

## **ARTICLE 4I:**

### **ARTICLE 4I: - Marine & Environmental Affairs – Jenney Pond Dredging Engineering & Permitting**

#### **RECOMMENDATION: Approval \$101,000 (9-1-0)**

The Advisory & Finance Committee recommends Town Meeting approve this appropriation. The Jenney Pond Dredging is closely related to the preceding dam repairs project and aligning them makes sense. The last dredging was in 1968. The dredging will improve water quality, habitat and aesthetics within the park area. Funding for this project will also be from the Environmental Affairs Fund.

**TOWN OF PLYMOUTH CAPITAL IMPROVEMENT PLAN REQUEST FORM**  
**FY20 FALL ANNUAL TOWN MEETING REQUEST FORM**

Department: Marine and Environmental Affairs		2
Project Title and Description: Engineering and Permitting for the dredging of Jenney Pond	Total Project Cost:	101,000

Department/Division Head: **David Gould**

Cost estimate was developed: Internally  Externally

Basis of Estimated Costs (attach additional information if available)			If project has impact on 5 Year Plan and future operating budgets, insert estimated amounts.		
Capital:	Cost	Comments	Fiscal Year:	Capital	O & M
<i>Planning and Design</i>	101,000		<i>FY20</i>		
<i>Labor and Materials</i>			<i>FY21</i>		
<i>Administration</i>			<i>FY22</i>		
<i>Land Acquisition</i>			<i>FY23</i>		
<i>Equipment</i>			<i>FY24</i>		
<i>Other</i>					
<i>Contingency</i>					
<b>Total Capital</b>	<b>101,000</b>				

Possible sources and amounts of funding, if known: Environmental Affairs Fund

**Project Justification and Objective:** Jenney Pond is an artificial impoundment created by the dam at this location and therefore sediment build-up behind the dam is an on-going process. The impoundment has not been dredged since 1968 and with 20 years of previous dam removals upstream (over 12,000 cubic yards of sediment was removed from upstream impoundments) it is in need of dredging to improve water quality, habitat and aesthetics within the park area.

**Justification for Request at Fall Annual Town Meeting:** Beginning the process now allows us to get started on design and permitting and to be concurrent with the engineering and design of dam repairs. The two projects are closely related and it makes sense to keep both projects aligned in terms of schedule.

**For Capital Project Requests:**

Will this project be phased over more than one fiscal year? If yes, enter it on the next 5 Year Plan Yes  No   
 Can this project be phased over more than one fiscal year? Yes  No

**For Capital Equipment Requests:**

Check if equipment requested is replacement and enter the year, make & model, VIN and present condition of existing equipment

Attach additional information, estimates, or justification. Please see attached back-up materials.

**Person-Day and Fee Schedule**  
**Jenney Pond Dredging Project**  
December 2014 revised with 2018 rates 11/6/18

Time is indicated in hours.

Scope of Work	Principal \$210/hr	Sr. Licensed Prof. \$175/hr	Lead Licensed Prof. \$155/hr	Licensed Prof. \$150/hr	Engineer/ Planner \$113/hr	Survey Technician \$93/hr	2 person Survey Crew \$160/hr	Total Hours	Fee	Task Subtotal
<b>Task 1 - Project Management</b>										
1.1 Project Management	2.0	8.0						10.0	\$1,820	
1.2 Coordination Meetings			16.0					16.0	\$2,800	
										\$4,620
<b>Task 2 - Data Collection and Review</b>										
2.1 Existing Data Collection and Review					4.0	16.0				
2.2 Site Inspection					8.0	12.0				
2.3 Sensitive Species Review					4.0					
2.4 Sensitive Historical/Archeological Resources						4.0				
2.5 Definition of Wetlands								10.0	\$1,550	
2.6 Wetland Characterization Memo					10.0	2.0				
								2.0	\$310	
										\$8,226
<b>Task 3 - Field Survey and Base Mapping</b>										
3.1 Survey	2.0	4.0						8.0	24.0	
3.2 Existing Conditions Plan		4.0						8.0	12.0	\$1,564
										\$7,288
<b>Task 4 - Sediment Sampling Plan and Analysis</b>										
4.1 Sed Quality Assessment			8.0					4.0		
4.2 Sediment Probing & Sampling*								4.0		
4.3 Data Review					4.0			4.0		
										\$11,592
<b>Task 5 - Conceptual Design</b>										
5.1 Conceptual Alternatives	2.0	4.0	8.0							
5.2 Sediment Management Plan		2.0	16.0					8.0		
5.3 Technical Memorandum		2.0	2.0	8.0						
5.4 Submittal								1.0		
										\$10,415
<b>Task 6 - Preliminary Design</b>										
6.1 Supplemental Survey			2.0							
6.2 Prelim Design Plans	2.0	16.0	12.0	12.0				4.0	12.0	
6.3 Preliminary Cost Opinion				1.0	1.0	8.0				
6.4 Submittal								2.0		
										\$12,765
<b>Task 7 - Regulatory Permitting</b>										
7.1 Permit Application Preparation	4.0	8.0			40.0	16.0				
7.2 Application Review	2.0	4.0			8.0					
7.3 Comment Response		2.0			8.0					
										\$13,918
<b>Task 8 - Final Design and Construction Documents</b>										
8.1 Semifinal Design	2.0	8.0	16.0	16.0	16.0					
8.2 Technical Specifications		8.0	16.0	16.0						
8.3 Estimated Quantities and Cost Opinion		2.0	2.0	2.0	8.0					
8.4 Final Design Documents		8.0	8.0	8.0	8.0					
<b>TOTALS:</b>	24.0	122.0	83.0	127.0	215.0	20.0	36.0	627.0	\$90,220	\$90,220

\*Assumes two days of sampling with a crew of two.

This number may need to be adjusted following completion of the sediment sampling plan.

Direct expenses will be invoiced in addition to the above lump sum fees.

**Direct Expenses (Printing, Travel, Lab Fees, etc.):** \$10,000

**TOTAL:** \$100,220