

## Town of Yarmouth

Per M.G.L.: A public body shall post notice of every meeting at least 48 hours prior to such meeting, excluding Saturdays, Sundays, and legal holidays. Notice shall be printed in a legible, easily understandable format and shall contain: the date, time and place of such meeting and a listing of topics/agenda that the chair reasonably anticipates will be discussed at the meeting.

### Notice of Meeting

Name of committee, board, etc:	<b>Water Resources Advisory Committee (WRAC)</b>
Date of Meeting:	<b>October 3, 2022</b>
Time:	<b>4:00 p.m.</b>
Place:	<b>Yarmouth Town Hall Hearing Room 1146 Route 28 South Yarmouth, MA 02664</b>

#### **Zoom meeting information for alternative public access**

<https://us02web.zoom.us/j/83490010522?pwd=Z05KcEthRXNEbHQ5L2RuekhMM2xoQT09>

#### **Agenda:**

1. OPM Update – Project Status and Schedule
2. Project Cost Discussion
3. Design Update for WRRF and Collection System
4. MEPA Supplemental Environmental Impact Statement
5. Regulatory/Permitting Update
6. WRAC Neighborhood Meetings
7. Friends of Bass River Update
8. Review of Past Meeting Minutes
  - September 12, 2022
9. Future Meeting Dates/Agenda Items

Posted By (Name):	Kyle Pedicini
Signature:	<i>Kyle Pedicini</i>

**For meetings of a local public body, notice shall be filed with the municipal clerk.**

Date & Time: **10/3/2022 4:00 PM**

Location: **Yarmouth Department of Public Works**

Project: **Yarmouth Wastewater Collection System and Water Resource Recovery Facility**

Objective: **Water Resource Advisory Committee – Project Progress Report**

---

## Previous Month's Accomplishments

- July 23
  - W-1 Flow and Load Criteria Technical Memoranda
  - W-2 Effluent Water Quality Criteria Technical Memoranda
- July 28
  - Hydrogeologic Evaluation report submittal to Mass DEP
  - Site Visit to Cohasset MBR Wastewater Treatment Plant
- August 2 - Board of Selectmen SRF Application Presentation
- August 3 - Architectural Concepts Meeting
- August 9 - W-4 Biological Process Alternatives Evaluation and Recommendation Technical Memorandum
  - Phase 1 Collection System Schedule
- August 10 - Draft Supplemental Environmental Impact Report
- August 12 - 2023 Clean Water Construction Project Evaluation Form
  - 2023 Drinking Water Construction Project Evaluation Form
- August 15 - Supplemental Environmental Impact Report to MEPA
- September 1 – W-3 Septage and Grease Receiving Considerations
- September 9 - The following new design criteria memos were submitted for review.
  - G-1 Area Classification
  - G-2 Nomenclature
  - A-1 Architectural Basis of Design
  - S-1 Structural Design Concepts
  - GEO-1 Geotechnical Review
  - W-1 Flow and Load Criteria Technical Memoranda
  - W-2 Effluent Water Quality Criteria Technical Memoranda
  - W-3 Septage and Grease Receiving Considerations
  - W-4A Denitrification Filters Design Concepts
  - W-5 Preliminary Treatment Design Concepts
  - W-6 Disinfection Design Concepts
  - W-7 Solids Processing Design Concepts
  - W-8 Odor Control Design Concepts
  - H-1 HVAC Design Concepts
  - P-1 Plumbing and Fire Protection Design Concepts
  - I-1 Instrumentation and Control Design Concepts
  - E-1 Electrical Design Concepts
- September 22 – Design Memorandum Review Workshop

#### Microsoft Teams Town Project Site

- The Town has established a Team site where files can be uploaded for access by the project team including Yarmouth Staff. The items requested include: Running list of deliverables and status (see attached), plans and any permits and applications submitted, current cost estimates, narrative project executive summaries, project descriptions, notice of project change.

Spending Plan – Bill Scott requested a spending plan broken down by Engineering and Construction phases (attached). The Town is concerned that the revenue generated from Phase I does not cover the cost of the Phase I contracts and has requested that the design team look at cost reduction measures.

#### Recent Accomplishments

September 19 – WRAC Neighborhood Meetings (see attached)

September 22 – WRRF Technical Memoranda Review Workshop

September 23 – Phase 2 and Phase 3 - Collection System Technical Memorandum/30% Design Submittal

September 27 – Board of Selectmen meeting – request for cost back-up for Phase I collection system

See attached memorandum from CDM Smith dated September 28, 2022

#### Upcoming Milestones

Collection System Technical Memoranda Review Workshop

See updated Deliverable Schedule, attached

Date: 9/23/2022

To: William J Scott, Assistant Town Administrator

From: Louis Ragozzino

Subject: Yarmouth WRRF and Phase 1 Sewer Collection System Deliverable Schedule

Cc: Jeff Colby; CDMSmith

---

Schedule of Deliverables/milestone dates based on CDM Smith project schedule.

**1) Contract 1 - Water Resource Recovery Facility**

- a) Preliminary Design
  - i) September 9, 2022 Technical Memorandum Submittal
  - ii) November 29, 2022 30% Design Submission
- b) Final Design
  - i) March 21, 2023 60% Design Submission with refined Cost Estimate
  - ii) August 4, 2023 90% Design Submission
  - iii) August 22, 2023 SRF Application with 90% design and updated cost estimate
  - iv) November 2, 2023 MADEP Permission to Advertise
- c) Bidding
  - i) November 3, 2023 Bid Advertisement
  - ii) January 26, 2024 Bid Evaluation
  - iii) January 29, 2024 Notice of Contract award
- d) Key Milestone Dates
  - i) June 30, 2023 Town Authorizes Funding for Project
  - ii) June 28, 2024 Town Executes Construction Contract
  - iii) July 2023 – 2025 Construction

**2) Contract 2 - East of Parkers River (Old Main St to Rte. 28/N. Main St Intersection)**

- a) Preliminary Design
  - i) September 23, 2022 Technical Memorandum/30% Design Submittal
- b) Final Design
  - i) November 23, 2022 60% Design Submittal
  - ii) February 17, 2023 90% Design Submittal
  - iii) March 29, 2023 100% Design Submittal
- c) Bidding
  - i) April 13, 2023 Bid Advertisement
  - ii) July 1, 2023 Notice of Contract award
  - iii) August 2023 – 2025 Construction

---

## Memo: Yarmouth WRRF and Phase 1 Sewer Collection System deliverable Schedule

- 3) Contract 3 - East of Parkers River (Parkers River to Old Main St., including South Shore Dr.)
  - a) Preliminary Design
    - i) September 23, 2022 Technical Memorandum/30% Design Submittal
  - b) Final Design
    - i) November 23, 2022 60% Design Submittal
    - ii) February 17, 2023 90% Design Submittal
    - iii) March 29, 2023 100% Design Submittal
  - c) Bidding
    - i) April 13, 2023 Bid Advertisement
    - ii) July 1, 2023 Notice of Contract award
    - iii) August 2023 – 2025 Construction
  
- 4) Contract 4 – Route 28 to North Main Intersection (MassDOT)
  - a) Final Design
    - i) July 1, 2022 75% Design Submittal
    - ii) TBD 100% Design Submittal
  - b) Bidding
    - i) October 15, 2023 Bid Advertisement
    - ii) April 2024 – 2026 Construction
  
- 5) Contract 5 – Route 28 West (MassDOT)
  - a) Final Design
    - i) TBD Not Yet Under Contract
  - b) Bidding
    - i) April 15, 2024 Bid Advertisement
    - ii) 2024 – 2026 Construction
  
- 6) Contract 6– Route 28 West (MassDOT)
  - a) Preliminary Design
    - i) TBD Not Yet Under Contract
  - b) Bidding
    - i) April 15, 2024 Bid Advertisement
    - ii) 2024 – 2026 Construction



## Memorandum

*To: Mr. William J. Scott  
Town of Yarmouth  
Assistant Town Administrator*

*From: Michael Guidice, P.E.  
David F. Young, P.E.*

*Date: September 28, 2022*

*Subject: Yarmouth Phase 1 Cost Overview*

The purpose of this memorandum is to provide an overview of the methodology used to develop the updated cost estimate for Phase 1 of the Town of Yarmouth's recommended wastewater program. This updated estimate was prepared as part of the Project Evaluation Form (PEF) submittal to the Massachusetts Department of Environmental Protection (MassDEP) for the State Revolving Fund (SRF) Loan Program submitted in August 2022.

Prior to the recent cost estimate update, the Recommended Plan costs presented in the Notice of Project Change (NPC) for Phase 1 (\$162.4M) were based on a projected 2024 Engineering News Record (ENR) industry standard Construction Cost Index of 13060. The underlying Opinion of Probable Construction Costs were based on conceptual layouts and developed using estimated treatment plant construction costs based on flow; per foot construction costs for the collection system pipelines; and costs per pumping station based on pumping capacity.

For preparation of the PEF submittal in August 2022, due to significantly changed market conditions, costs needed to be updated since previous annual inflation rate projections of 3 percent per year were now projected to be at 7 percent per year. The present-day market condition costs presented in the NPC were first increased by 8 percent to escalate them to the actual July 2022 ENR index of 13168. Additionally, per industry practice, the costs were then escalated further to the projected mid-point of construction at 7 percent per year. For the Water Resource Recovery Facility (WRRF), a mid-point of 2025 was used (projected ENR index of 16131). For the Phase 1 collection system, a mid-point of 2024 was used (ENR of 15077). Although construction of some of the collection system contracts will likely extend beyond a mid-point of 2024, we anticipate some cost savings due to coordination with the Massachusetts Department of Transportation (MassDOT) projects along Route 28.

A summary of the costs presented in the NPC and those presented in the PEF is shown below. The differences between the two columns are due to the escalation factors noted above.

Please note that we expect PEF costs to be conservative for planning purposes. As part of our ongoing design services for the WRRF and collection system, updated cost estimates, based on increasing level of detail, will be developed at each design milestone. These estimates will be progressively more accurate as the level of design completion increases.

	<b>NPC COST</b> (ENR 13060)	<b>PEF COST</b> (ENR 16131 for WRRF; ENR 15077 for Collection System)
<b>WRRF</b>	\$96.9M	\$126.4M
<b>Collection System</b>	\$65.4M	\$80.9M
<b>Total</b>	\$162.4M	\$207.3M

Notes:

1. Costs include construction contingencies and engineering during construction.
2. OPM, Effluent Recharge and Non-Infrastructure costs are included in the WRRF cost items.

CC: Mr. Robert Whritenour  
Mr. Jeff Colby  
Mr. Lou Ragozzino

On xx, on a motion by xx, seconded by xx, the committee voted xx to approve these minutes.

## Town of Yarmouth

### MINUTES OF THE WATER RESOURCES ADVISORY COMMITTEE MEETING OF September 12, 2022

The Yarmouth Water Resources Advisory Committee held a Business Meeting at 4:00 p.m. on Monday, September 12, 2022. The meeting was a hybrid meeting conducted in person in the DPW Training Room and through Zoom videoconferencing.

#### **Committee Members Present**

**In Person:** Curt Sears, John Deliso, Spyro Mitrokostas, Tom Durkin, George Perkins, Joanne Crowley, Lee Rowley

**Via Zoom:** Mary Craig

**Staff:** Jeff Colby, DPW Director; Mike Gudice and Kara Johnston, from CDM Smith; Louis Ragozzino, Wright-Pierce; Laurie Ruzala, Water & Wastewater Superintendent; Kyle Pedicini, Economic Development Coordinator

#### **1. OPM Update**

Louis Ragozzino, Wright-Pierce, presented an Owner's Project Manager progress report for the Yarmouth wastewater project. Mr. Ragozzino reported that Bill Scott, Assistant Town Administrator, requested a spending plan broken down by Engineering and Construction phases. That spending plan was presented to the committee. It was noted that the Town is concerned that the revenue generated from Phase I does not cover the cost of the Phase I contracts and has requested that the design team look at cost reduction measures. The following upcoming milestones were also noted:

September 9 - Collection System Technical Memorandum/30% Design Submittal

September 19 – First WRAC Neighborhood Meeting

September 22 – WRRF Technical Memoranda Review Workshop

September 23 – Collection System Technical Memoranda Review Workshop

Finally, an updated project schedule was presented to the committee and it was noted that the hope is to have Town Meeting approve construction funding at the 2023 Annual Town Meeting, and then begin construction on the project in July 2023.

#### **2. Design Update for WRRF and Collection System**

Bill McConnell, CDM Smith, reported that the wastewater project design is currently on schedule. He also noted that CDM Smith is recommending that the town maintain the current operation of the existing Yarmouth Septage Treatment Plant, and not add Septage Treatment to the planned wastewater treatment facility. It was noted that the treatment facility will be designed to potentially accommodate a future addition of septage treatment at the site, but due to the need for cost savings it will not be included in the initial design. The committee agreed with this recommendation.



**On xx, on a motion by xx, seconded by xx, the committee voted xx to approve these minutes.**

Mike Gudice, CDM Smith, provided an update on the collection system design. It was noted that Phase 1 of the collection system will be broken into six contracts. Mr. Gudice noted some minor changes made to the contracts.

**3. MEPA Supplemental Environmental Impact Statement**

Kara Johnston, CDM Smith, noted that the supplemental environmental impact review information has been submitted to MEPA and is currently under their review. The comment period for the SEIR is open for another week. A decision will be issued by MEPA by 9/30, which will hopefully close out the MEPA process. The committee agreed to send a letter of support for this review.

**Vote:** On a motion from Lee Rowley, seconded by George Perkins, the Committee voted to approve sending a letter of support to MEPA for the Town's SEIR review, by a vote of 8-0.

**4. MEPA Supplemental Environmental Impact Statement**

Kara Johnston reported that the first step in the process for the Groundwater Discharge Permit required for the project has been completed. It was also noted that after the MEPA process is complete, the next step for the town will be to submit project information to the Cape Cod Commission for a review of its consistency with the regional 208 plan.

**5. WRAC Neighborhood Meetings**

Spyro Mitrokostas stated that venues and meeting dates have been secured for four upcoming neighborhood meetings with the public regarding the town's wastewater planning efforts. Committee members agreed to have a brief and broad slideshow at the beginning of these meetings updating the public on the recent progress in wastewater planning, and directed town staff to create one.

**6. Review of Past Meeting Minutes**

**Vote:** On a motion by Lee Rowley, seconded by Mary Craig, the committee voted to approve the minutes of August 15, 2022, by a vote of 7-0-1 (Lee Rowley abstained).

The meeting adjourned at approximately 5:15pm