



TOWN OF CONCORD
Division of Natural Resources
141 Keyes Road, Concord, MA 01742
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To: Ann Clifford, Senior Planner
From: Delia Kaye, Natural Resources Director
Re: Response to CPC Questions
Date: November 15, 2022

Please see below for responses to questions raised by members of the Community Preservation Committee on the Warner's Pond Restoration and Open Space and Recreation Plan update grant applications.

- 1. If the Warner's Pond application is not being withdrawn, provide a detailed budget.** *Response: Warner's Pond is in an advanced state of eutrophication which has resulted in a number of undesirable conditions including decreased water depths, widespread growths of aquatic invasive plants, and impaired recreational opportunities. I am respectfully requesting that the Community Preservation Committee consider recommending this request in full.*

The Town is currently entering into a contract with the consultant to evaluate alternatives to the original proposal of limited dredging at Warner's Pond. Cost estimates developed for the project in 2018 and 2022 greatly underestimated the impacts of trucking, inflation, and sediment disposal costs. Rather than continue to request additional funding for what seems to be an unacceptably high cost for limited dredging, we are working with our consultant to evaluate two options over the winter:

- a. Hydraulically dredging accumulated sediments from the eastern portion of the pond and pumping the material directly to the pond's northwestern and/or southwestern cove(s). This alternative would increase water depths throughout several acres of Warner's Pond and would improve recreational opportunities by linking Town-owned access points at Commonwealth Avenue, the Gerow Recreation Area, and Pond Street. This alternative would also convert several acres of existing open water to a shallow vegetated wetland community through the placement of dredged material.*
- b. Removal of the Warner's Pond dam. This alternative would fully restore the system to its pre-alteration state as a free-flowing river and wetland system by removing sediment and the impounding effects of the Warner's Pond dam. The pre-alteration alignment of Nashoba Brook would be restored through the existing ponded area, and existing areas of open water would be converted to one or more vegetated community types.*

Once additional data collection has been conducted and conceptual designs prepared, including visual renderings and cost estimates, we will engage in a robust public process to obtain community and stakeholder feedback on the preferred approach to restore Warner's Pond prior to 2023 Annual Town Meeting. We will proceed as directed from the outcome of this public engagement process.

A detailed budget for each option of provided below.

PRELIMINARY COST ESTIMATE

Hydraulically dredge 55,000 cy from the eastern portion of the pond and around Scout Island and pump the material to the northern and/or southern portion(s) of the pond.

Task 1	Project Management		\$ 10,000.00
	PM	\$ 10,000.00	
Task 2	Data Collection and Analysis		\$ 75,000.00
	Updated bathymetry and sediment depth surveys	\$ 10,000.00	
	Updated sediment sampling	\$ 30,000.00	
	Water quality sampling	\$ 5,000.00	
	Aquatic plant mapping	\$ 5,000.00	
	Wildlife habitat assessment	\$ 5,000.00	
	Fisheries and benthos survey	\$ 5,000.00	
	Community engagement	\$ 5,000.00	
	Technical memorandum	\$ 10,000.00	
Task 3	Hydrologic and Hydraulic Modeling		\$ 30,000.00
	Existing conditions model	\$ 10,000.00	
	Proposed conditions model	\$ 15,000.00	
	H&H report	\$ 5,000.00	
Task 4	Engineering Design		\$ 25,000.00
	60% design drawings	\$ 20,000.00	
	Engineer's Opinion of Probable Cost (EOPC)	\$ 5,000.00	
Task 5	Permitting		\$ 65,000.00
	USACE	\$ 15,000.00	
	MEPA	\$ 15,000.00	
	NOI	\$ 10,000.00	
	401 WQC	\$ 10,000.00	
	Chapter 91	\$ 10,000.00	
	FEMA	\$ 5,000.00	
Task 6	Final Design and Bid Support		\$ 35,000.00
	100% design drawings	\$ 10,000.00	
	Bid documents and specifications	\$ 10,000.00	
	Updated EOPC	\$ 5,000.00	
	Bid administration	\$ 10,000.00	
Task 7	Construction		\$ 3,600,000.00
	Mobilization/demobilization	\$ 1,000,000.00	
	Turbidity controls	\$ 100,000.00	
	Dredging/sediment placement	\$ 2,475,000.00	
	Commonwealth Avenue access improvements	\$ 25,000.00	
Task 8	Monitoring		\$ 30,000.00
	Construction phase monitoring	\$ 30,000.00	
PROJECT TOTAL			\$ 3,860,000.00

PRELIMINARY COST ESTIMATE

Remove Warner's Pond dam and re-establish thalweg of Nashoba Brook through the former impoundment.

Task 1	Project Management		\$ 10,000.00
	PM	\$ 10,000.00	
Task 2	Feasibility Study		\$ 75,000.00
	Review Existing Data	\$ 5,000.00	
	Topographic Survey	\$ 20,000.00	
	Bathymetric and Sediment Depth Survey	\$ 5,000.00	
	Sediment Sampling	\$ 15,000.00	
	Wetland Delineation	\$ 5,000.00	
	Community engagement	\$ 10,000.00	
	Dam Removal Feasibility Study Report	\$ 15,000.00	
Task 3	Hydrologic and Hydraulic Modeling		\$ 30,000.00
	Existing Conditions Model	\$ 10,000.00	
	Proposed Conditions Model	\$ 20,000.00	
Task 4	Engineering Design		\$ 55,000.00
	60% Design Drawings	\$ 35,000.00	
	Design Memorandum	\$ 15,000.00	
	Engineer's Opinion of Probable Cost (EOPC)	\$ 5,000.00	
Task 5	Permitting		\$ 65,000.00
	USACE	\$ 10,000.00	
	MEPA	\$ 15,000.00	
	NOI	\$ 10,000.00	
	401 WQC	\$ 10,000.00	
	Chapter 91	\$ 10,000.00	
	FEMA	\$ 5,000.00	
	ODS	\$ 5,000.00	
Task 6	Final Design and Bid Support		\$ 35,000.00
	100% design drawings	\$ 10,000.00	
	Bid documents and specifications	\$ 10,000.00	
	Updated EOPC	\$ 5,000.00	
	Bid administration	\$ 10,000.00	
Task 7	Construction		\$ 2,000,000.00
	Mobilization/demobilization	\$ 350,000.00	
	Erosion and sedimentation controls	\$ 100,000.00	
	Control of water	\$ 750,000.00	
	Spillway removal	\$ 150,000.00	
	Earthwork	\$ 250,000.00	
	Transportation and disposal	\$ 400,000.00	
Task 8	Monitoring		\$ 30,000.00
	Construction phase	\$ 30,000.00	
PROJECT TOTAL		\$ 2,300,000.00	

2. **Provide scope of work, tasks, and budget for the Open Space and Recreation Plan Update, identifying the primary focus of the consultant's responsibilities.**

Response: The Open Space and Recreation Plan (OSRP) was last updated in 2015 and is now due for its 7-year update as required by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) through the Division of Conservation Services (DCS). The OSRP Update will seek a qualified consultant to perform the following services:

- *Update all sections of the OSRP required by EEA DCS (See [EEA DCS OSRP Workbook](#). The Workbook prescribes the following sections:*
 - *Section 1 – Plan Summary*
 - *Section 2 – Introduction*
 - *Section 3 – Community Setting*
 - *Section 4 – Environmental Inventory and Analysis*
 - *Section 5 – Inventory of Lands of Conservation and Recreation Interest*
 - *Section 6 – Community Vision*
 - *Section 7 – Analysis of Needs*
 - *Section 8 – Goals and Objectives*
 - *Section 9 – Five-Year Action Plan*
 - *Section 10 – Public Comments*
 - *Section 11 – References*

The majority of the consultant's effort's is anticipated to be on Sections 6, 7, 8, and 9.

- *Facilitate the public process required for the update of the OSRP, including all public outreach, public meetings, data collection and analysis, and incorporation of data gathered through the public process*
- *Incorporate elements of the Town's Envision Concord Plan, Climate Action Plan, and Recreation Department's Recreation Facilities Study into the OSRP*
- *Update the Inventory of Lands of Open Space, Conservation and Recreation Interest, and all GIS Maps*
- *Revise the acquisitions and wish lists and create associated GIS Map*
- *Prepare required ADA Self-Evaluation of conservation and recreation properties and programs to determine how accessible these properties and programs are to people with disabilities and use as a tool for recognizing any shortcomings of the existing properties and programs and incorporating remedies in the plan*
- *Incorporate the Goals, Priority Projects, and 5-Year Capital Improvement Plans of the Natural Resources Commission and Recreation Commission as well as the Select Board Goals*

PRELIMINARY COST ESTIMATE

Open Space and Recreation Plan Update

Task 1	Project Management		\$ 6,000.00
	PM	\$ 6,000.00	
Task 2	Meetings		\$ 18,000.00
	Public Engagement and Participation Meetings	\$ 6,000.00	
	Board and Committee Meetings	\$ 6,000.00	
	Staff/OSRP Committee Meetings	\$ 6,000.00	
Task 3	Community Survey		\$ 7,200.00
	Develop and Distribute Survey	\$ 3,600.00	
	Analyze Results	\$ 3,600.00	
Task 4	Data Collection and Analysis		\$ 34,350.00
	Review Existing OSRP and Town Plans	\$ 3,600.00	
	ADA Evaluation	\$ 3,750.00	
	Community Vision	\$ 3,000.00	
	Analysis of Needs	\$ 6,000.00	
	Goals and Objectives	\$ 9,000.00	
	Five-Year Action Plan	\$ 9,000.00	
Task 5	GIS Mapping	\$ 10,800.00	\$ 10,800.00
Task 6	OSRP Update		\$ 6,600.00
	First Draft	\$ 4,800.00	
	Incorporate EEA Comments	\$ 1,800.00	
Task 7	Printing		\$ 12,500.00
	500 copies at \$25 per plan	\$ 12,500.00	
PROJECT TOTAL		\$ 95,450.00	