Cracking of the CMU blocks and mortar joints was identified at multiple locations including all window openings.

2.4.3 Main Level Concrete Walls and Floor

The perimeter foundation for the main level consists of a 14-inch reinforced concrete wall. Walls were generally found to be in good condition with only a few minor deficiencies noted. The east and west walls each show vertical cracks at approximately the midpoint of the wall that project to the exterior face. Crack widths are approximately 0.012".

The floor in the main level also consists of prestressed precast concrete beams. A 2-inch cast in place concrete slab covers the beams. The main level floor system was found to be in good condition with only one area of scaling adjacent to the back-up pump engine pad. Floor grating was found to be damaged with minor to heavy corrosion of supports and connections.

2.4.4 Lower-Level Concrete Walls and Floor

Lower-level perimeter wall consists of 18-inch reinforced concrete. Overall, the walls were found to be in good condition with only minor deficiencies identified. Minor leaking was observed along construction joints at two locations. Efflorescence and paint failure is visible around the pipe penetration on the south wall.

The lower-level floor is a 12-inch reinforced concrete slab. Ponding of water was noted due to a low spot in the floor. The source of the water appeared to be seal water from Pump No. 1. Moisture in the south east corner appeared to result from groundwater infiltration. Cracks with widths between 0.01 to 0.04 inches were observed.

2.4.5 Wet Well

During the evaluation, the City utilized the engine driven pump to draw the wet well down to the pump inlets to facilitate a visual inspection. The concrete below the normal operating level appeared to be in good condition while the concrete above the normal operating level had signs of exposed aggregate. Neither concrete cracking nor exposed rebar were observed.

2.5 Architectural

Architectural components of the WRPS were inspected by Dewing Schmid Kearns Architects + Planners (DSK), and existing conditions were documented. The pump station super structure was found to be in poor condition as indicated by the deficiencies noted below. The complete architectural review of the WRPS is provided for reference in **Appendix B**.

2.5.1 Masonry Walls

The exterior of the superstructure is finished with a brick veneer. Available drawings indicate that the brick was applied directly to the CMU wall with no insulation, air gap or drainage cavity. Delamination of the brick veneer was observed in numerous locations. The architect also noted the cracking in the CMUs identified by the structural review.

2.5.2 Miscellaneous Metals

The building has seven single pane steel windows with rusting prevalent on the muntins. Windows are hopper style that swing inward to open. A single steel door on the west side of the building provides access to the upper level of the pump station drywell. A set of double steel doors on the east side of the

building is available for moving larger equipment in and out of the building. Both doors were found to be operable and in fair condition.

2.5.3 BALLASTED ROOF

The architectural inspection of the roof also deficiencies in the ballasted roof. Vegetation with roots extending through the roof membrane were observed. Bubbling and cracking of the membrane was also identified at multiple locations.

2.6 BUILDING SERVICES

Building Services including electrical systems, HVAC plumbing, and I&C systems were inspected. In general, the building services appeared to be at or beyond their typical life expectancy. The evaluation of building services and I&C performed by SAR Engineering, Inc. is provided for reference in **Appendix C**.

2.6.1 PLUMBING

Domestic water is provided to the WRPS through a 2-inch steel water service. A portion of the service was recently replaced with 2-inch copper from the main to the curb stop. The water service runs from the 8-inch water main in Worcester Road to the northwest corner of the pump station. A backflow preventer is installed inside the drywell where the service enters the structure. Hot water is provided to a lavatory and a shower by an electric 4,500 watt, 40-gallon storage type water heater. A toilet and sink are provided on the upper level and the shower stall is provided on the lower level. The shower stall appears to be abandoned and not utilized for some time. The fixtures appear to be original to the building and they do not meet current water conservation and safety requirements.

There are two sump pumps installed in open concrete pits in the lower level of the pump station. The pumps are plug in type with an integral float for level control. Both sump pumps appear to be in poor condition.

Plumbing fixtures and equipment were found in fair to poor conditions. No items were identified as being viable for use on the pump station replacement.

2.6.2 HVAC

Heat in the pump station is provided by an electric unit heater and a gas fired warm air furnace located on the upper level of the drywell. The lower level of the drywell is also heated with a gas fired warm air furnace. Gas fired radiant heaters suspended from the ceiling, which appeared to have been previously used for heat, were found abandoned in place. Cooling is not provided at the WRPS.

The building is ventilated with roof mounted fans. A wall mounted fan with duct work introduces outdoor makeup air to the lower level. Motor operated louvers allow outside air to enter the upper level.

HVAC equipment was found to be in fair to poor condition. No items were identified as being viable for use on the pump station replacement.

2.6.3 ELECTRICAL

A pole mounted transformer located behind the station provides 480 Volt, 3-phase, 3-wire 300 Amp utility power for the pump station. Overhead wires from the transformer are connected to the stations main circuit breaker located within a motor control center (MCC) on the upper level. The MCC appears to be original to the station and contains remnants of flow match pump controllers and wet well level control. VFDs have been installed in the MCC to control the electric motor driven wastewater pumps. A 15 KVA 480/120/208 Volt transformer located inside the station provides power to lighting and receptacles.

Emergency power for 120/208 equipment (not wastewater pumps) is provided by a 12.5 KW natural gas engine generator.

2.6.4 I&C

Wet well level is monitored with a bubbler level control system located in the upper level of the pump station. A pressure signal from the bubbler system is sent to the SCADA control panel to monitor wet well levels and control automatic pump operation. An ultrasonic transit time strap on flow meter is installed on the pump common discharge header. The flow meter has been abandoned and is not functional.

A control panel for three calcium nitrate solution (Bioxide) chemical feed pumps is located on the lower level. The control panel for the chemical storage fill station is located outside behind the main entrance door for the pump station. Tank high level is monitored for the two chemical storage tanks located in the lower level.

The SCADA control panel for the pump station is mounted inside the MCC. A radio modem within the unit communicates with the main SCADA system located at the Department of Public Works. This allows for remote monitoring and control of the pump station. However, during power failure the back-up pumping system (natural gas fired engine driven pump) must be manually operated on site.

2.7 MECHANICAL

2.7.1 PUMPS

The pump station has three vertical centrifugal pumps located on the lower level of the drywell. Two of the pumps are powered by 50 hp electric motors. One electric motor is closed coupled to the pump on the lower level while the other pump is connected to an electric motor on the upper level by a vertical intermediate shaft. The third pump is power by a natural gas fired Ford motor located on the upper level. The power from the Ford motor is transferred manually to an Amarillo right-angle pump drive with a hand operated clutch. The right-angle pump drive is connected to a vertical intermediate shaft which delivers the power to pump three on the lower level.

The name plate for each of the 50 hp pumps identifies their design capacity as 2,460 gpm at 51 feet of TDH. Both pumps are required to operate to meet peak hour flow rates.

2.7.2 PIPING

Each pump has a dedicated 10-inch diameter suction pipe from the wet well to the pump inlet. An 8-inch discharge pipe connects each pump to a common header by a 12x8x12 inch tee. The 12-inch common header connects to the 16-inch force main outside the building. The exterior of the suction and discharge piping appeared to be in fair condition with surficial corrosion but no visible leaks. Peeling paint and surface rust was prevalent on all piping.

2.8 HYDROGEN SULFIDE (H_2S)

2.8.1 EXISTING TREATMENT SYSTEM

In 2001 the Massachusetts Water Resources Authority (MWRA) implemented an effluent discharge limit of 0.3 mg/L of total sulfide. SEA completed an odor and corrosion control study in 2002 that identified the WRPS force main discharge as exceeding the effluent limit. A chemical injection system was installed at the WRPS to address sulfides and meet the discharge limit.

Two 750-gallon polyethylene chemical storage tanks installed within a concrete containment basin are located in the lower level of the pump station. A remote fill station is located behind the main entrance door to the pump station. Three Milton Roy chemical metering pumps and a control panel are installed adjacent to the storage tanks in the lower level of the drywell. A calcium nitrate solution (trade name Bioxide) is metered into the wet well at an operator specified rate.

H_2S treatment equipment was found to be in fair condition. Since the equipment is approaching the end of its 20-year life expectancy no items were identified as being viable for use on the pump station replacement.

2.8.2 Sampling Monitoring

TECH Environmental assessed the sulfide levels at the WRPS in the fall of 2019. The level of H_2S in the ambient air within the WRPS wet well and the force main discharge manhole prior to entering the Farm Pond interceptor were measured from September 18, 2019 to October 9, 2019 with an OdaLog H_2S gas logger. Measurement results are presented in **Table 2-5** below. These levels were not considered to be peak levels since the highest levels will typically occur during the dry summer months.

Table 2-5: Sample Results

Location	Average H_2S (ppm)	Peak H_2S (ppm)	Sulfide (mg/L)	Dissolved Oxygen (mg/L)	pH
WRPS Wet well	0.8	9	< 0.5	1.16 & 2.75	7.3 & 7.76
WRPS Force Main Discharge Manhole	15.2	67	2	0.26 & 0.71	7.58 & 7.62

The levels of sulfides in the wet well and the discharge manhole are consistent with measurements from August-September 2001. It is important to note that the addition of Bioxide was not taking place in 2001. Comparing the WRPS wet well data to the data from the force main discharge manhole indicates that the septic conditions in the force main is contributing sulfide loading to the Farm Pond Interceptor and MWRA connection.

Table 2-6: Historical Sulfide Concentrations

Location	2001	2019
Wet well Sulfide Concentration (mg/L)	0.57	0.5
Discharge Manhole Sulfide Concentration (mg/L)	1.83	2.0

Additional field investigations were completed by Tech Environmental to assess if the addition of Bioxide upstream of the WRPS should be considered. A flow meter and OdaLog H2S gas logger was installed in the sewer manholes near the force main discharge for both the Woodland pump station and Fenwick pump station from June 24, 2021 to August 24, 2021. The data collected indicated the following:

- Minimal H_2S was detected in the Fenwick pump station manhole headspace.
- Substantial H2S was detected in the Woodland pump station manhole with an average of between 5 to 10 ppm at all times during the sampling period.

See the Tech Environmental report dated November 12, 2021 for further discussion of dosing options.

3.0 Design Flow

3.1 Future Wastewater Flow Projections

3.1.1 Population Growth

Since Framingham's inception it has seen appreciable population growth. However, since the highest levels of population growth in the 1960's and 1970's the growth trend has dropped off significantly. Between 1970 and 2010 population growth has average 1.6 percent for each ten-year interval. Within the last ten years there has been an increase in population growth based on 2020 decennial census completed by the United States Census Bureau. This can be attributed to the shift in housing density which will be discussed in the next section.

Table 3-1: Framingham Census Data

Year	Population	Percent Change
1950	28,068	20.9%
1960	44,562	58.8%
1970	64,068	43.8%
1980	65,113	1.6%
1990	64,989	-0.2%
2000	66,910	3.0%
2010	68,323	2.1%
2020	72,362	5.9%

3.1.2 Building Trends

Zoning regulations in Framingham have historically restricted the amount of multi-family development in the City. In 2015 the City's zoning regulations were amended to allow for multi-family dwellings to be built within the Central Business District (CBD). This zoning change allowed an additional 773 housing units to be proposed/constructed within the CBD. An additional 924 housing units are proposed/constructed outside of the CBD. The WRPS does not receive wastewater flow from the CBD and therefore future development within this area will not impact the design flow. However, projects outside of the CBD have the potential to contribute additional wastewater flow to the WRPS. The identified special permit projects outside the CBD will not contribute additional wastewater flow to the WRPS. BETA recommends that future special permit projects be reviewed and considered for impacts to the design capacity of the WRPS.

U.S. Census data indicates that the population had an appreciable increase between 2010 to 2020. This increase can be attributed to the additional multi-family buildings being constructed in the City. The multi-family housing units identified above result in an increase of Framingham's population by approximately 4,200 people. The 5.9-percent increase in population noted in **Table 3-1** is largely a result of the construction of multi-family housing units in the CBD and in other areas with the approval of special permits.

Table 3-2: Framingham Residential Building Permits										
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	21	21	27	39	80	82	44	31	37	34
Two Family	0	0	0	0	0	56	16	27	2	32
Number of Housing Units	21	21	27	39	80	194	76	85	41	98
									Total Housing Units	682
City of Framingham Building Department Records										

A review of building permits in the WRPS service area further demonstrates that the increase in population has not followed the United States Census Bureau growth trend. Construction of single family and two-family buildings between 2000 and 2010 resulted in approximately 600 new housing units. City Building Department records indicate that an additional 682 units were constructed between 2010 and 2020 (**Table 3-2**). Out of the 682 permits, only 37 were within the WRPS service area (**Figure 3-1**).

3.1.3 Evaluation of Existing Flows

Flow metering completed for the WRPS service area in 2003 reported an ADF of 1,295,875 gpd while metering in 2013 measured an ADF of 1,410,000 gpd. This data indicates that ADF increased by 114,000 gpd for the 10-year period between 2003 and 2013. While building permit records indicate that only a fraction of additional housing units were constructed within the WRPS service area the following factors could contribute to this flow increase.

- Changes in use for properties zoned for business.
- Expansion of existing businesses resulting in additional wastewater.
- New sources of I/I within the service area.

Reduction of I/I has been the focus of sewer collection utilities rehabilitation projects in Framingham. Since 2003 the City has completed several projects to rehabilitate sections of the sewer collection system identified as having higher levels of I/I. The 2017 Sewer Master Plan was not able to quantify if these efforts have reduced the overall levels of I/I within the City's collection system. MWRA annual I/I report indicates that levels of I/I as a percentage of average daily flow since the sewer improvements program has been implemented is consistent with levels measured in 2003 (**Table 3-3**). This suggests that efforts to reduce I/I to date have offset new sources of I/I that develop as existing infrastructure degrades. This wastewater flow estimate assumes the City will continue with rehabilitation efforts in the future to maintain levels of I/I.

Table 3-3: Framingham's Annual I/I							
Year	2003	2015	2016	2017	2018	2019	2020
Average Daily Flow (mgd)	7.4	7.78	6.72	7.03	8.16	6.71	6.48
Average Daily I/I (mgd)	2.38	2.62	1.68	1.94	2.87	1.54	1.33
I/I Percent of Daily Flow	32%	34%	25%	28%	35%	23%	21%
MWRA Annual I/I Reporting							

3.1.4 Evaluation of Future Flows

Prior to allowing construction of multi-family units within the CBD Framingham's population growth trends had averaged 1.6-percent for each ten-year interval from 1970 to 2010. Subtracting the additional multi-family growth from the estimated population for 2019 results in a population growth of 2.7-percent from 2010 to 2019. A population growth of 2.7-percent should reflect the population growth within the WRPS service area given that multi-family units are not allowed by current zoning regulations. This is further substantiated given that only 37 new housing units have been constructed in WRPS service area in the last 10-years.

Future wastewater flow increases at the WRPS should continue to follow historical trends given that growth has been consistent since 1970. Current zoning regulations do not permit the construction of multi-family units within the WRPS service area; however, if the City authorizes construction of multi-family units, then consideration should be given to the potential impacts at the WRPS.

3.1.5 Recommended Design Flow

The 2013 PDR design flow was developed based on full-build out, including build-out of "underutilized parcels", of residential units within the WRPS service area. The full build-out design wastewater flow was utilized at that time considering the intent was to construct a new pump station to replace the WRPS. A fiscally conservative approach for rehabilitation of the existing WRPS is to develop a design flowrate based on the anticipated mechanical system design life of 20-years.

Building trends indicate that construction of housing within the WRPS service area has been and will continue to be limited. Conservatively, the 114,000 gpd increase per ten-year interval will be utilized to estimate future wastewater flows to the WRPS.

During the 2013 flow monitoring the minimum dry weather nighttime flow (12 am to 6 am) of 410,000 gpd was attributed to infiltration. This was approximately 29-percent of ADF. The same percentage of future wastewater flow was attributed to infiltration. For this estimate 10-percent of the minimum nighttime flow was considered to be sanitary flow with the remaining 90-percent representing infiltration. The future flows consist of the estimated flow increase between 2013 to 2021 (92,000 gallons) in addition to the flow increase between 2021 and 2041 (228,000 gallons). Since the design flow will be based on peak hourly wastewater flow a peaking factor of 3.5 was applied to sanitary flows. As shown in **Table 3-4,** the resulting peak hourly design wastewater flow is therefore 4.9 mgd.

Table 3-4: Recommended Design Flows

WRPS	Flow (gpd)
Existing ADF (2003)	1,296,000
Existing ADF (2013)	1,410,000
10 Year Flow Increase	114,000
infiltration (90% minimum flow)	452,000
Sanitary ADF 2013	958,000
Future Flows (2013 to 2041)	320,000
peaking factor	3.5
peaked flows	4,470,000
Future Peak Hour Flows	4,930,000

4.0 100-PERCENT DESIGN

4.1 MAINTAINING EXISTING FLOWS

To upgrade the existing pump station, a temporary bypass pumping system will be required. A bypass pump connection is required on the existing force main just south of the pump station as shown on the 90-Percent Drawings.

Wastewater flow enters the station's parshall flume chamber through an 18-inch pipe from the south and an 18-inch pipe from the west. Therefore, we recommend phasing the wastewater bypass operation during construction.

- Phase I – Wastewater will be pumped from the existing upstream manholes (referred to as "West SMH" and "South SMH" on the drawings) to the force main connection. This will be a shorter duration bypass and will facilitate improvements to the parshall flume and wetwell structures. Additionally, new 14-inch diameter piping will be installed in the common wall between the wetwell and the drywell.
- Phase II – Wastewater will be pumped from the wetwell to the force main connection. The remaining work to the pump station will be completed during this Phase.

4.2 WET WELL

4.2.1 EXISTING WET WELL CONFIGURATION

The existing wet well does not follow guidelines from the Hydraulic Institute's design recommendations for new pump station designs. Items include:

- A submergence of approximately 4-feet is recommended for the pump intake. Submergence is intended to limit the formation of vortices which promote air uptake into the pumps. Air uptake can lead to vibration which reduces bearing life. Additionally, entrained air can cause cavitation within the pump. However, lowering the pump intake is limited by the existing concrete floor elevation of the dry well.
- Suction pipes do not have bells on the intakes. This was confirmed during the structural inspection when the City pumped down the wet well. Having a bell installed on the inlet pipe is also intended to reduce the potential for air uptake into the pump. However, Installation of a bell on the intake pipe would require the space for the fitting and the space for providing separation between the bottom of the bell and the wet well floor. The two feet required to install a bell on the pump intake is not available in the existing wet well at the WRPS.

Both design parameters are not included at the existing WRPS; however, historical operations have not documented any adverse effects.

4.2.2 NEW WET WELL

The nonconformities noted could not be resolved by providing a new wet well. In this case the controlling factor is the elevation of the pump intake and the velocity into the pump intake. Two options for reducing the potential for air uptake into the pumps are presented below.

- Raise Pump Off: The pump off set point could be set to turn off four feet above the pump intake. This could contribute to additional maintenance of the immediate upstream gravity sewer lines. Having the influent pipes continually submerged could result in grease/solids accumulation within these lines.

- Increase the pump suction line/intake: The proposed pump capacity is comparable to the existing pump capacity and vortices have not been an issue. In an effort to further reduce the opportunity for vortices and subsequent air entrainment, the proposed design includes an increase in the diameter of the pump suction lines from 10-inch to 14-inch diameter. This will also improve the net positive suction head available (NPSHA) for pump operation.

4.3 Force Main

4.3.1 Hydrogen Sulfide Management

Additional field investigations were completed by Tech Environmental to assess if the addition of Bioxide upstream of the WRPS should be considered. The following recommendations were provided based on the data collected:

- Tech Environmental concluded that the Fenwick pump station was not a viable location for sulfide suppression.
- Based on the results the Woodland pump station was identified as a viable candidate for sulfide suppression or oxidation. The three options presented were addition of Bioxide, addition of hydrogen peroxide, or a caustic shock to kill the anaerobic bacteria in the force main.
- The study found that the dosing of Bioxide at the Worcester Road pump station should be increased from 13 gallons per day to 15 gallons per day to meet the MWRA sulfide discharge limit of 0.3 mg/L.

See the Tech Environmental report dated November 12, 2021 for further discussion of dosing options.

4.3.2 Force Main Sedimentation

Records of discharge flow and pump starts/stops are not available. The City has raised concerns about pump performance and issues related to force main solids deposition during low wastewater flows. The force main, pumps and wet well have not historically experienced issues, with the exception of excessive pump cycling (starts per hour). At the request of the City, BETA is evaluating the feasibility of incorporating a pipe "pig" launch and retrieval system for the force main.

4.4 Mechanical

4.4.1 Corrosion/Odor Control

The structural evaluation identified corrosion in both the parshall flume chamber and the wet well. Currently there is only passive ventilation, which is not sufficient to protect these areas from corrosion resulting from hydrogen sulfide. The H_2S data collected to date suggests that continuous ventilation should be provided to minimize odor and corrosion potential within the wet well. With the concentrations of H_2S measured there is potential for acidic corrosion of metals and concrete. The most cost-effective way to ensure minimal odor and corrosion is to install an odor control system that will continuously ventilate the headspace.

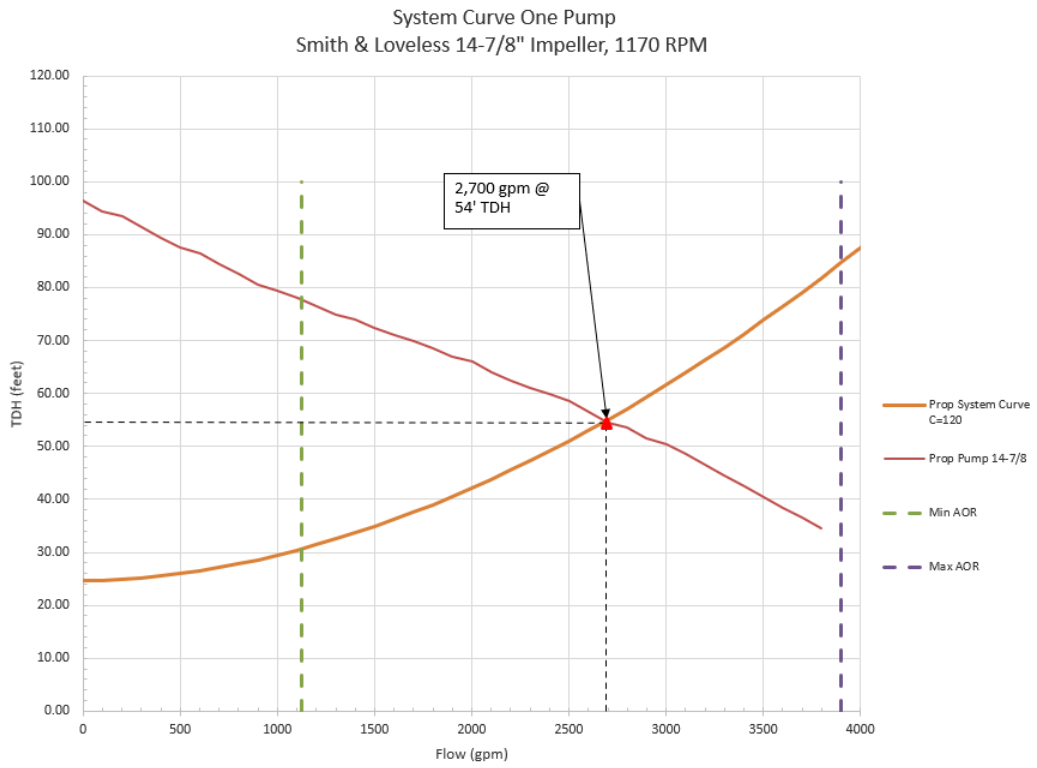
A carbon adsorption system will be provided to treat the required flow rate. Continuously ventilating the wet well headspace will prevent the buildup of hydrogen sulfide and will treat collected odors prior to discharge.

4.4.2 Pumps

The existing pump station has two electric pumps that have historically met peak wastewater flows (both during wet weather and flooding). The upgrade to the station is based on the same configuration which has two pumps to meet peak demand with the addition of a third pump to provide redundancy. At a peak

hour flow of 4.9 mgd, the required pumping rate will be 3,400 gpm. To meet this demand each of the duty pumps will provide 1,700 gpm at a TDH of 71 (**Figure 4-1**).

Figure 4-1 Modified System Curve



The City requested that Smith and Loveless pumps with X-Peller® type impeller be specified. The manufacturer indicated that this type of impeller is only available in pumps up to a flow rate of 1,750 gpm. At a design flow of 2,700 gpm for single pump operation this option will not be available.

As presented in Section 2.2.4, BETA installed a temporary doppler style flowmeter within the station on the pump discharge header. Flowmeter reading identified up to 13 pump starts per hour as presented in **Table 2-4: Effluent Flows**. It should be noted that the pump starts per hour were for one pump. The proposed design utilizes three pumps with automatic lead pump alternation which will reduce pump starts by 1/3. Based on this configuration the number of starts per hour will fall within the recommended range of four starts per hour. Smith and Loveless indicated that for the motor size required at the WRPS up to 10 starts per hour can occur without causing problems with the motors or starters.

4.4.3 PIPING

Existing piping does not appear to have been updated since the pump station was constructed in 1965. The anticipated useful life of cast iron pipe is between 50 to 100 years. While water mains have demonstrated that 100 plus years of service is achievable, the harsher conditions present in wastewater tend to cause sewer piping to fail sooner. Since the existing piping is reaching the end of its service life new ductile iron piping within the drywell will be installed as part of this rehabilitation.

4.5 INSTRUMENTATION & CONTROL

The existing I&C system consists of a remote terminal unit (RTU) and SCADA telemetry to the City "Head End" at the Department of Public Works. A desktop computer workstation is located in the upper level of the drywell which provides the human machine interface (HMI) to the SCADA system.

The proposed I&C / SCADA RTU will be designed based on Standards developed by Woodard & Curran and the City. The system will utilize a non-proprietary programmable logic controller (PLC) that communicates both through hard wired ethernet and licensed radio. The Construction Documents will include I&C / SCADA panel design drawings customized to City Standards. The following data/control will be incorporated into the design:

- Operator Adjustable Pump Start/Stop and Maintain Wet well Levels
- Wet Well Level, including high and low wet well alarms
    - Primary level control will utilize a bubbler system
    - Backup control will utilize floats
- Pump Run Status and Speed, including pump runtime accumulation
- Pump Common Fail
- Discharge Flow, including Totalizing
- Pump Discharge Check Valve Limit Switch (i.e., alarm if a pump is running and the check valve doesn't open)
- Automatic lead/lag/standby pump alternation to reduce excessive pump cycling
- PLC/Radio Communication Failure
- Utility Power Failure
- Engine/Generator status and Common Fail Alarm
- Wet well and Drywell Intrusion Alarms
- High/Low Drywell Temperature Alarms
- Hydrogen Sulfide Chemical Addition System
    - Dosage Concentration Adjustment
    - Common Fail
    - Chemical Storage Tank Level, Including High- and Low-Level Alarms

4.6 ARCHITECTURAL DESIGN

4.6.1 GENERAL

Replacement of the super structure allows for sustainable and resilient features to be incorporated into the building design. This may include maximizing natural light within the station by reconfiguring window openings, optimizing the roof layout for future photovoltaic installation, and reducing impermeable surfaces on the site.

4.6.2 APPLICABLE CODES

A code analysis completed for the project identified the WRPS as use Group U – Utility & Miscellaneous. A summary of this analysis is provided in **Appendix D**, the design of all new architectural components will be done in accordance with applicable requirements of the most up to date version of the following standards and codes:

- Massachusetts Building Code, 9th Edition
- 527 CMR Massachusetts Fire Prevention Regulations
- 2015 International Energy Conservation Code (IECC)

4.6.3 Recommended Improvements

4.6.3.1 Superstructure

The new superstructure will provide a façade that is visually appealing while providing a building envelope that is more energy efficient. To accomplish this, the building envelope will now include mineral wool insulation and insulated windows. Aesthetics will be improved with a masonry veneer rainscreen that will be extended to cover the exposed foundation on the southern, eastern, and western exposures. Renderings of the proposed building façade are provided in **Figure 4-2**. The existing and proposed wall sections are shown in **Figure 4-3**.

4.6.3.2 Interior Improvements

Once structural improvements are made to the upper and lower-level, floors in the drywell will be coated with a heavy-duty concrete floor epoxy coating system. This will not only improve the aesthetics of the interior of the station but will provide a surface that is easier to clean and maintain. A high-performance protective coating will also be provided on the interior concrete walls.

Surficial corrosion was noted on the interior stairs. The stairs will be sandblasted to remove the surface rust and existing coating. Once surface preparation is completed the stairs will be primed and painted.

A new enclosure will be provided around the restroom. If structurally feasible, the bathroom could be enclosed with partitions and a door to provide additional privacy.

4.6.3.3 Landscaping

The pump station site has sensitive resource areas including the Sudbury River and associated wetlands. To limit impacts of site development, the runoff from the roof of the pump station will be collected and infiltrated into the ground. Additionally, areas of pavement that are not required to support pump station maintenance can be removed and restored to pervious vegetated areas. One potential area is the site paving along the southern and eastern sides of the building. Vegetation would consist of native species that will require little maintenance. A secondary benefit of the plantings in these areas would be to deter graffiti on these exposures.

4.7 Structural Design

4.7.1 General

The structural analysis of the existing foundation found that it was suitable for reuse. A rigid roof system is required to provide building dynamics that are similar to the existing conditions. The benefit of the rigid roof is that it will allow the most flexibility for the layout of window and door openings in the new superstructure.

4.7.2 Applicable Codes

The design of all new structural components will be done in accordance with applicable requirements of the most up to date version of the following standards and codes:

- Massachusetts Building Code, 9th Edition
- Building Code Requirements for Structural Concrete (ACI 318)
- Specifications for Structural Concrete for Buildings (ACI 301)
- Building Code Requirements for Masonry Structures (ACI 530)

4.7.3 Recommended Improvements

4.7.3.1 Wet Well

Exposed aggregate was observed in the parshall flume chamber and the wet well above the water line. The concrete appeared to be intact below the normal water surface elevation. No significant structural deficiencies were identified during the visual inspection. Once the pump station is under bypass the wet well and parshall flume will be inspected for additional deficiencies beyond what was identified.

Prior to rehabilitating the wet well and parshall flume chamber, cracking or infiltration will be repaired by injecting epoxy grout into the identified areas. Rehabilitation of the wet well will require the application of a 100-percent solids epoxy coating to a specified thickness. The City indicated that they had experienced issues with the coating at the A Street pump station. As with any coating type process, surface preparation is very important to ensure proper adhesion to the substrate. The interior surface of the wet well and the parshall flume chamber will be prepared following the coating system manufacturer's specified procedures. To demonstrate the coating has been installed properly, high-voltage holiday testing will be completed to identify any pin holes in the coating system. In addition, pull testing will be completed to demonstrate that the specified bond strength has been achieved. This coating system will be installed while the wet well and parshall flume are under bypass, providing the opportunity to inspect the surfaces and ensure appropriate conditions.

4.7.3.2 Dry Well

The structural inspection of the existing foundation identified minor cracking in the upper and lower level of the pump station. Evidence of groundwater infiltration was also noted along construction joints at several locations. Repair to these locations will consist of epoxy injection which help to strengthen the area and prevent further water infiltration.

4.7.3.3 Floors

The main level floor was found to be in good condition and suitable for use. The minor area of scaling identified will be abraded and repaired with an epoxy grout prior to applying the finishes specified by the architect.

Cracking and low areas where puddling occurred were identified on the lower level. Epoxy grout will be applied to the floor to repair the identified deficiencies. Abrading the entire floor and applying the finish specified by the architect will provide a more suitable surface for maintenance and cleaning.

4.7.3.4 Monorail

There are currently three monorails on the upper level with one provided for each pump motor. One of the monorails is positioned over a hatch to allow items to be lifted out of the lower level. This monorail continues to the outside of the building to allow equipment to be loaded/offloaded from a vehicle. Unfortunately, the masonry blocks above the door prohibit the carriage from going from the interior to the exterior of the building. This issue will be resolved in the new building.

The monorails on the upper level will be demolished with the superstructure. Since all of the pumps and motors will be located in the lower level, three monorails will not be required. One new monorail will be installed over the existing hatch in the upper level. The new door will allow the carriage to pass from the interior to the exterior with no obstructions.

4.8 Building Mechanical Design

4.8.1 Heating, Ventilation, & Cooling

The existing heating and ventilation systems must be replaced and upgrade to modern standards. All existing equipment will be demolished and disposed of by the contractor unless the City has identified components to be salvaged. The proposed ventilation system for the pump station will comply with the provisions detailed in chapters 4, 5, and 9 of the National Fire Protection Association (NFPA) Standard 820 Fire Protection in Wastewater Treatment and Collection Facilities.

An energy recovery ventilation unit (ERV) will be installed on the roof to provide ventilation for the pump station. The unit will be capable of cooling/dehumidification and providing 7,500 cubic feet per minute (cfm) of airflow which equates to 12 air changes per hour for the space. A gas burner within the ERV will warm the air to 50 degrees Fahrenheit when required. New duct work will be installed to bring make-up air and exhaust air from the upper and lower level to the ERV.

Electric unit heaters will be installed in the upper and lower level of the pump station. The heaters will provide supplementary heat above the 50-degree temperature provided by the ERV.

4.8.2 Plumbing

All existing equipment will be demolished and disposed of by the contractor unless the City has identified components to be salvaged. Proposed plumbing will comply with applicable Code of Massachusetts Regulations Title 248.

The following components shall be provided:

- A new domestic water service from the curb-stop to the building
- An electric hot water heater
- Low flow lavatory and toilet
- Eye/face wash and emergency shower on the lower level
- Hose bibs for wash down on lower level and on the exterior for outside use
- Sump pumps sized to meet water drainage requirements

4.9 Electrical Design

All existing equipment will be demolished and disposed of by the contractor unless the City has identified components to be salvaged. Proposed electrical improvements will comply with applicable section of NFPA 70 and amendments enacted by the Massachusetts Board of Fire Prevention Regulations.

The following components are proposed to be provided:

- 480/277 volt, 3-phase, 4-wire 400 Amp electrical service
- Pole mounted utility transformer with underground service from the utility pole at the street
- 480/277 volt, 3-phase, 4-wire 400 Amp main circuit breaker
- 200 KW, 480 Volt, 3-phase, 4-wire exterior diesel engine generator with weatherproof sound attenuated enclosure
- 400 Amp switch gear and automatic throw over
- New LED lighting fixtures on the interior and exterior of the building
- Emergency lighting and exit signage
- Intrusion detection system

The following existing components were identified to be incorporated into the pump station rehabilitation.

- Phone system - VOIP
- CCTV system
- City Fiber

4.10 HAZARDOUS MATERIALS

4.10.1 BUILDING

A limited hazardous materials survey report had been completed for the WRPS by AECOM dated December 14, 2018. Supplemental hazardous materials surveys were also completed by BETA in April 2021 and September of 2021. The following hazardous materials were identified at the site.

Date	Consultant	Sample Media	Summary of Sampling Results
12/14/18	AECOM	Building materials (pipe penetration sealant, gray painted piping, black wall coating, roofing materials)	PCBS > 50 ppm in Lower Level • Gray paint - piping system Asbestos • Window glazing • Roof vent caulking • Louver Caulking Lead Based Paint • Pumping Equipment
4/17/21	BETA	Building Materials	Asbestos • Foundation vapor barrier • Roofing materials Lead Based Paint • Exterior Railing • Interior Stairs
9/13/21	BETA	PCB Sampling - Suspect Paints	PCBs > 50 ppm in Lower Level • Green wall paint • Gray pipe paint • Gray duct paint • Gray stair paint • Gray floor paint PCBs > 50 ppm in Upper Level • White floor paint • Gray/red floor paint • Green motor paint
March 2022	BETA	Concrete Substrate & Miscellaneous Building Materials	PCBS > 50 ppm in Upper Level • Green paint on CMUs PCBS < 50 ppm in Upper/Lower Levels • All concrete substrate samples

Removal and disposal of lead and asbestos containing materials will be removed and disposed of in accordance with local, State and Federal requirements. Materials containing PCBs will be managed in accordance with a PCB Bulk Product Waste Disposal Plan prepared by BETA.

4.10.2 Soil and Groundwater

Previous investigations at the site have identified impacted soil and groundwater. Excess soil generated will be managed in accordance with local, state, and federal regulations.

5.0 Project Costs

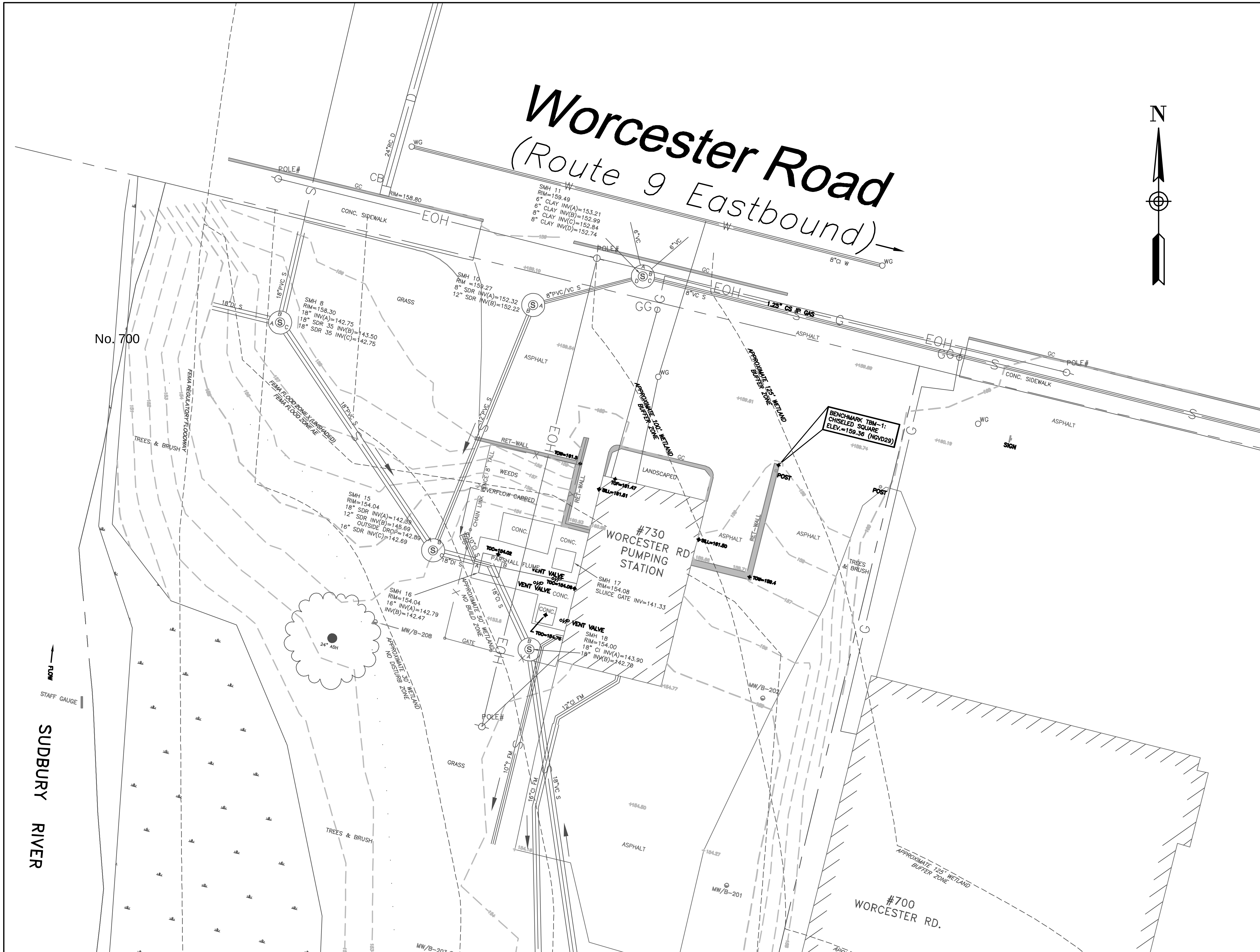
The estimated project cost to upgrade the WRPS is $8.78 million. This estimate includes project management and resident engineering costs. A contingency of 10-percent is included to account for additional costs that may be required as the design progresses to construction documents. As the design progresses toward final contract documents, the estimate will be updated, and the contingency will be reduced to 10-percent.

Worcester Road Wastewater Pump Station
100 - Percent Design Submission
Opinion of Probable Construction Cost
May 2022

Description	Unit Meas.	Quantity	Unit Price	Estimate
Erosion Control/Site Preparation	LS	1	$75,000	$75,000
Bypass Setup/Breakdown	LS	2	$17,000	$34,000
Linestop	EA	1	$35,000	$35,000
Tapping Sleeve and Valve	EA	1	$20,000	$20,000
Bypass Connection and Structure	LS	1	$27,000	$27,000
Future Forcemain Connection and Valves	LS	1	$85,000	$85,000
Bypass Rental and Pumping (Phase I, see notes)	Month	3	$100,000	$300,000
Bypass Rental and Pumping (Phase 2)	Month	9	$25,000	$225,000
Equipment Demolition	LS	1	$50,000	$50,000
Engine/Generator Support and Frame	LS	1	$150,000	$150,000
Miscellaneous Concrete Pads	LS	1	$20,000	$20,000
Site Paving	SY	900	$65	$58,500
Curbing and Sidewalk Improvements	LS	1	$30,000	$30,000
Site Improvements	LS	1	$125,000	$125,000
Soil Management and Disposal	Allow	1	$100,000	$100,000
Hazardous Building Materials Abatement	LS	1	$725,000	$725,000
Wetwell Interior Coating System	SF	1,600	$75	$120,000
Waterproof Wetwell Access Hatches	EA	2	$30,000	$60,000
Carbon Odor Control System	LS	1	$20,000	$20,000
Wastewater Pumps	EA	3	$79,000	$237,000
Interior Piping and Valves	LS	1	$250,000	$250,000
Site/Roof Rails	LF	150	$725	$108,750
Architectural and Structural Components	LS	1	$985,000	$985,000
Plumbing	LS	1	$50,000	$50,000
HVAC	LS	1	$255,000	$255,000
Electrical	LS	1	$1,115,000	$1,115,000
I&C	LS	1	$75,000	$75,000
Contractors Overhead and Profit	LS	1	$800,000	$800,000
SUBTOTAL				$6,136,000
Construction Contingency (10%)				$614,000
Construction Subtotal				$6,750,000
Construction Services and Observation (30%)				$2,025,000
TOTAL				$8,775,000

Phase I Bypass Notes:
1: assumed coverage not required on work days
2: two 8-hour shifts for coverage on work days
3: three 8-hour shifts for coverage on weekends & holidays.

Figures


Worcester Road
(Route 9 Eastbound)
N
No. 700
CONC. SIDEWALK
EOH
GRASS
ASPHALT
FEMA REGULATORY FLOODWAY
FEMA FLOOD ZONE X (UNSHADED)
FEMA FLOOD ZONE AE
TREES & BRUSH
SMH 8
RIM=158.30
18" INV(A)=142.75
18" SDR 35 INV(B)=143.50
18" SDR 35 INV(C)=142.75
SMH 10
RIM =159.27
8" SDR INV(A)=152.32
12" SDR INV(B)=152.22
SMH 11
RIM=159.49
6" CLAY INV(A)=153.21
6" CLAY INV(B)=152.99
8" CLAY INV(C)=152.84
8" CLAY INV(D)=152.74
1.25" CS IP GAS
APPROXIMATE 100' WETLAND BUFFER ZONE
APPROXIMATE 125' WETLAND BUFFER ZONE
BENCHMARK TBM-1:
CHISELED SQUARE
ELEV.=159.36 (NGVD29)
RET-WALL
LANDSCAPED
WEEDS
OVERFLOW CAPPED
POST
SIGN
#730
WORCESTER RD
PUMPING
STATION
SMH 15
RIM=154.04
18" SDR INV(A)=142.85
12" SDR INV(B)=145.69
OUTSIDE DROP=142.69
16" SDR INV(C)=142.69
PARSHALL FLUME
VENT VALVE
SMH 16
RIM=154.04
16" INV(A)=142.79
INV(B)=142.47
SMH 17
RIM=154.08
SLUICE GATE INV=141.33
SMH 18
RIM=154.00
18" CI INV(A)=143.90
18" INV(B)=142.78
APPROXIMATE 50' WETLAND NO BUILD ZONE
APPROXIMATE 30' WETLAND NO DISTURB ZONE
24" ASH
MW/B-208
MW/B-202
MW/B-201
MW/B-203
GATE
12" CI FM
TREES & BRUSH
STAFF GAUGE
FLOW
SUDBURY RIVER
#700
WORCESTER RD.
APPROXIMATE 125' WETLAND BUFFER ZONE

Prepared by:

BETA
www.BETA-Inc.com

Print Date: 3/9/2021 11:51 AM

WORCESTER ROAD PUMP STATION

FRAMINGHAM, MA

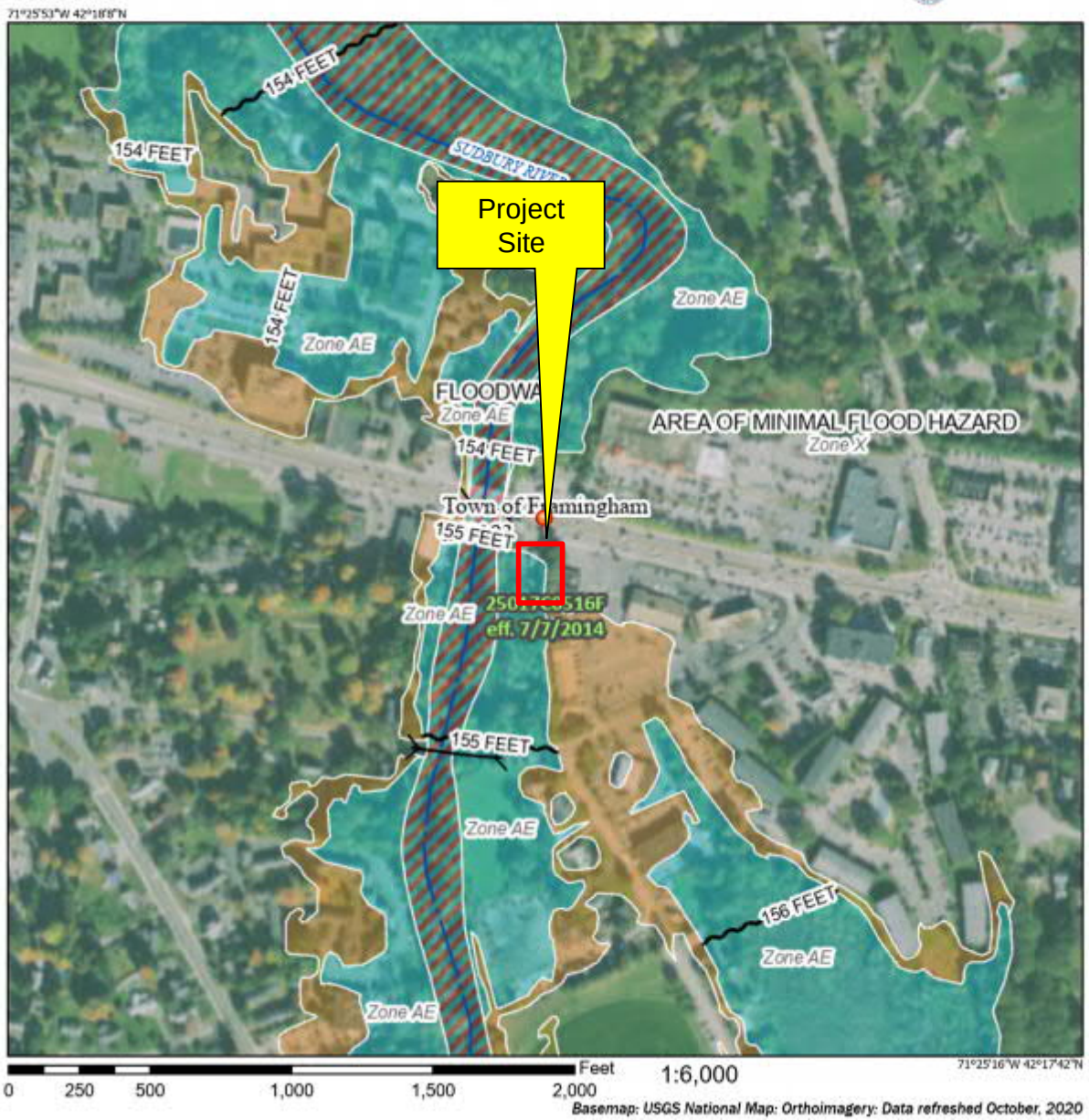
Scale: 1" = 20'

Figure No. 2-4

Site Plan

J:\7385 - FRAMINGHAM WRPS IMPROVEMENTS\DRAWINGFILES\PLANSET\WRPS FIGURES.DWG

National Flood Hazard Layer FIRMette



FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/3/2021 at 8:06 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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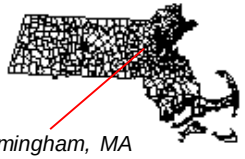


Fig. 2-5: Flood Map

Worcester Road Pump Station
Framingham, MA

Scale: Not to Scale

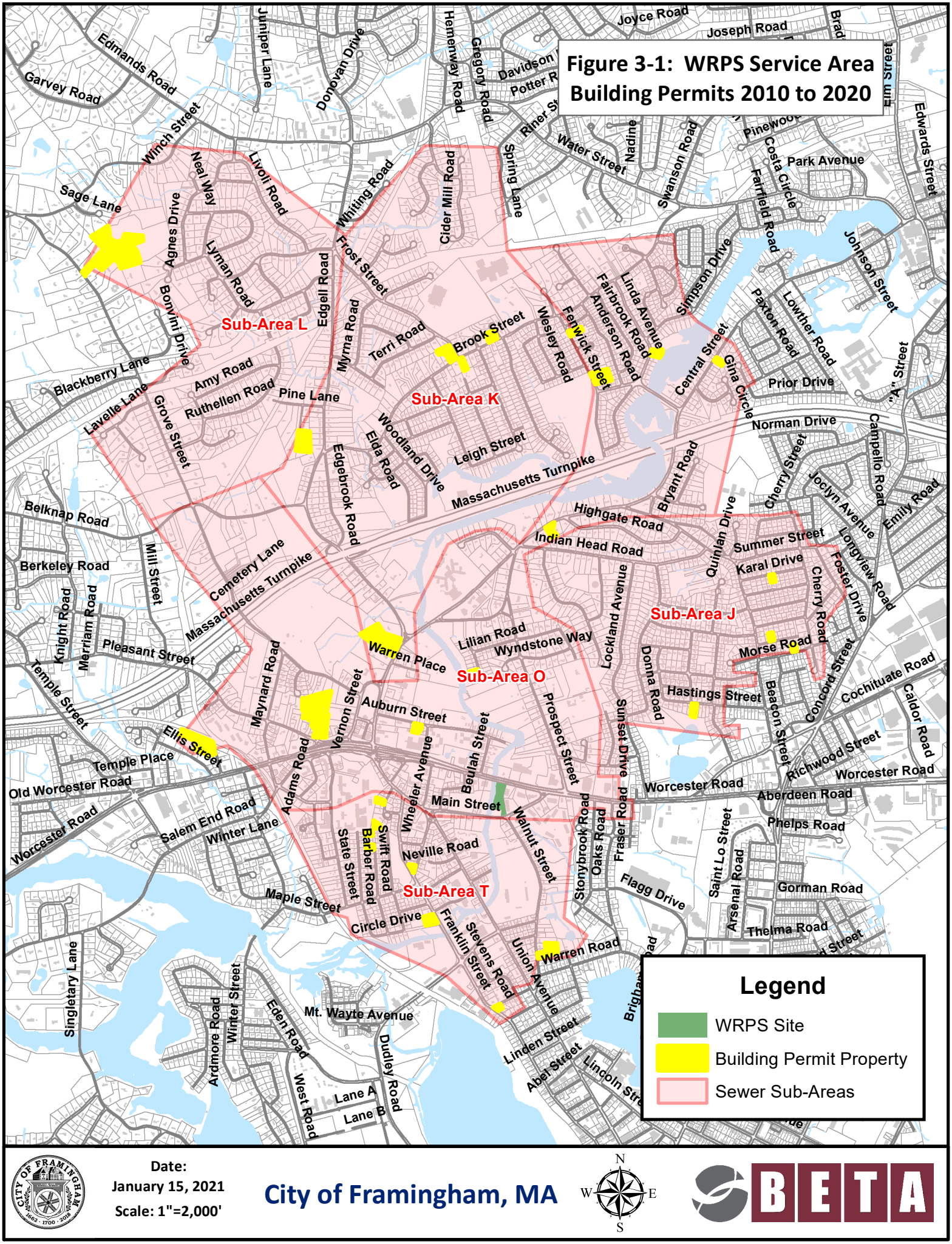
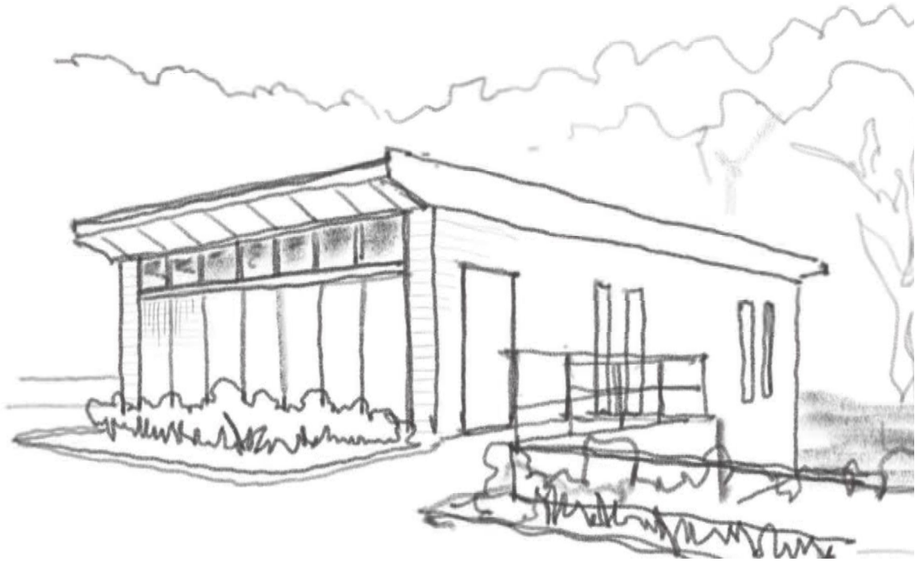
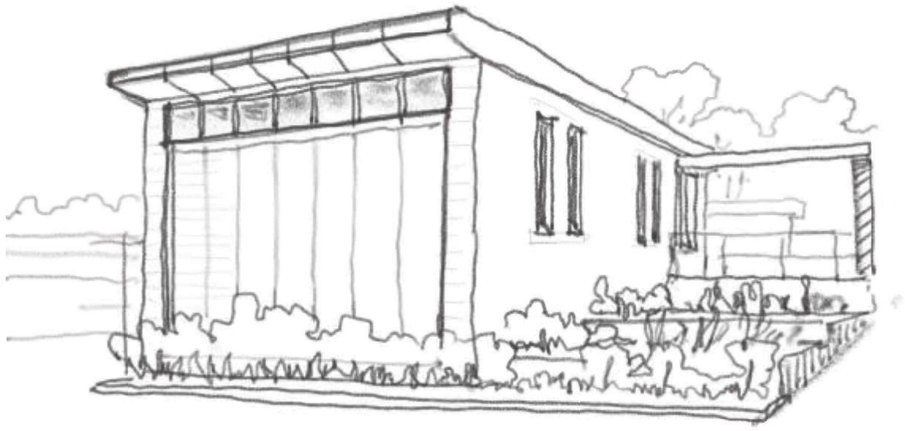


Figure 3-1: WRPS Service Area
Building Permits 2010 to 2020
Sub-Area L
Sub-Area K
Sub-Area J
Sub-Area O
Sub-Area T
Legend
WRPS Site
Building Permit Property
Sewer Sub-Areas
Date:
January 15, 2021
Scale: 1"=2,000'
City of Framingham, MA
N
W
E
S
BETA



NORTHERN ELEVATION



SOUTHERN ELEVATION

Prepared by:

BETA
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Print Date: 3/4/2021 10:01 AM

DSK Dewing Schmid Kearns
ARCHITECTS + PLANNERS

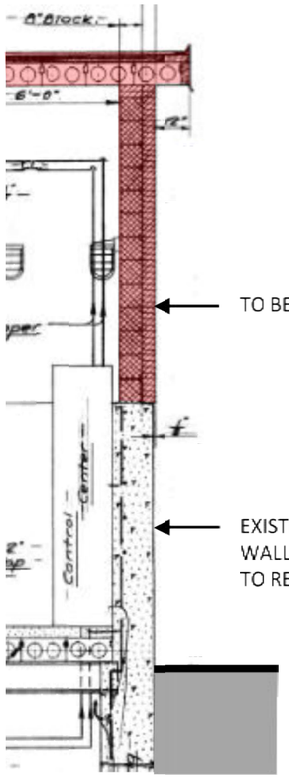
WORCESTER ROAD PUMP STATION
FRAMINGHAM, MA

Scale: None

Figure No. 4-2

Proposed Rendering

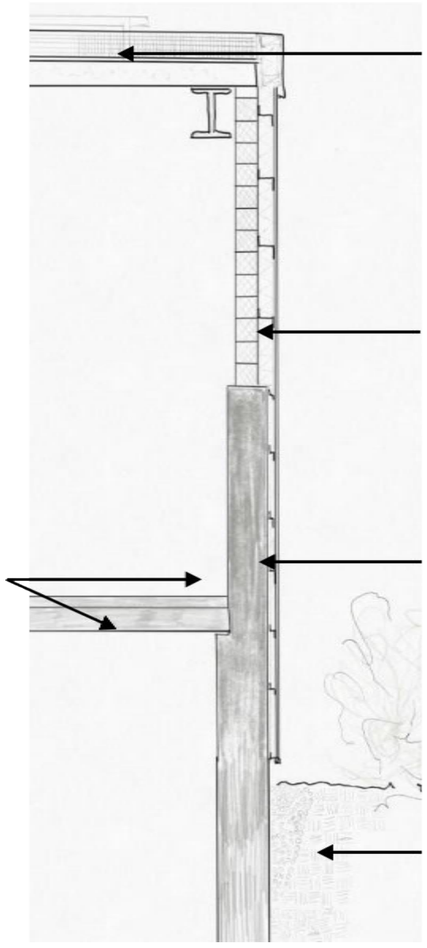
J:\7385 - FRAMINGHAM WRPS IMPROVEMENTS\DRAWINGFILES\PLANSET\WRPS FIGURES.DWG



TO BE DEMOLISHED (RED)

EXISTING FOUNDATION WALLS AND INTERIOR FLOOR TO REMAIN

EXISTING



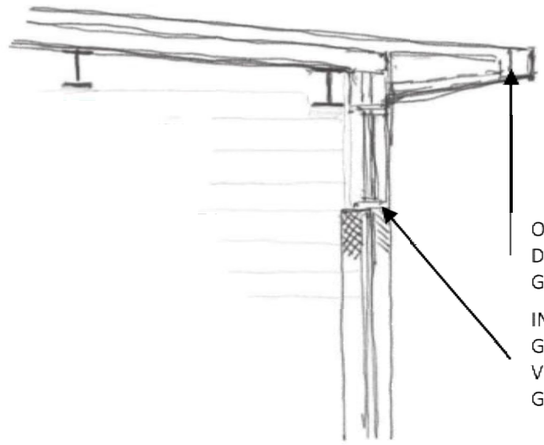
PV PANELS SECURED TO CONCRETE SLAB ROOF WITH DRAINAGE PLANE AND 5" RIGID INSULATION, MEMBRANE, SLOPED TO DRAIN.

CMU WALL WITH MINERAL WOOL INSULATION, THERMALLY ISOLATED FASTENERS WITH GLASS FIBER REINCORCED RAINSCREEN

RAINSCREEN AND 2" OF INSULATION CONTINUE AT EXPOSED FOUNDATION WALL

EXISTING ASPHALT PAVING REMOVED AT SELECT LOCATIONS AND REPLACED WITH DRAINAGE MAT, GRAVEL AND COMPACTED EARTH.

PROPOSED EAST



OVERHANG, DRAINED TO GUTTER.

INSULATED GLAZED VISION GLASS.

PROPOSED SOUTH

Prepared by:

BETA
www.BETA-Inc.com

Print Date: 3/4/2021 10:08 AM

DSK Dewing Schmid Kearns
ARCHITECTS + PLANNERS

WORCESTER ROAD PUMP STATION

FRAMINGHAM, MA

Scale: None

Figure No. 4-3

WALL SECTIONS

J:\7385 - FRAMINGHAM WRPS IMPROVEMENTS\DRAWINGFILES\PLANSET\WRPS FIGURES.DWG

III-20. Provision for O&M Program

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date: April 13, 2022 Job No.: 7385

To: MassDEP – CWSRF

Cc:

From: Alan Gunnison, P.E.

Subject: Worcester Road Sewer Pumping Station Replacement – CWSRF

PROVISION FOR O&M PROGRAM

As part of the professional services for the Worcester Road Sewer Pumping Station Replacement project, the Worcester Road Pump Station Operation and Maintenance Manual will be updated and will meet all of the requirements of 314 CMR 12.04(1).

Alan Gunnison, P.E.

Project Manager

III-21. Displacement of Persons or Businesses

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP – CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement – CWSRF		

DISPLACEMENT OF PERSONS OR BUSINESSES

The Worcester Road Sewer Pumping Station Replacement project has not caused, and will not cause, the displacement of any individual, family, business, or farm as required by the Uniform Relocation and Real Property Assistance Policies Act of 1970 (PL-91-646).

Alan J. Gunnison

Alan Gunnison, P.E.

Project Manager

III-22. Plan of Operation

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP – CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement – CWSRF		

PLAN OF OPERATION

As part of the professional services for the Worcester Road Sewer Pumping Station Replacement project, BETA will draft an Operation and Maintenance manual for the pump station. This manual will contain a final Plan of Operation.

Alan J. Gunnison

Alan Gunnison, P.E.

Project Manager

III-23. Start-up Services

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP – CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement – CWSRF		

PROVISION FOR START-UP SERVICES

As part of the professional services for the Worcester Road Sewer Pumping Station Replacement project, BETA will provide the City of Framingham with start-up services for the new equipment for one year. One year after startup, the City will submit a report to MassDEP outlining the performance of the equipment.

Alan J. Gunnison

Alan Gunnison, P.E.

Project Manager

III-24. Post-Construction Services

IMPROVING COMMUNITIES TOGETHER

MEMORANDUM

Date:	April 13, 2022	Job No.:	7385
To:	MassDEP – CWSRF		
Cc:			
From:	Alan Gunnison, P.E.		
Subject:	Worcester Road Sewer Pumping Station Replacement – CWSRF		

PROVISION FOR POST CONSTRUCTION SERVICES

As part of the professional services for the Worcester Road Sewer Pumping Station Replacement project, BETA and the City of Framingham will monitor the performance of the new station. One year after startup, the City will submit a report to MassDEP outlining the performance of the station.

Alan J. Gunnison

Alan Gunnison, P.E.

Project Manager