



TOWN OF CONCORD
COMMUNITY PRESERVATION COMMITTEE
 141 KEYES ROAD, CONCORD, MA 01742
 TEL. (978) 318-3290 FAX (978) 318-3291

Application for CPA Funding
Due no later than 4:00pm on Friday, September 20, 2019

Applicant: Town of Concord – Division of Natural Resources

Co-Applicant (if applicable): _____

Project Name: Warner's Pond Dredging Project

Project Location/Address: Warner's Pond

Purpose: (Select all that apply)

- Open Space Community Housing Historic Preservation Recreation

Project Budget:

Amount of CPA Funds Requested: \$500,000
 Amount from Other Funding Sources: \$500,000 (FY21 Capital Budget appropriation)
 Total Project Budget: \$1,000,000
 (If multi-year project, note current phase only)

Please check which of the following is included with this Application:

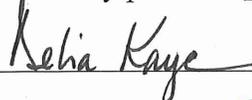
- | | |
|---|--|
| <input checked="" type="checkbox"/> One Paragraph Project Summary * | <input checked="" type="checkbox"/> Timeline * |
| <input checked="" type="checkbox"/> Map (if applicable) | <input checked="" type="checkbox"/> Architectural plans, site plans, photographs
(if appropriate) |
| <input checked="" type="checkbox"/> Narrative * | <input type="checkbox"/> Copy of Audit or most recent Financial
Information (<u>Non Profit Organizations Only</u>)* |
| <input checked="" type="checkbox"/> Selection Criteria and Needs Assessment | <input type="checkbox"/> Letters of Support (if any) |
| <input checked="" type="checkbox"/> Detailed Project Budget * | |
| <input checked="" type="checkbox"/> Feasibility Assessment | |
| <input checked="" type="checkbox"/> Statement of Sustainability (if applicable) | |

* Required Documentation

The Contact Person for this Project is: Delia Kaye, Natural Resources Director

All Correspondence should be mailed to: Division of Natural Resources, 141 Keyes Road, Concord

The Contact Person can be reached by phone at: 978.318.3285 or by email at: dkaye@concordma.gov

Signature of Applicant: 

Signature of Property Owner (if different): 

For Historic Preservation Projects Only – please check the box below left and acknowledge:

- I/We have read the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties and understand that planning for and execution of this project must meet these standards.

Brief Project Summary:

The Warner's Pond Dredging Project seeks to improve the ecological health and recreational opportunities at Warner's Pond through a limited dredging operation, and to improve the boat launch access to better serve the public. The pond once provided recreational opportunities including swimming, fishing, boating, and ice-skating, but these uses have diminished over time due to pond eutrophication, which has also decreased the ecological health of the pond. The Warner's Pond Watershed Management Plan identified limited dredging as the most economical strategy to sustainably improve the condition of Warner's Pond. The Warner's Pond Dredging Feasibility Analysis developed preliminary cost estimates of \$1.8 million to \$2.2 million to dredge a limited portion of the pond at the boat launch off Commonwealth Avenue and at the newly-acquired Gerow land. Access improvements to the Warner's Pond boat launch are estimated between \$180,000 and \$220,000. This application seeks construction funds for dredging and boat launch access improvements. A \$500,000 funding request will be included in the FY21 capital budget for Town Meeting approval. CPA funding is requested from the Open Space and Recreation categories.

Previously completed studies on the pond can be viewed at:

- www.concordma.gov/744/Warners-Pond-Watershed-Management-Plan
- www.concordma.gov/DocumentCenter/View/18566/Warners-Pond-Dredging-Feasibility-Study

Narrative:

Warner's Pond is a 48-acre pond in West Concord formed by the damming of Nashoba Brook in the 1800s. Positioned at the base of an extensive 47-square mile, densely developed watershed which lies almost entirely outside of Concord's borders, Warner's Pond is subject to sedimentation caused by flows from Nashoba Brook slowing down and depositing sediments into the pond, which amass to allow excessive plant growth. These accumulating nutrient-rich sediments increase plant growth and decrease oxygen levels, resulting in eutrophication of the pond.

Eutrophication of the pond has been occurring since at least the 1980s; a consequence of the dammed condition and the large watershed to pond ratio, resulting in shallower water depths more susceptible to excessive weed growth. Nuisance aquatic plants, particularly highly invasive, non-native plant species such as variable watermilfoil (*Myriophyllum heterophyllum*), fanwort (*Cabomba caroliniana*), and water chestnut (*Trapa natans*), have degraded open water habitat and impaired recreational uses. The sediment accumulation, excess nutrients in the water column, and dense growth of non-native aquatic plants have led to seriously degraded conditions in the pond over time.

These degraded conditions have diminished the ecological value of the pond with regard to its ability to support fish and wildlife populations typical of healthier open water habitats. The poor water quality and increased weed growth are also impairing the pond's ability to serve the community with regard to recreational opportunities. Sediment accumulation and excessive plant

growth have increased to the point that many areas of the pond are impassable by kayakers and canoeists.

The Town commissioned a Watershed Management Plan in 2012, which identified dredging as the most economical strategy for sustainable and long-term improvements to Warner's Pond. The Watershed Management Plan recommended a range of options for improving the ecological and recreational value of the pond, including short-term options such as herbicides and biological controls, as well as long-term options including dredging. Dredging was recommended as the primary focus for management. While dredging is expensive, it addresses multiple in-pond problems and lasts for decades. As dredging the entire 48-acre pond is not economically feasible, the Plan recommended dredging a 6.1-acre portion of the pond, specifically the area between Scout Island, Pond Street, and the Commonwealth Avenue public access points, as a more realistic alternative to dredging the entire pond, that targeted primarily recreational areas while leaving more ecologically sensitive areas unaltered. With the recent acquisition of the Gerow Land, the Dredging Feasibility Study also evaluated a northern dredge area to enhance the ability of the Gerow land to be used for recreational activities. See Figure 1 showing proposed dredging areas.

This project proposes to dredge areas of the pond to reestablish open water habitat to improve wildlife habitat while also providing improved recreational opportunities for swimming, boating, and fishing. Along with these recreational improvements, the pond will also continue to afford a wide range of shallow water habitat including marsh, emergent wetland, and other vegetated areas that will maintain the pond's value for associated wildlife viewing. To minimize cost and maximize benefits for the Town, some dredge material will be repositioned along the northern shore of Scout Island and revegetated with wetland plants to create a wetland shelf, which will further improve wildlife habitat in Warner's Pond. Cost estimates range between \$1.8 million and \$2.2 million, as detailed in the attached budget estimate.

Improvements to the existing, rundown, access and parking area at the Commonwealth Avenue access is also proposed. This access includes an approximately 250-foot dirt road down to the pond that sits tightly between two houses (293 and 303-305 Commonwealth Avenue). It is only wide enough for one vehicle, and is overrun with invasives. There is a dirt parking area at the end of the road with boat access. Converting the road to gravel, and either widening the road to 22 feet or adding passing pull-offs (Figures 6 and 7 attached) was recommended and costed in the Dredging Feasibility Study. The Study also recommended delineating seven parking spaces, using a portion of the existing parking area for stormwater management improvements, and improving the beach surface. The estimated cost for these improvements is \$180,000 to \$220,000, as detailed in Table 3. Concept plans for the access improvements are appended to this application.

Part of the Dredging Feasibility Study included identifying grant opportunities to fund this work. The Study notes that not many sources of funding specifically dedicated to dredging or pond restoration projects are available, and that they are difficult to obtain. The Town has included \$500,000 for Warner's Pond dredging in its Capital Improvement Plan for 2021, and intends to seek additional capital funding and CPA monies in future years.

This application seeks the first half of funds as a match to the Town's capital funds.

Dredging is a reliable approach for restoring ecological and aesthetic characteristics of Warner's Pond as it will remove the nutrient-rich sediments that are causing eutrophication of the pond. Grant funding for this type of project is extremely limited and difficult to secure. Fortunately, this dredge project is envisioned to last at least 100 years before additional dredging might be required.

CPC's Selection Criteria and Needs Assessment

This application meets the following Selection Criteria as found in the 2018 Community Preservation Plan:

- a.) **Eligibility** – Under the CPA legislation, CPA funds can be used for “*the acquisition, creation, and preservation of open space*” and for “*recreational use*”. This proposal seeks to restore Town-owned open space, thereby preserving and improving the ecological health of the pond while enhancing the recreational experience of all users of Town land, a recreational opportunity once cherished by residents.

- b.) **Consistency with Town-wide Planning** – Goal 1 of the 2015 Open Space and Recreation Plan (OSRP) is to protect water resources and biodiversity. The restoration of Warner's Pond, is a specifically listed goal under this section (Goal 1C3). This project also meets several goals identified in the 2018 Comprehensive Long Range Plan. Goal 4.6 1.1 recommends financial resources be allocated to maintain and protect current open space and conservation land. Goal 4.6 2.2 recommends that the Town restore Warner's Pond as part of the Town's effort to protect and improve the recreational accessibility of its water resources. The proposed project also meets Goal 4.6 7.2 which recommends increasing financial resources allocated to maintain and provide programming of current open space and recreational facilities. Goal 4.6 8.2 recommends ensuring the Concord's open space and recreation facilities are physically and financially accessible to residents and improvements or new facility projects are fiscally sound. Goal 4.6 9.4 recommends increasing accessibility to open space and Goal 4.6 9.6 advocates for providing public amenities and improved access to recreation and natural areas. And as stated previously, this project is consistent with the recommendations identified in the 2012 Warner's Pond Watershed Management Plan. This project will result in improved recreational opportunities not presently at the pond. Being located directly adjacent to the newly constructed Bruce Freeman Rail Trail (BFRT), improved recreational use of Warner's Pond will also enhance use of the BFRT, not only locally but also regionally.

- c.) **Support by Boards, Committees, Community & Town Meeting Actions** – With the recent construction of the Bruce Freeman Rail Trail and parking area, along with the recent acquisition of the northern shore of Warner's Pond (Gerow Land), there is real movement to improve recreational opportunities in this area by the community. The Natural Resources Commission has endorsed this project. The project has also received its environmental clearance under the Massachusetts Environmental Protection Act.

- d.) **Enhancement of existing Town-owned open space, recreation, historic, and/or housing assets** –This proposal enhances and improves recreational uses within Warner's Pond, restores degraded portions of open space, and protects the historic and cultural resource of Warner's Pond, as well as its water quality.
- e.) **Service of Multiple or Underserved Populations** –Town lands are public and open to all members of the community. This project will provide and/or improve recreational opportunities not presently available in West Concord. Being linked to the BFRT, these opportunities are extended to regional populations as well.
- f.) **CPA Purposes** – This proposal meets two of the four CPA purposes: open space preservation and recreation.
- g.) **Administrative and Financial Management** - The Division of Natural Resources has overseen several restoration projects funded by the CPA and has completed all requirements for previously-funded projects.
- h.) **Successful Implementation of Similar Projects** – Though dredging projects area not undertaken frequently, the Division is familiar will all required permitting, regularly develops bid documents for various Division projects, and oversees restoration projects on a regular basis.
- i.) **Site Control** – Warner's Pond is owned by the Town of Concord under the care and custody of the Natural Resources Commission. Dewatering and disposal will occur at the MCI Concord facility. Approval has been obtained from MCI for activities that will occur on their land.
- j.) **Financial Need** – The Division of Natural Resources manages over 1,400 acres of conservation land and conducts regular maintenance and small improvements through careful application of limited funds within its operating budget, summer staff, trail stewards, and volunteers. A restoration project of this magnitude is beyond the funding provided by the operating budget. Grant funding for this type of project is extremely limited and difficult to secure. The project requires specialized equipment and personnel to successfully implement and is beyond the financial resources of the Town.
- k.) **Sources of Funding** – Due to the significant funds needed to undertake this work, the Town included \$500,000 for Warner's Pond dredging in its Capital Improvement Plan for 2021. This application would seek the first half of funds as a match to the Town's capital funds. In-kind contributions of staff time will be provided for project administration.
- l.) **Project Plan Feasibility** – The 2012 Watershed Management Plan recommends dredging as the most cost-effective, long-lasting solution to improve recreational opportunities at Warner's Pond. Conceptual plans have been developed and permits will be secured over the next year; the next steps are to obtain construction funding to implement the project.

- m.) **Urgency of Project** – Besides improving wildlife habitat, which is in severe decline, with the recent construction of the BFRT and acquisition of the Gerow land, dredging is the first step to greatly improve recreational use of this underutilized resource in West Concord.
- n.) **Maintenance Provisions** – Benefits from this undertaking are projected to last 100 years before additional dredging might be required.
- o.) **Permanent Restriction** – No permanent restriction is needed as part of this project
- p.) **Reimbursement** – This proposal does not seek reimbursement of previously appropriated funds.
- q.) **Incorporation of Sustainable Design Features** – This project proposes restoration of an environment impaired by past and present human activity. To conserve fuel required to transport dredge material from the site, we worked with MCI Concord who agreed to allow us to use their adjacent farm field temporarily to dewater dredge material. Following dewatering, MCI has agreed to accept the dredge material to amend their agricultural soils. This public-private partnership greatly reduces energy consumption to transport material, allows dewatering activities to occur within the same watershed, and reusing dredge material to enhance local agricultural soils. Reusing some of the dredged material to create wildlife shelves within Warner's Pond further reduces impacts on the environment and energy costs associated with undertaking this project.
- r.) **Four Sustainability Principles** – Proposed work entails reversing human impacts on Warner's Pond in an environmental sound manner.
- s.) **Local Qualified Vendors** – The Town will adhere to state bidding rules, and will award projects to local bidders where it is legal and feasible to do so.
- t.) **Normal CPC Schedule** - This proposal does not request the CPC to act outside their normal schedule.
- u.) **Land Acquisition Projects** – N/A.

Project Budget: (Please see the attached detailed budgets for the dredging and pond access portions of proposed work.)

	Funding		
	CPA	Capital	Town Staff
Administrative Oversight			\$10,000*
Permitting	\$75,000		
Dredging Warner's Pond	\$2,200,000	\$500,000	
Commonwealth Avenue Improvements	\$220,000		

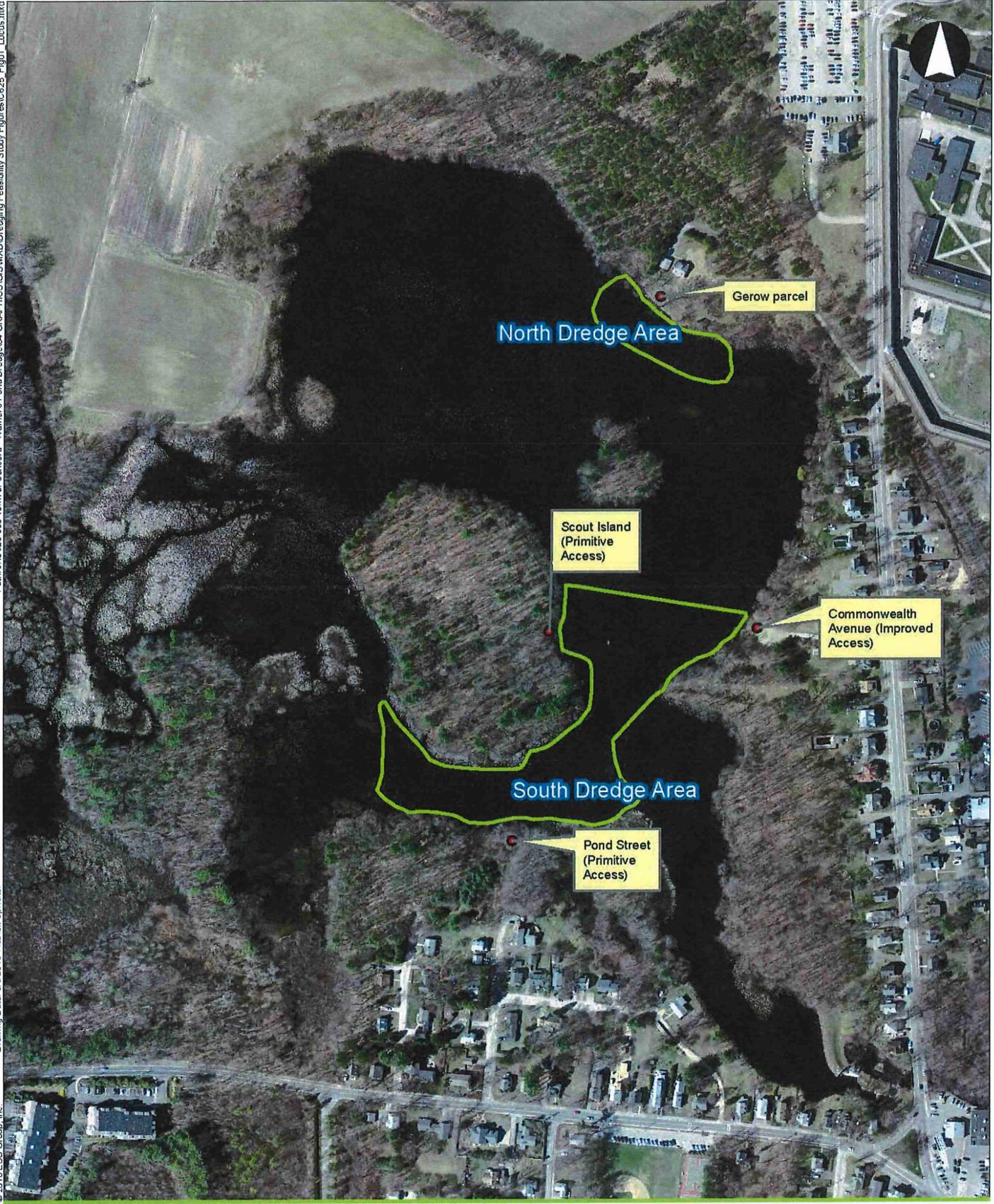
* Administrative oversight is estimated for the entire dredging project.

** This CPA request seeks \$500,000 in funding. Additional funding for the dredging costs will be requested in future years from the Town's capital budget and CPA funds.

Attachments:

- Figure 1: Warner's Pond Project Locus and Dredge Areas
- Table 2a: Project Budget Estimates for Warner's Pond Restoration
- Table 3: Project Budget Estimates for Commonwealth Avenue Access Improvements
- Figure 6: Access Road Concept
- Figure 7: Access Road Concept
- Dredging Plans for Warner's Pond prepared by ESS Group, dated May 2018

Path: J:\C625-000 Town of Concord - Warner's Pond Dredging Feasibility Study Figures\C625_Fig01_Locus.mxd
Drawing Date: 5/6/2018 Author: epvistor
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ess
group
environmental consulting
& engineering services

0 175 350
Feet

Warner's Pond Dredging Feasibility Assessment Concord, Massachusetts

1 inch = 350 feet
Source: 1) MassGIS, Ortho Imagery, 2013

 Dredge areas

Warner's Pond Project Locus and Dredge Areas

Figure 1



Table 2a. Project Budget Estimates for Warner's Pond Restoration

Town of Concord - Hydraulic Dredging of Warner's Pond								
Project Budget Estimate								
10/23/18								
Description	Unit	Unit Price (2018 \$)	Quantity - South Dredge Area	Quantity - North Dredge Area	Subtotal - South Dredge Area	Subtotal - North Dredge Area	Project Total	South Dredge Area Only
Site Preparation Warner's Pond								
Mobilization/Demobilization	LS	\$50,000.00	1		\$50,000.00		\$50,000.00	\$50,000.00
Clearing and Grubbing	AC	\$18,000.00	0.15	0.10	\$2,700.00	\$1,800.00	\$4,500.00	\$2,700.00
Crushed Stone for Access Road	T	\$150.00	55		\$8,250.00		\$8,250.00	\$8,250.00
Site Preparation Re-Use Site (Northeast Correctional Facility)								
Erosion Controls	FT	\$12.00	1,300	0	\$15,600.00	\$0.00	\$15,600.00	\$15,600.00
Fine Grading and Compacting	SY	\$2.50	12,300	0	\$30,750.00	\$0.00	\$30,750.00	\$30,750.00
Pond Dredging								
Hydraulic Dredging (8-Inch Dredge)	CY	\$7.00	30,740	4,990	\$215,180.00	\$34,930.00	\$250,110.00	\$215,180.00
Dewatering								
Bales of Straw	EA	\$13.50	500	60	\$6,750.00	\$810.00	\$7,560.00	\$6,750.00
Crushed Stone Marker Layer	T	\$37.00	7,700	1,200	\$284,900.00	\$44,400.00	\$329,300.00	\$284,900.00
Crushed Stone Marker Layer Removal and Disposal	CY	\$28.00	6,000	1,000	\$168,000.00	\$28,000.00	\$196,000.00	\$168,000.00
Dewatering Dredge Material	CY	\$12.00	30,740	4,990	\$368,880.00	\$59,880.00	\$428,760.00	\$368,880.00
Wetland Creation								
Fine Grading and Compacting	SY	\$2.29	5,600		\$12,800.00		\$12,800.00	\$12,800.00
Wetland Plants	EA	\$8.00	15,000		\$120,000.00		\$120,000.00	\$120,000.00
Material Placement by Hydraulic Dredge	CY	\$3.50	500		\$1,800.00		\$1,800.00	\$1,800.00
Turbidity Curtain	FT	\$32.00	1,400		\$44,800.00		\$44,800.00	\$44,800.00
Hauling to Re-Use Site (Northeast Correctional Center)								
Trucking	CY	\$6.00	30,240	4,990	\$181,440.00	\$29,940.00	\$211,400.00	\$181,440.00
Site Restoration Warner's Pond								
Seeding	SY	\$1.00	700	500	\$700.00	\$500.00	\$1,200.00	\$700.00
Site Restoration Re-Use Site								
Pavement Restoration	LS	\$5,000.00	1		\$5,000.00		\$5,000.00	\$5,000.00
Seeding	SY	\$1.00	12,300	0	\$12,300.00	\$0.00	\$12,300.00	\$12,300.00
15% CONTINGENCY								
Estimated Construction Budget							\$259,520.00	\$229,478.00
Range of Estimated Budget (-10%/+10%)							\$1,790,000 - \$2,190,000	\$1,580,000 - \$1,940,000

Disclaimer: This Project Budget Estimate is made on the basis of ESS's judgement utilizing conceptual level drawings. The stated range of estimated budget are opinions only and not a formal construction estimate. ESS makes no warranty, expressed or implied, that proposals, bids, or actual construction cost will not vary from this budget estimate. If the Client wishes greater assurance as to probable construction costs, the Client shall employ an independent cost estimator or contractor.



Table 3. Project Budget Estimates for Commonwealth Avenue Access Improvements

Town of Concord - Commonwealth Avenue Access Road					
Project Budget Estimate					
05/18/18					
<i>Description</i>	<i>Unit</i>	<i>Unit Price</i>	<i>Quantity</i>	<i>Total</i>	
Mobilization/Demobilization	LS	\$ 10,000.00	1	\$	10,000.00
Erosion Controls	FT	\$ 12.00	1,300	\$	15,000.00
Clearing and Grubbing	AC	\$ 18,000.00	0.25	\$	4,500.00
Fine Grading and Compacting	SY	\$ 8.00	1,000	\$	8,000.00
Crushed Stone for Gravel Access Road	T	\$ 51.00	400	\$	25,000.00
Sand Borrow for Beach Surface Improvement	CY	\$ 100.00	30	\$	3,000.00
Curb Stop	EA	\$ 487.50	7	\$	3,400.00
Stormwater	LS	\$ 100,000	1	\$	100,000.00
15% CONTINGENCY				\$	30,000.00
Estimated Construction Budget				\$	200,000.00
Range of Estimated Budget (-10%/+10%)					\$180,000 - \$220,000

Disclaimer: This Project Budget Estimate is made on the basis of ESS's judgement utilizing conceptual level drawings. The stated range of estimated budget are opinions only and not a formal construction estimate. ESS makes no warranty, expressed or implied, that proposals, bids, or actual construction cost will not vary from this budget estimate. If the Client wishes greater assurance as to probable construction costs, the Client shall employ an independent cost estimator or contractor.



DATE: Jan 03, 2018 - 12:07PM
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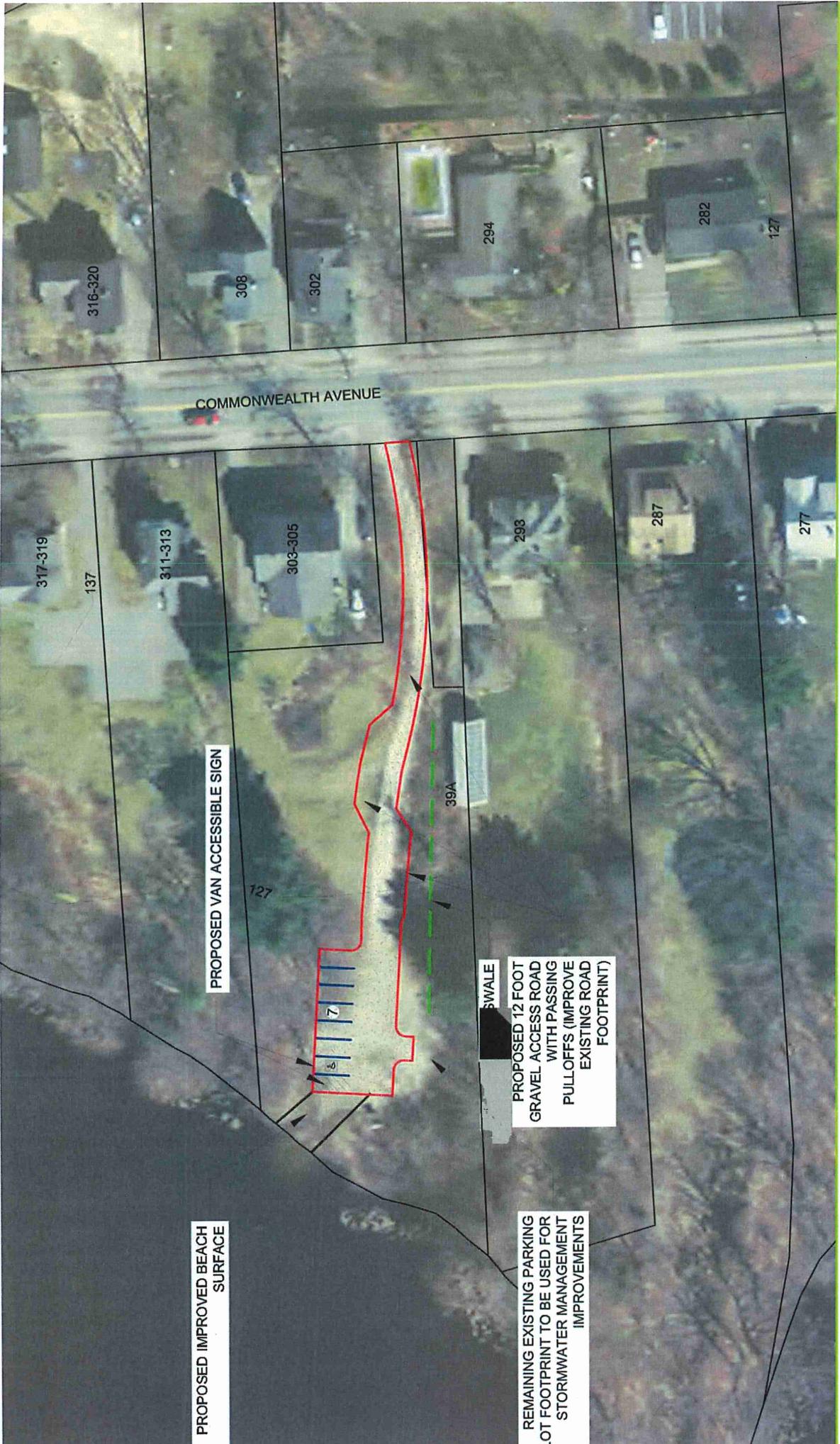


TOWN OF CONCORD
 WARNERS POND
 1"=50'
 0 50 FEET
 1) MASSGIS, 2010 FEMA LIDAR & 2013/2014 ORTHOIMAGERY

- LEGEND**
-  PROPOSED ACCESS ROAD
 -  PROPOSED PARKING SPACE
 -  PROPOSED ACCESS ROAD CENTERLINE
 -  EXISTING TAX PARCELS
 -  EXISTING TOPOGRAPHY (10 FOOT)

ACCESS ROAD CONCEPT

Figure 6



PROPOSED IMPROVED BEACH SURFACE

PROPOSED VAN ACCESSIBLE SIGN

SWALE
 PROPOSED 12 FOOT GRAVEL ACCESS ROAD WITH PASSING PULLOFFS (IMPROVE EXISTING ROAD FOOTPRINT)

REMAINING EXISTING PARKING LOT FOOTPRINT TO BE USED FOR STORMWATER MANAGEMENT IMPROVEMENTS

TOWN OF CONCORD

WARNERS POND



1) MASSGIS, 2010 FEIMA LIDAR & 2013/2014 ORTHOIMAGERY



LEGEND



PROPOSED ACCESS ROAD



PROPOSED PARKING SPACE



PROPOSED ACCESS ROAD CENTERLINE



EXISTING TAX PARCELS



EXISTING TOPOGRAPHY (10 FOOT)

ACCESS ROA

DREDGING PLANS FOR WARNER'S POND CONCORD, MASSACHUSETTS

MAY 2018

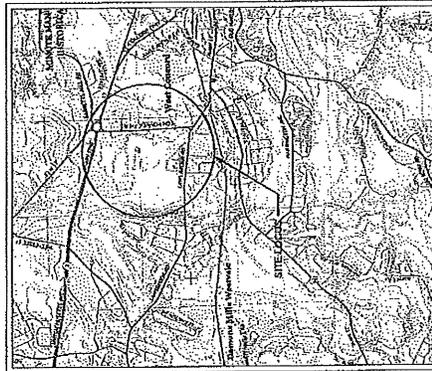
PREPARED FOR:

Town of Concord
22 Monument Square
Concord, Massachusetts 01742

PREPARED BY:



100 Fifth Avenue, 5th Floor
Waltham, Massachusetts 02451
p 781.415.7686
www.essgroup.com



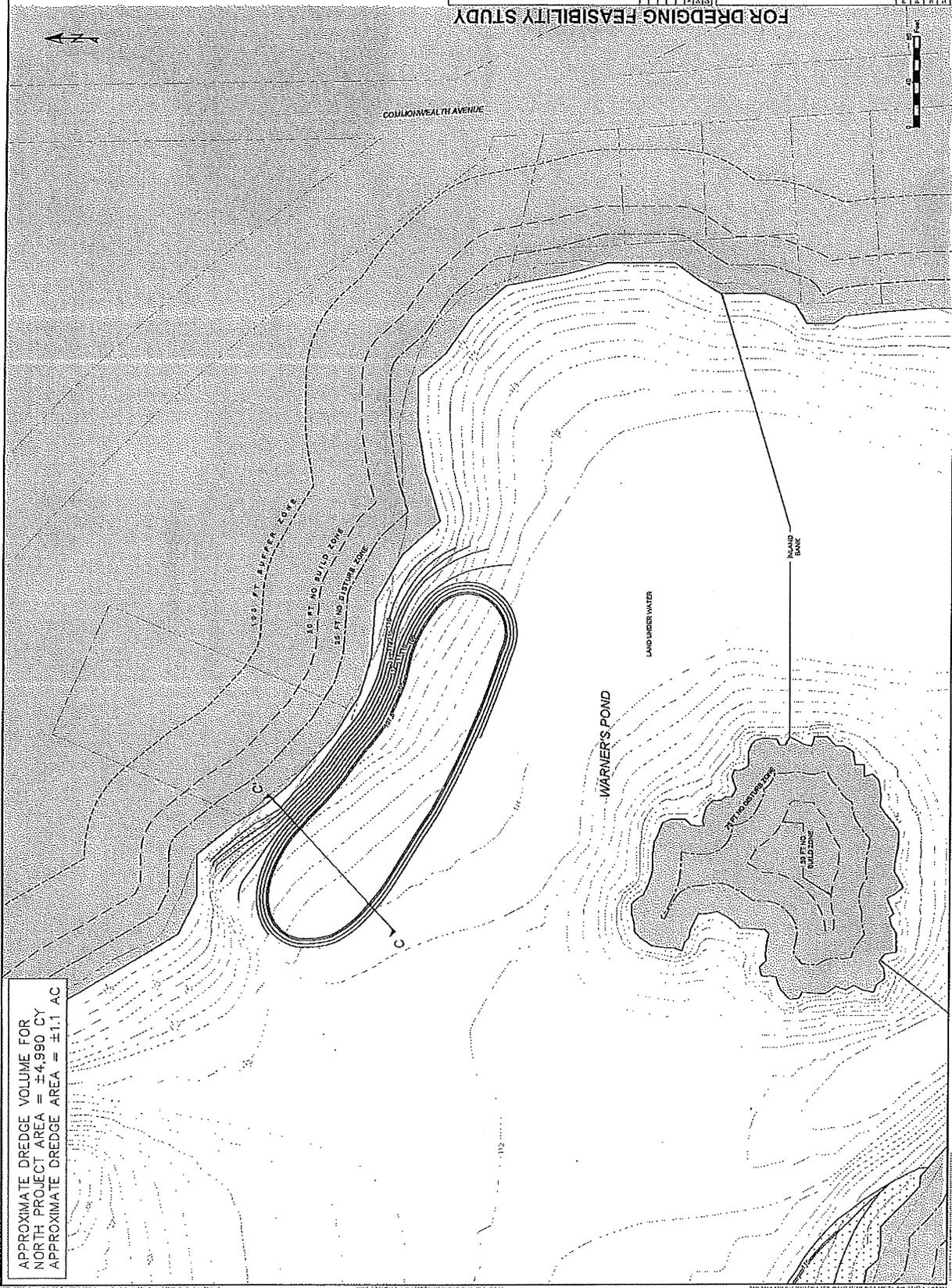
NOT TO SCALE
SOURCE: LIDAR 2015

LOCATION MAP

INDEX OF DRAWINGS	
	COVER SHEET
M-1	DREDGING GENERAL NOTES
S-1	DREDGING SITE PLAN
D-1	SOUTH PROJECT AREA PROPOSED DREDGING
D-2	NORTH PROJECT AREA PROPOSED DREDGING
D-3	PROPOSED WETLAND SHELF
D-4	DREDGE MATERIAL MANAGEMENT PLAN
D-5	DREDGE MATERIAL DISPOSAL SITE
D-6	SECTIONS
D-7	DREDGING DETAILS

FOR DREDGING FEASIBILITY STUDY

APPROXIMATE DREDGE VOLUME FOR
 NORTH PROJECT AREA = ±4,950 CY
 APPROXIMATE DREDGE AREA = ±1.1 AC



FOR DREDGING FEASIBILITY STUDY

ess group
 environmental consulting
 & engineering services

100 9th Avenue, 8th Floor
 Woburn, Massachusetts 02461
 P 781.418.7696
 www.essgroup.com

PROJECT NO.	00-000-000-00
DATE OF PREPARED DRAWING	05/05/2010
DATE OF FIELD SURVEY	05/05/2010
DATE OF DESIGN	05/05/2010
DATE OF CONSTRUCTION	05/05/2010

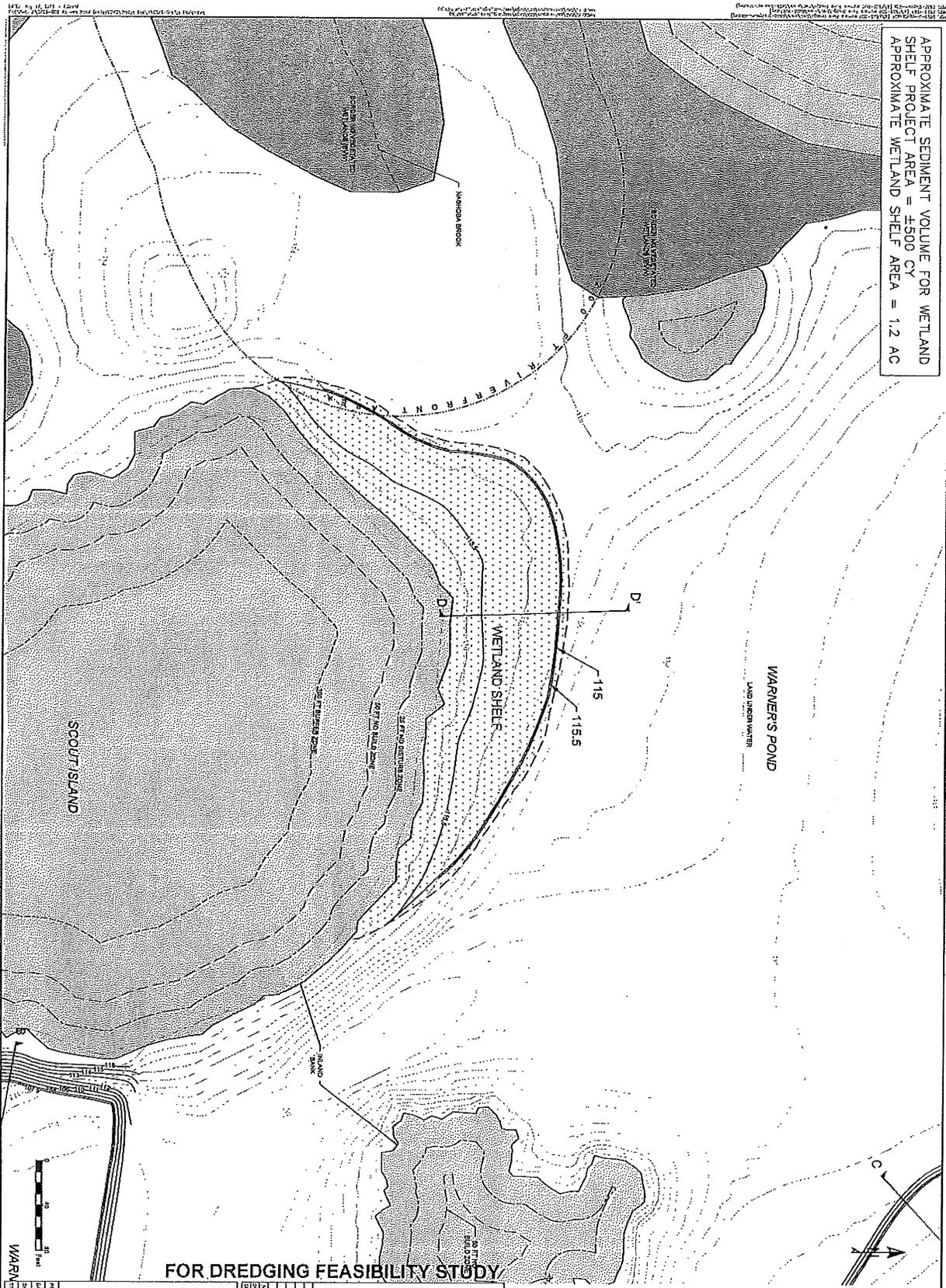
TOWN OF CONCORD
 WARNER'S POND
 CONCORD, MA

WARNER'S POND
 NORTH PROJECT AREA
 PROPOSED DREDGING

PROJECT NO.	00-000-000-00
DATE OF PREPARED DRAWING	05/05/2010
DATE OF FIELD SURVEY	05/05/2010
DATE OF DESIGN	05/05/2010
DATE OF CONSTRUCTION	05/05/2010

D-2

APPROXIMATE SEDIMENT VOLUME FOR WETLAND SHELF PROJECT AREA = 4,500 CY
 APPROXIMATE WETLAND SHELF AREA = 1.2 AC



FOR DREDGING FEASIBILITY STUDY

PROJECT NO. 2009-0007
 DATE OF DESIGN 2008
 SHEET NO. 3 OF 4
 PROJECT NAME
 PROJECT NO.

WARNER'S POND
 PROPOSED
 WETLAND SHELF

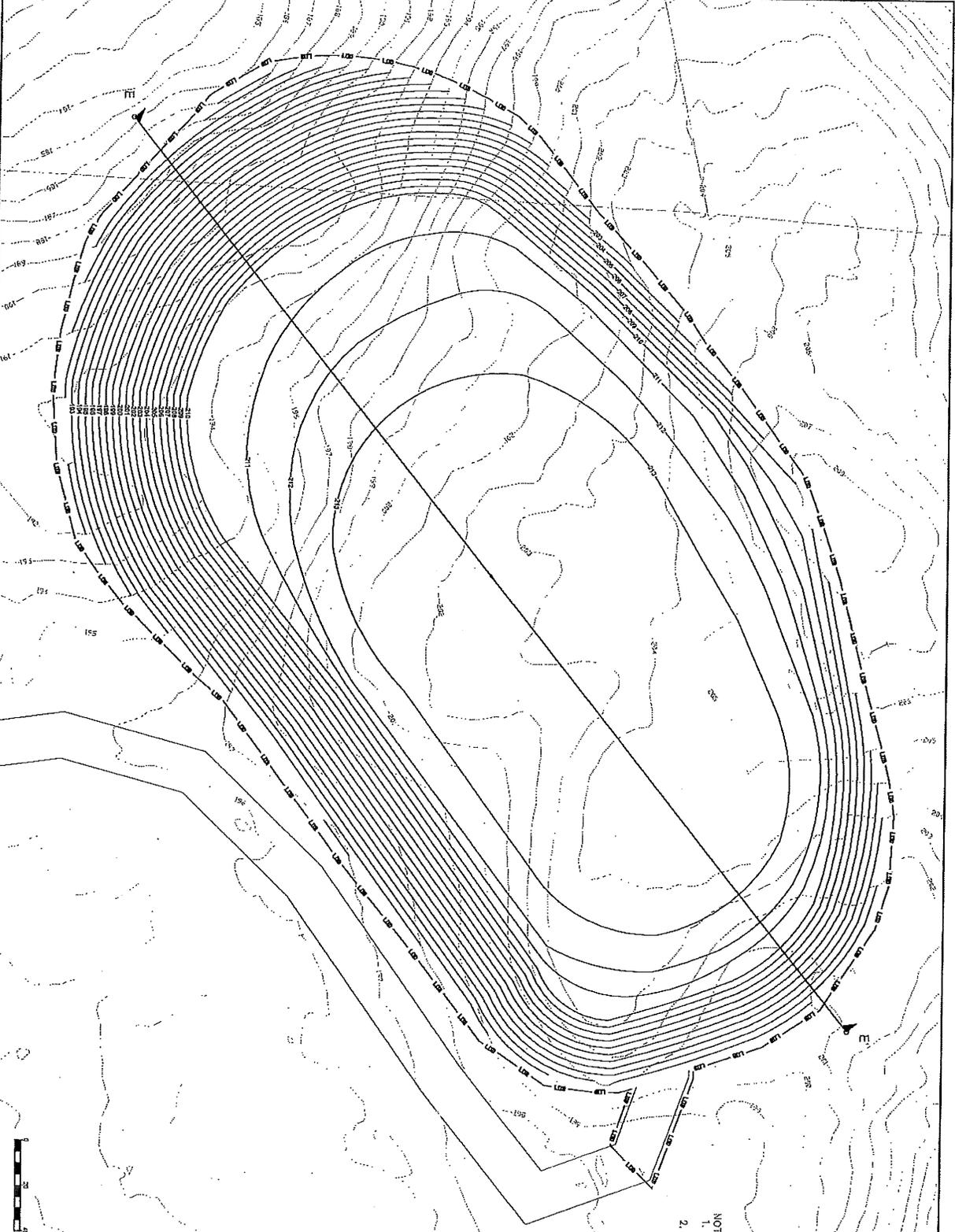
TOWN OF CONCORD
 WARNER'S POND
 CONCORD, MA

D-3

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100 Park Avenue, 5th Floor
 Waltham, Massachusetts 02451
 p 781.412.7855
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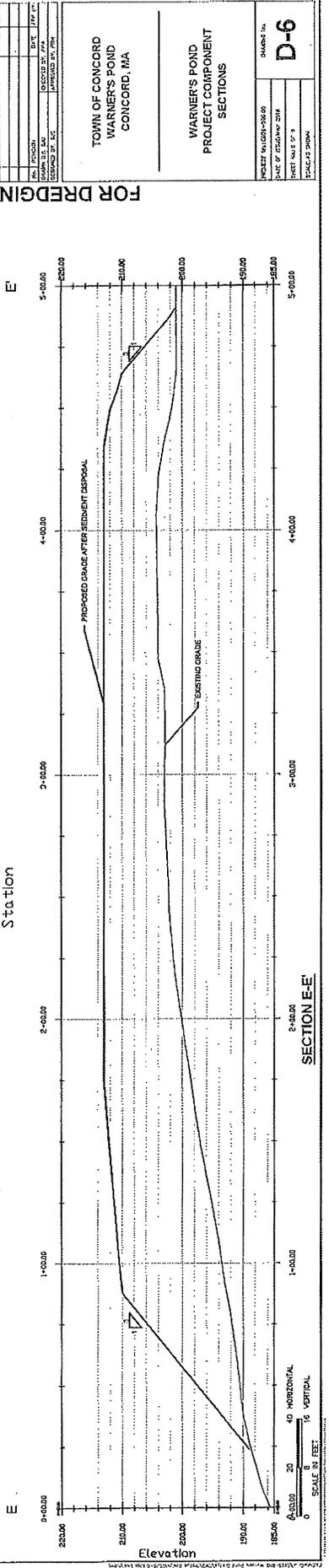
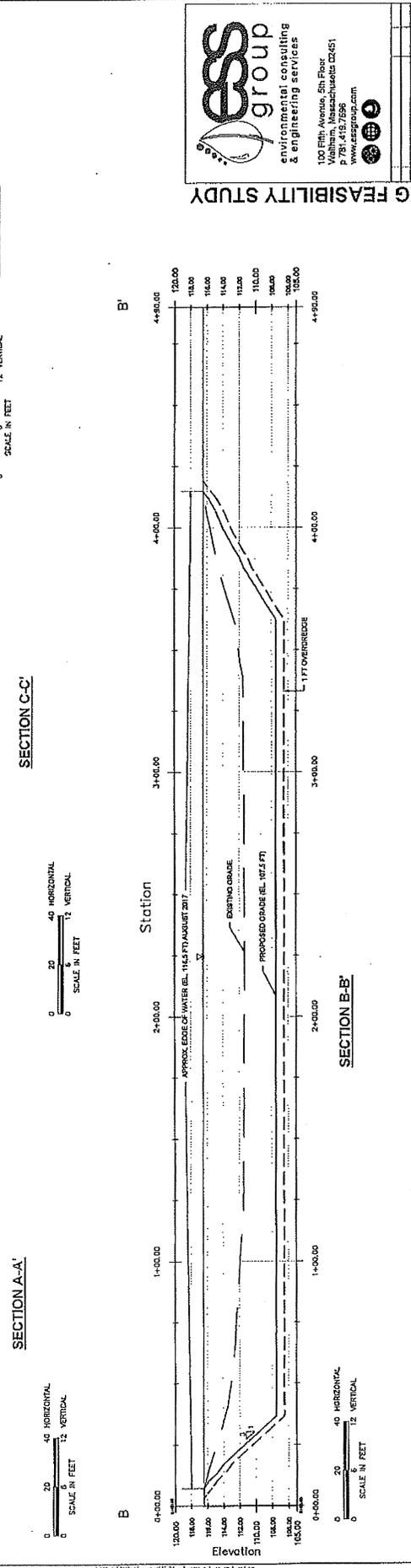
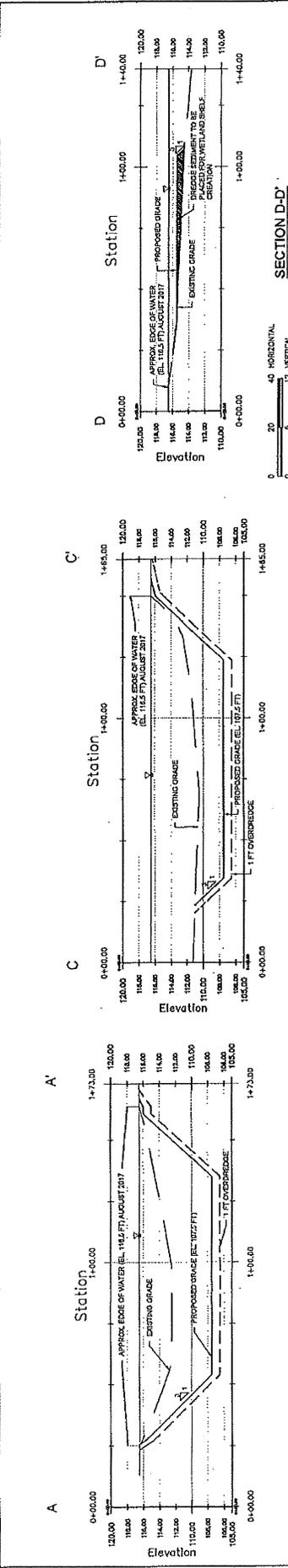
NO.	DESCRIPTION	DATE	BY	CHKD BY



FOR DREDGING FEASIBILITY STUDY

- NOTES:
1. PLACE EROSION CONTROLS ALONG LOD PERIMETER.
 2. FINAL GRADED DISPOSAL AREA TO BE SEEDED WITH SEED MIX MEETING APPROVAL OF NORTHEASTERN CORRECTIONAL CENTER.

PROJECT NO. 1008-0000 DATE OF PRELIMINARY DESIGN SHEET NO. 2 OF 9 PROJECT NAME	DRAWN BY: [] CHECKED BY: [] DATE: 11/17/10 APPROVED BY: []
TOWN OF CONCORD WARNER'S POND CONCORD, MA	
WARNER'S POND DREDGE MATERIAL DISPOSAL SITE	
D-5	



FOR DREDGING FEASIBILITY STUDY

ESS group
environmental consulting & engineering services
100 Eddy Avenue, 5th Floor
Warner's Pond, Massachusetts 02451
P: 781.418.7586
www.essgroup.com

DATE	DATE	DATE	DATE
ISSUED BY	DATE	ISSUED BY	DATE
APPROVED BY	DATE	APPROVED BY	DATE

TOWN OF CONCORD
WARNER'S POND
CONCORD, MA

WARNER'S POND
PROJECT COMPONENT
SECTIONS

DATE: 04/04/2018
SCALE: 1" = 40'

D-6

