



The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

MAY 06 '20 AM 10:56 DAS



Sam
59

May 4, 2020

His Excellency, Governor Christopher T. Sununu
and The Honorable Council
State House
Concord, NH 03301

REQUESTED ACTION

Approve Great Bay Marina's request to perform the following work on Broad Cove-Piscataqua River in Newington. File # 2019-01758. This project will not have significant impact on or adversely affect the values of Broad Cove-Piscataqua River.

Maintenance dredge 600 square feet (300 cubic yards) of accumulated sediments from within the boat launch area and placement of approximately 60 linear feet (340 square feet) of rip-rap for the reconstruction of an existing deteriorated rip rap seawall.

The New Hampshire Department of Environmental Services (NHDES) imposed the following conditions as part of this approval:

1. All work shall be in accordance with plans by Civilworks New England dated May 8, 2019, and revised through September 23, 2019 as received by the NH Department of Environmental Services (NHDES) on October 3, 2019.
2. Not less than 5 state business days prior to starting work authorized by this permit, the permittee shall notify David.Price@des.nh.gov at the NHDES Wetlands Bureau and the Newington Conservation Commission in writing of the date on which work under this permit is expected to start.
3. There shall be no further maintenance dredging of sediment at any tide level, either on or adjacent to the boat ramp, beyond the one occurrence permitted herein.
4. Dredging in tidal waters shall be done between November 15 and March 15, and shall not be permitted during a fish migration or larval setting stage of shellfish.
5. Work shall be done during periods of low tide only.
6. Equipment used for rip-rap placement shall be done from the landward side and no equipment shall be located below highest observable tideline.
7. Any stone used in the construction or repair of a revetment shall be of suitable size and weight to assure that the structure is stable and will withstand tidal river wave energy anticipated at this location.
8. No person undertaking any activity shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards in RSA 485-A and Env-Wq 1700.
9. Appropriate turbidity controls shall be installed prior to construction, shall be maintained during construction such that no turbidity escapes the immediate dredge area, and shall remain until suspended particles have settled and water at the work site has returned to normal clarity.

10. All dredged material shall be placed outside of the areas subject to RSA 482-A.
11. Dredged material to be stockpiled in uplands shall be dewatered in sedimentation basins lined with siltation and erosion controls, and located outside jurisdiction to prevent water quality degradation.
12. Construction equipment shall be inspected daily for leaking fuel, oil, and hydraulic fluid prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
13. The permittee's contractor shall maintain appropriate oil/diesel fuel spill kits on site that are readily accessible at all times during construction, and shall train each operator in the use of the kits.
14. All refueling of equipment shall occur outside of surface waters or wetlands during construction. Machinery shall be staged and refueled in upland areas only.

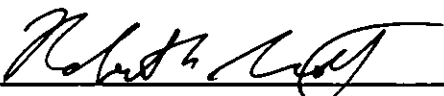
EXPLANATION

The NHDES approved this project on March 30, 2020. The NHDES supported its decision with the following findings:

1. This is a major impact project per New Hampshire Administrative Rule Env-Wt 303.02(a) projects in sand dunes, tidal wetlands, or bogs, except for repair of existing structures pursuant to Env-Wt 303.04(v).
2. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the NHDES' jurisdiction per New Hampshire Administrative Rule Env-Wt 302.03.
3. The applicant has demonstrated by plan and example that each factor listed in New Hampshire Administrative Rule Env-Wt 302.04(a) & (c), Requirements for Application Evaluation, has been considered in the design of the project.
4. Accumulated sediment from within the boat launch area is causing a hazard to public safety and the existing rip-rap seawall is deteriorated and requires reconstruction.
5. The application included NH Natural Heritage Bureau (NHB) Datacheck Results Letter NHB19-1059 with records of sensitive natural communities and vertebrate species within the vicinity of the project. Further review by NHB and NH Fish and Game Department finds no concerns with the proposal.
6. No comments of concern were received by the NHDES from abutters or local governing organizations.
7. In accordance with RSA 482-A:8, the NHDES finds that the requirements for a public hearing do not apply as the permitted project is not of substantial public interest, and will not have a significant impact on or adversely affect the values of the estuarine resource, as identified under RSA 482-A:1.

Application file documents are being forwarded to the Governor and the Executive Council in connection with their consideration of this matter pursuant to RSA 482-A:3,II.(a) as it is a major project in public waters of the state.

We respectfully request your approval of this item.


Robert R. Scott
Commissioner



WETLANDS PERMIT APPLICATION

Water Division/ Wetlands Bureau
Land Resources Management

Check the status of your application: www.des.nh.gov/onestop



RSA/Rule RSA 482-A/ Env-Wt 101.89

RECEIVED JUN 13 2019 Use Only NHDES LAND RESOURCES MANAGEMENT	COMPLETE JUN 14 2019	Administrative Use Only	File No: 2019-01758
			Check: CR # 2478
			Amount: \$ 200.00
			Initials: RS

1. REVIEW TIME: Indicate your Review Time below. To determine review time, refer to Guidance Document A for instructions.

☒ Standard Review (Minimum, Minor or Major Impact)

☐ Expedited Review (Minimum Impact only)

2. MITIGATION REQUIREMENT:

If mitigation is required, a Mitigation Pre-Application meeting must occur prior to submitting this Wetlands Permit Application. To determine if mitigation is required, please refer to the Determine If Mitigation Is Required Frequently Asked Questions.

Mitigation Pre-Application Meeting Date: Month: ___ Day: ___ Year: ___

☒ N/A - Mitigation is not required

3. PROJECT LOCATION:

Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.

ADDRESS: 61 Bean Lane

TOWN/CITY: Newington

TAX MAP: 06

BLOCK:

LOT: 09

UNIT:

USGS TOPO MAP WATERBODY NAME: Broad Cove - Piscataqua River

☐ NA

STREAM WATERSHED SIZE:

☒ NA

LOCATION COORDINATES (if known): 1206123, 225467

☐ Latitude/Longitude ☐ UTM ☒ State Plane

4. PROJECT DESCRIPTION:

Provide a brief description of the project outlining the scope of work. Attach additional sheets as needed to provide a detailed explanation of your project. DO NOT reply "See Attached" in the space provided below.

The project proposes to dredge approximately 600 sf of sediment along the docking structure to the east of the site. A turbidity curtain will be installed for sediment and erosion control and a dredging dewatering containment area will be created and used to dewater the material on site. Additionally, approximately 340 sf of rip-rap will be added to an existing structure along the western side of the site to ensure shoreline protection.

5. SHORELINE FRONTAGE:

☐ N/A This does not have shoreline frontage.

SHORELINE FRONTAGE: 1,400'

Shoreline Frontage is calculated by determining the average of the distances of the actual natural navigable shoreline frontage and a straight line drawn between the property lines, both of which are measured at the normal high water line (Env-Wt 101.89).

6. RELATED NHDES LAND RESOURCES MANAGEMENT PERMIT APPLICATIONS ASSOCIATED WITH THIS PROJECT:

Please indicate if any of the following permit applications are required and, if required, the status of the application.

To determine if other Land Resources Management Permits are required, refer to the Land Resources Management Webpage.

Permit Type	Permit Required	File Number	Permit Application Status
Alteration of Terrain Permit Per RSA 485-A:17	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Individual Sewerage Disposal per RSA 485-A:2	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Subdivision Approval Per RSA 485-A	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Shoreland Permit Per RSA 483-B	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED

7. NATURAL HERITAGE BUREAU & DESIGNATED RIVERS:

See the Instructions & Required Attachments document for instructions to complete a & b below.

a. Natural Heritage Bureau File ID: NHB 19 - 1059

b. ☐ This project is within a Designated River corridor. The project is within 1/4 mile of: _____; and date a copy of the application was sent to the Local River Management Advisory Committee: Month: ___ Day: ___ Year: ___

☒ N/A - This project is not within a Designated River corridor.

lrn@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

8. APPLICANT INFORMATION (Desired permit holder)

LAST NAME, FIRST NAME, M.I.: ELLEN GRIFFIN SAAS

TRUST / COMPANY NAME: Great Bay Marina

MAILING ADDRESS:

TOWN/CITY:

STATE:

ZIP CODE:

EMAIL or FAX:

PHONE:

ELECTRONIC COMMUNICATION: By initialing here: SM, I hereby authorize NHDES to communicate all matters relative to this application electronically.**9. PROPERTY OWNER INFORMATION (If different than applicant)**

LAST NAME, FIRST NAME, M.I.: Same

TRUST / COMPANY NAME:

MAILING ADDRESS:

TOWN/CITY:

STATE:

ZIP CODE:

EMAIL or FAX:

PHONE:

ELECTRONIC COMMUNICATION: By initialing here _____, I hereby authorize NHDES to communicate all matters relative to this application electronically.

10. AUTHORIZED AGENT INFORMATION

LAST NAME, FIRST NAME, M.I.: Hurley, Luke

COMPANY NAME: GES, Inc.

MAILING ADDRESS: 8 Continental Drive, Unit H

TOWN/CITY: Exeter

STATE: NH

ZIP CODE: 03833

EMAIL or FAX: lhurley@gesinc.biz

PHONE: 603-778-0644

ELECTRONIC COMMUNICATION: By initialing here LH, I hereby authorize NHDES to communicate all matters relative to this application electronically.**11. PROPERTY OWNER SIGNATURE:**See the Instructions & Required Attachments document for clarification of the below statements

By signing the application, I am certifying that:

1. I authorize the applicant and/or agent indicated on this form to act in my behalf in the processing of this application, and to furnish upon request, supplemental information in support of this permit application.
2. I have reviewed and submitted information & attachments outlined in the Instructions and Required Attachment document.
3. All abutters have been identified in accordance with RSA 482-A:3, I and Env-Wt 100-900.
4. I have read and provided the required information outlined in Env-Wt 302.04 for the applicable project type.
5. I have read and understand Env-Wt 302.03 and have chosen the least impacting alternative.
6. Any structure that I am proposing to repair/replace was either previously permitted by the Wetlands Bureau or would be considered grandfathered per Env-Wt 101.47.
7. I have submitted a Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) to the NH State Historic Preservation Officer (SHPO) at the NH Division of Historical Resources to identify the presence of historical/ archeological resources while coordinating with the lead federal agency for National Historic Preservation Act (NHPA) 106 compliance.
8. I authorize NHDES and the municipal conservation commission to inspect the site of the proposed project.
9. I have reviewed the information being submitted and that to the best of my knowledge the information is true and accurate.
10. I understand that the willful submission of falsified or misrepresented information to the NHDES is a criminal act, which may result in legal action.
11. I am aware that the work I am proposing may require additional state, local or federal permits which I am responsible for obtaining.
12. The mailing addresses I have provided are up to date and appropriate for receipt of NHDES correspondence. NHDES will not forward returned

Property Owner Signature

Print name legibly

Date

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

MUNICIPAL SIGNATURES

12. CONSERVATION COMMISSION SIGNATURE

The signature below certifies that the municipal conservation commission has reviewed this application, and:

1. Waives its right to intervene per RSA 482-A:11;
2. Believes that the application and submitted plans accurately represent the proposed project; and
3. Has no objection to permitting the proposed work.

Print name legibly

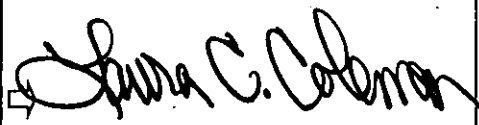
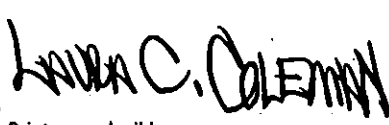
Date

DIRECTIONS FOR CONSERVATION COMMISSION


1. Expedited review ONLY requires that the conservation commission's signature is obtained in the space above.
2. Expedited review requires the Conservation Commission signature be obtained prior to the submittal of the original application to the Town/City Clerk for signature.
3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will be reviewed in the standard review time frame.

13. TOWN / CITY CLERK SIGNATURE

As required by Chapter 482-A:3 (amended 2014), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

Print name legibly



Town/City



Date

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3,

1. For applications where "Expedited Review" is checked on page 1, if the Conservation Commission signature is not present, NHDES will accept the permit application, but it will NOT receive the expedited review time.
2. IMMEDIATELY sign the original application form and four copies in the signature space provided above;
3. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
4. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board; and
5. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

1. Submit the single, original permit application form bearing the signature of the Town/ City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery.

lrn@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

14. IMPACT AREA:

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact.

Permanent: Impacts that will remain after the project is complete.**Temporary:** impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.**Intermittent Streams:** linear footage distance of disturbance is measured along the thread of the channel.**Perennial Streams/Rivers:** the total linear footage distance is calculated by summing the lengths of disturbance to the channel and each bank.

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.	TEMPORARY Sq. Ft. / Lin. Ft.
Forested wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Scrub-shrub wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Emergent wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Wet meadow	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Intermittent stream channel	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Perennial Stream / River channel	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Lake / Pond	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Intermittent stream	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Perennial stream / River	340 / <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Lake / Pond	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Tidal water	600 / <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Salt marsh	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Sand dune	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Prime wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Prime wetland buffer	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Undeveloped Tidal Buffer Zone (TBZ)	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Previously-developed upland in TBZ	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - Lake / Pond	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - River	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - Tidal Water	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Vernal Pool	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
TOTAL	940 /	/

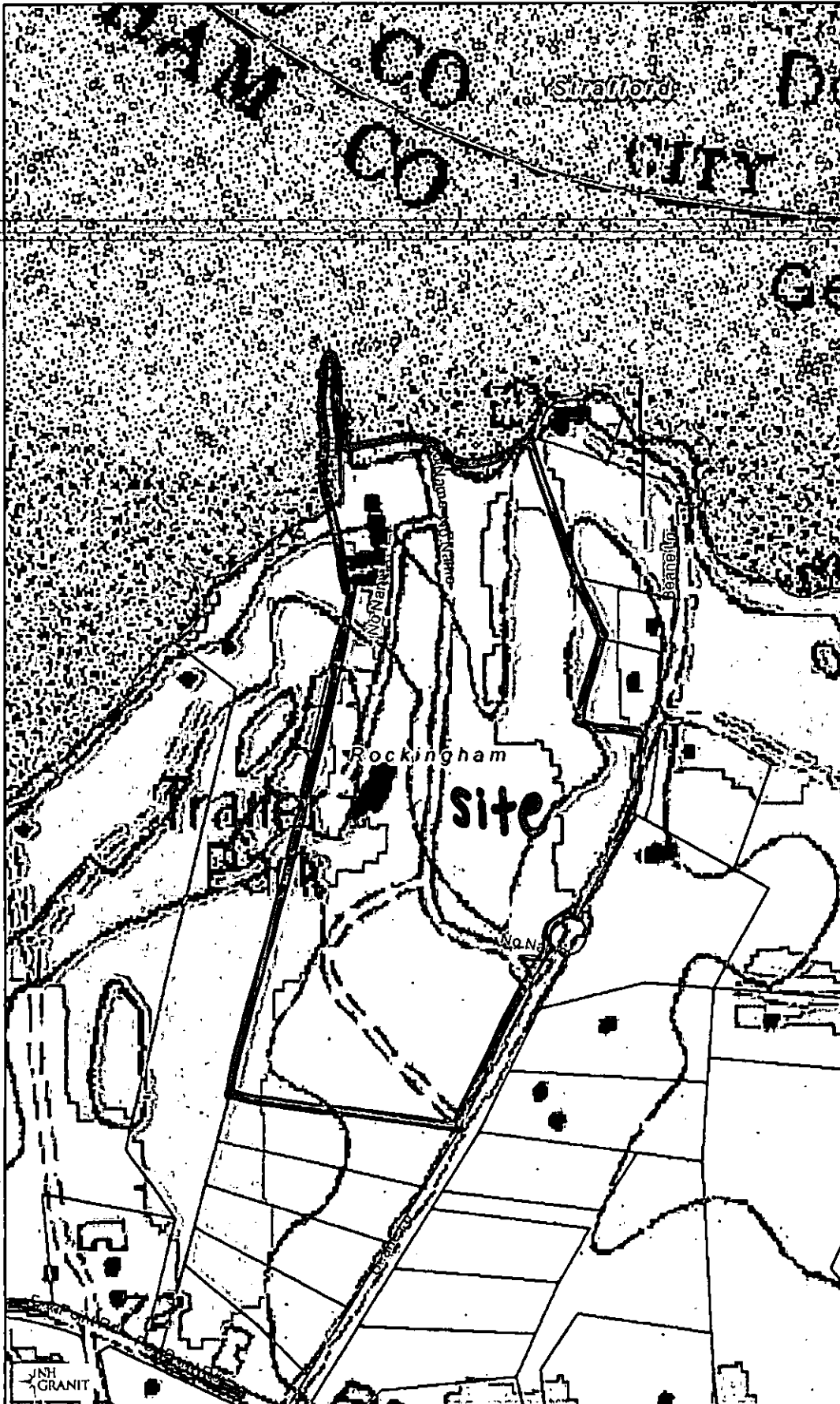
15. APPLICATION FEE: See the Instructions & Required Attachments document for further instruction☐ Minimum Impact Fee: Flat fee of \$ 200☒ Minor or Major Impact Fee: Calculate using the below table belowPermanent and Temporary (non-docking) 940 sq. ft. X \$0.20 = \$ 188.00Temporary (seasonal) docking structure: sq. ft. X \$1.00 = \$Permanent docking structure: sq. ft. X \$2.00 = \$Projects proposing shoreline structures (including docks) add \$200 = \$Total = \$ 188.00The Application Fee is the above calculated Total or \$200, whichever is greater = \$ 200.00

lrm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

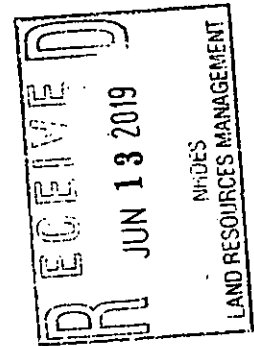
www.des.nh.gov

Map by NH GRANIT



Legend

- ☐ Polygons
- ☐ Additional lines
- ☐ State
- ☐ County
- ☐ City/Town



Map Scale

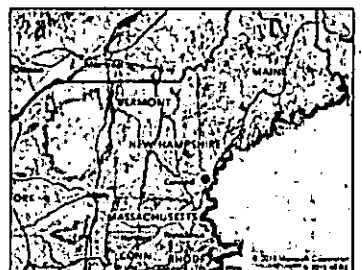
1: 5,000

© NH GRANIT, www.granit.unh.edu

Map Generated: 4/29/2019



Notes

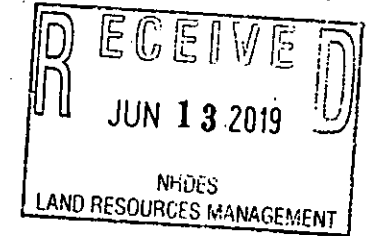


CONFIDENTIAL – NH Dept. of Environmental Services review

Memo



NH NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER



To: Luke Hurley, Gove Environmental Services, Inc.
8 Continental Drive
Exeter, NH 03833

From: Amy Lamb, NH Natural Heritage Bureau

Date: 4/8/2019 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB19-1059

Town: Newington

Location: Tax Maps: 06-09

Description: The project consists of increasing green space along the river front by removing existing pavement, installing porous pavement along the dock access, defining and structuring a patron boating gear drop off for access to the boat slips, and constructing a paved island and pavement markings. The improvements will result in a net gain of 1,088 sf of green space. Existing pilings will also be replaced in kind.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: Please send NHB a site plan detailing the existing conditions and proposed impacts, as well as a stormwater/drainage plan.

Natural Community

Sparsely vegetated intertidal system

Subtidal system

Vertebrate species

Atlantic Sturgeon (*Acipenser oxyrinchus*)

Shortnose Sturgeon (*Acipenser brevirostrum*)

State Federal Notes

T

T

Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

E

E

Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "-" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

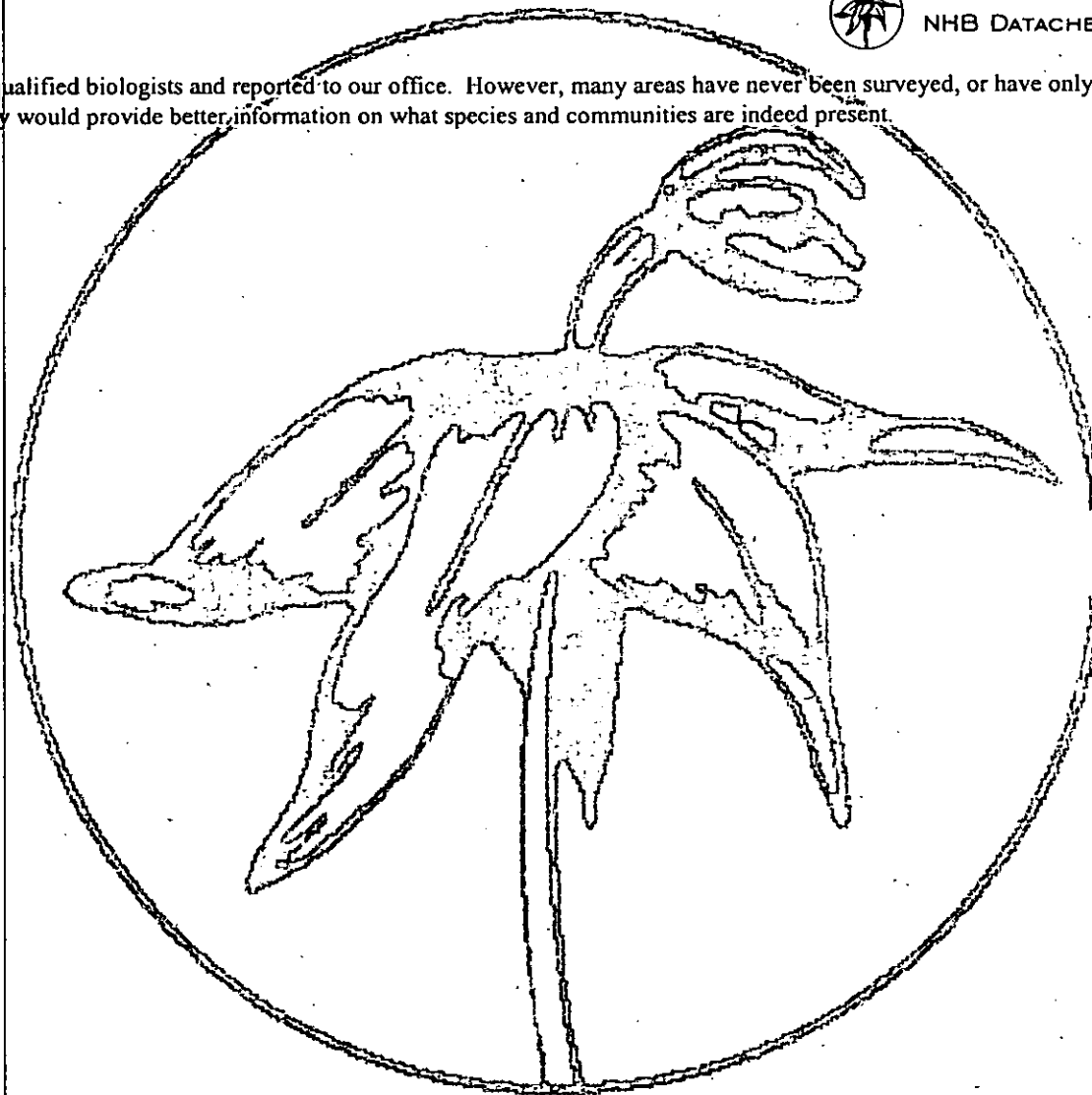
CONFIDENTIAL – NH Dept. of Environmental Services review

Memo



NH NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER

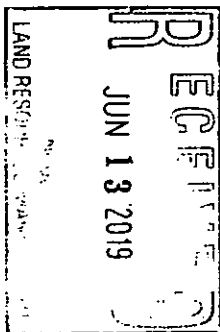
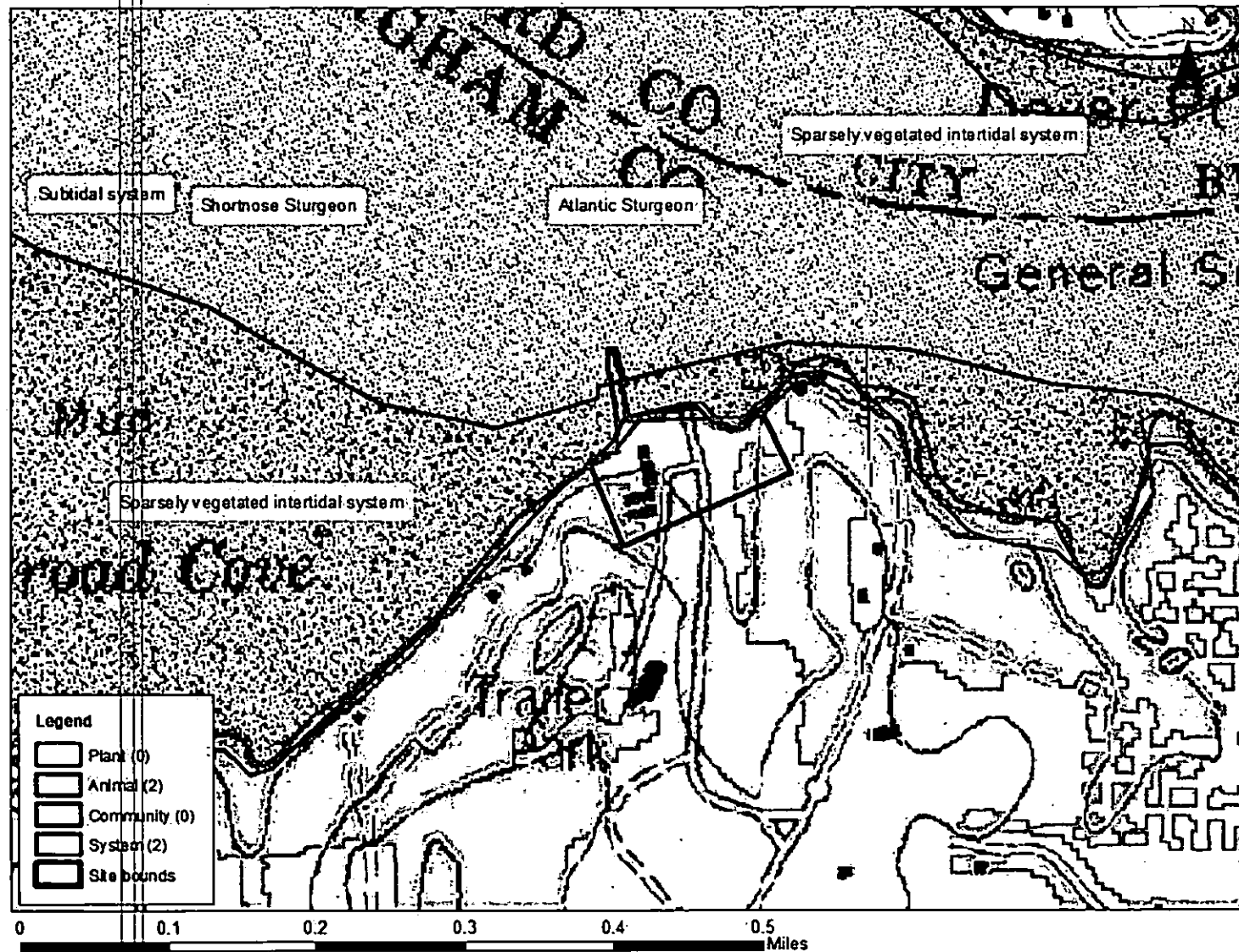
information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.



Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

NHB19-1059



LIST OF ABUTTERS

As defined as any person who owns property immediately adjacent and contiguous to the property on which the project will take place.

Tax Map-Lot Number
Owner of Record

Subject Parcel(s)

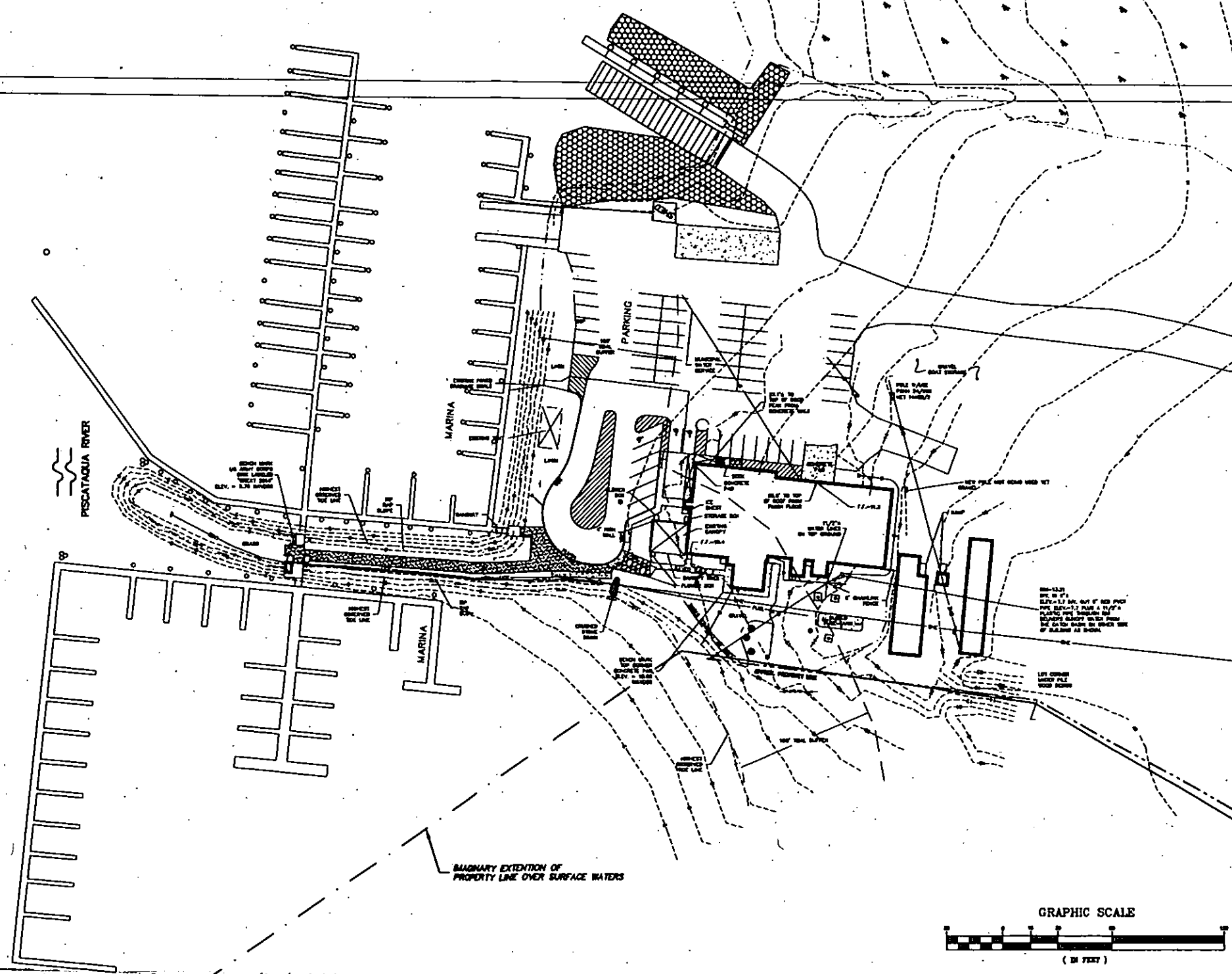
06-09 & 05
Great Bay Marina

Abutter/ Owner of Concern


06-03
James Kaddy

06-04
Samuel Smith

11-17
Christopher & Brian Coleman



GRAPHIC SCALE



(IN FEET)

[illegible]

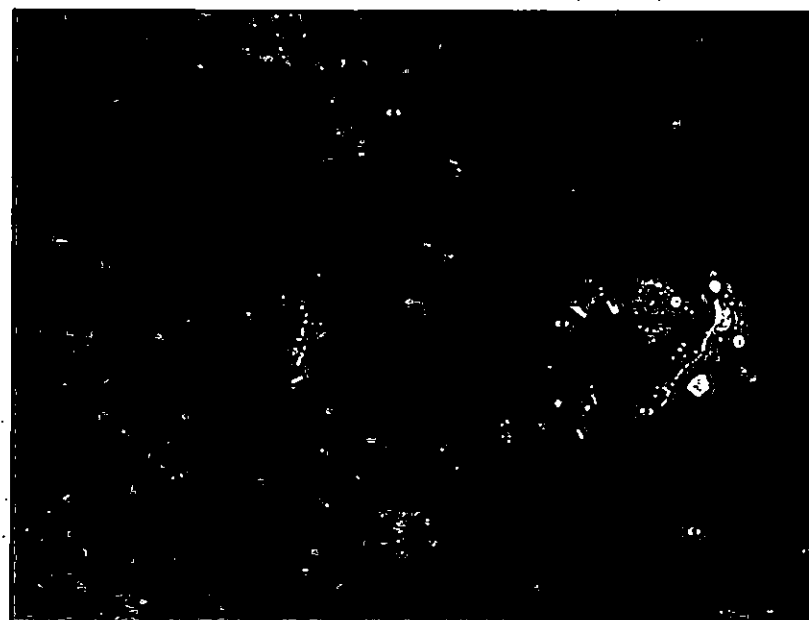
DREDGE AND FILL SITE PLAN GREAT BAY MARINA 61 BEANE LANE NEWINGTON, NH

TAX MAP 06, LOT 09
NEWINGTON, NH
MAY 8, 2019

REVISED: SEPTEMBER 23, 2019



LOCUS MAP
NOT TO SCALE



AERIAL MAP
NOT TO SCALE

OWNER GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH 03801

SITE CIVIL ENGINEER CIVILWORKS NEW ENGLAND
181 WATSON ROAD
DOVER, NH 03820

LAND SURVEYOR KNIGHT HILL LAND SURVEYING SERVICE, INC.
C/O: DAVE HISLOP, LLS
34 OLD POST ROAD
NEWINGTON, NH 03801

PURPOSE OF THIS PLAN:

THE PURPOSE OF THIS PLAN IS TO SHOW THE LOCATION OF THE PROPOSED MAINTENANCE DREDGING AT THE BOAT LAUNCH AREA AND A SMALL AREA RIP-RAP REPAIR OF THE EXISTING SHORELINE PROTECTION ALONG THE WESTERLY BANK.

SHEET INDEX
COVER SHEET
EXISTING OVERALL SITE PLAN
MAINTENANCE DREDGE AT BOAT LAUNCH SITE PLAN
SHORELINE REPAIR AREA SITE PLAN
EROSION CONTROL NOTES

SHEET
C-1
C-2
C-3
C-4
C-5

NOTES:

OWNER OF RECORD: GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH

TAX MAP 06, LOT 09

ZONED: M - MARINA DISTRICT

- EXISTING CONDITIONS SURVEY PERFORMED JULY 2017 BY DAVE HISLOP, KNIGHT HILL LAND SURVEYING SERVICES, INC., 34 OLD POST RD., NEWINGTON, NH 03801.
- VERTICAL DATUM ESTABLISHED FROM EXISTING US ARMY CORP OF ENGINEERS REFERENCE DISK LABELED "GREAT 2014" ELEV.=8.78 NAVD83 ON SITE.
- THE PARCEL SHOWN HEREON LIES WITHIN ZONE AE (ELEVATION 7) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP 3301500255E, EFFECTIVE DATE MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- THE HIGHEST OBSERVABLE TIDE LINE (HOTL) WAS DELINEATED JULY 2017 BY JOSEPH NOEL, CWS AND LOCATED IN THE FIELD BY KNIGHT HILL LAND SURVEYING SERVICES, INC. THIS IS THE REFERENCE LINE PER THE NEW HAMPSHIRE SHORELINE WATER PROTECTION ACT. LUKE HURLEY, CWS OF COVE ENVIRONMENTAL SERVICES INC. VERIFIED THE (HOTL) IN APRIL 2019.
- THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF VISIBLE STRUCTURES (E.G. CATCH BASINS, MANHOLES, GATES, ETC.) AND INFORMATION OBTAINED FROM PLANS OF RECORD. THE CONTRACTOR SHOULD NOTIFY IN WRITING UTILITY AGENCIES AND CONTACT DIG-SAFE (1-800-344-7233).

RECEIVED

OCT 03 2019

ENVIRONMENTAL SERVICES
BY NH DES WETLANDS BUREAU

PROJECT NAME AND LOCATION
GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH 03840

LATITUDE 43°07'N
LONGITUDE 70°57'W

RESTORED AREA

APPROXIMATELY 600 SF OF BRIDGE AREA AT THE BOAT RAMP AND
APPROXIMATELY 240 SF OF SURFACE AREA FOR BP-RAP PLACEMENT.

SEQUENCE OF MAJOR ACTIVITIES

1. ALL WORK SHALL BE DONE AT LOW TIDE AND DURING THE WINTER MONTHS IN ACCORDANCE WITH AN ADMINISTRATIVE ORDER (BY-STOP) DATED TO AVOID AND MINIMIZE IMPACTS TO THE ADJACENT ECOSYSTEM AND THE SURROUNDING ENVIRONMENT.
2. PLACE EROSION CONTROL AND SEDIMENT CONTROL BMP'S PRIOR TO BRIDGING ACTIVITIES AND PLACEMENT OF BP-RAP.
3. BP-RAP PLACEMENT SHALL BE DONE FROM LAUNDERS.
4. BRIDGING WITH EXISTING BRIDGES.
5. BRIDGE MATERIALS SHALL BE PLACED IN CLOSED BOXES TRUCKS AND TRANSPORTS UPWARD TO AREA IN THE EXISTING BOAT STORAGE AREA. THESE THE BRIDGE SPILLS WILL BE SPREAD OUT TO DRY.
6. BRIDGE SPILLS SHALL BE SPREAD OUT TO DRY.
7. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE RESTORED DURING CONSTRUCTION.
8. WHEN ALL SITE WORK AND BRIDGING IS COMPLETE AND ALL RESTORED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

DEFINITIONS

- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
1. BASE COLLECTOR CHANNELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 2. A REMOVAL OF ANY INSTALLED EROSION CONTROL HAS BEEN COMPLETED.
 3. A REMOVAL OF 1" OF NON-EROSIVE MATERIAL, SUCH AS STONE OR BP-RAP HAS BEEN INSTALLED ON.
 4. EROSION CONTROL MEASURES HAVE BEEN PROPERLY INSTALLED.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

- THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.
1. ALL EROSION MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWING ANY STORM EVENT OF 1/2 INCH OR GREATER.
 2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INSTALLED WITHIN 24 HOURS OF REPORT.
 3. BEST UP EROSION WILL BE REMOVED FROM BEST FORCE OR CHECK DAMS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FORCE OR DAM.
 4. ALL EROSION DICES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

B. FIELDS

1. Silt Fence

- Synthetic silt fence shall be a porous sheet of polypropylene, nylon, polyester or other material and shall be certified by the manufacturer or supplier as conforming to the following requirements:
- | Property | Test | Requirements |
|-----------|-------------|----------------------|
| Flow Rate | ASTM-D-5338 | 0.5 gal/sec/ft (min) |
| Flow Rate | ASTM-D-5338 | 0.5 gal/sec/ft (min) |
| Flow Rate | ASTM-D-5338 | 0.5 gal/sec/ft (min) |
- Requirements reduced by 50 percent after six (6) months of installation.

Synthetic silt fence shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six (6) months of expected useful construction life at a temperature range of 0 degrees F to 120 degrees F.

- a. The height of a silt fence shall not exceed thirty-six (36) inches.
- b. The silt fence shall be purchased in a continuous roll and to the length of the barrier to avoid the use of joints. When joints are necessary, silt fence shall be joined together only at support points, with a minimum six (6) inch overlap, and securely sealed.
- c. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location and extend vertically into the ground (minimum of 12 inches). When extra strength fabric is used without the site support fence, post spacing shall not exceed 6 feet.
- d. Posts for silt fences shall be 2-inch diameter wood with a minimum length of 6 feet. The fence reinforcement for all fences using standard strength silt fence shall be a minimum of 42 inches in height, a minimum of 14 gauge and shall have a minimum mesh spacing of 6 inches.
- e. A trench shall be excavated approximately four (4) inches wide and four (4) inches deep along the line of posts and up to the barrier.
- f. When standard strength silt fence is used, a site mesh support fence shall be installed securely to the updrift side of the posts using heavy duty wire staples at least one (1) inch long, the wire shall extend no more than 36 inches above the original ground surface.
- g. The "standard strength" silt fence shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Silt fence shall not be stapled to existing trees.
- h. When extra strength silt fence and shore post spacing are used, the site mesh support fence may be eliminated. In such a case, the silt fence is stapled or wired directly to the posts with all other provisions of item (f) apply.
- i. The trench shall be backfilled and the soil compacted over the silt fence.
- j. Silt fences shall be removed when they have served their useful purpose, but not before the updrift area has been permanently stabilized.

2. Sedimentation

- Sediment barriers shall be installed prior to any soil disturbance of the contributing drainage area above them.

3. Maintenance

- a. Check dams and all fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting of the barrier or the slope, or impending failure of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.
- b. Should the fabric on a silt fence or silt fence barrier become damaged or become ineffective prior to the end of the expected useful life and the barrier still is necessary, the fabric shall be replaced promptly.
- c. Sediment deposits shall be removed after each storm event. They must be removed when deposits reach approximately one third (1/3) the height of the barrier.
- d. Any sediment deposits remaining in place after the silt fence or silt fence barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

EMERGENCY SLOPE COVER

- Apply mulch at the rate of 500 pounds per acre of 10-10-10. Apply mulch (equivalent to 50 percent erosion plus vegetation) at the rate of three (3) tons per acre.

2. Seeding

- a. Use seed at the rate of 40 lbs/acre.
- b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, straw and seed.
- c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (fertilizer including seed and fertilizer). Hydroseeding, which includes mulch, may be left on soil surface. Seeding rates must be increased 100% when hydroseeding.

- a. Maintenance: Temporary seedings shall be periodically inspected. At a minimum, 85% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, reports shall be made and other temporary measures used in the interim (mulch, straw barriers, check dams, etc.).

2. PERMANENT SEEDING

1. Seeding - should be done larger than 1/2" brush, rocks, and other debris interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 4" to prepare a seedbed and then fertilizer into the soil.

2. Fertilizer - One and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Seeds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

Agricultural Lime @ 100 lbs. per 1,000 sq. ft.
10-20-20 Fertilizer @ 12 lbs. per 1,000 sq. ft.

3. Seed Mixtures (Recommended)

Rate	100-100-100	100-100-100
100-100-100	20	0.45
100-100-100	20	0.45
100-100-100	20	0.45
100-100-100	20	0.45

4. Seeding - seeding is done where it is desirable to rapidly establish cover on a disturbed area. Seeding on areas may be substituted for permanent seeding procedures anywhere on site. Seed preparation, fertilization, and placement of seed shall be performed according to the E.C.S. Handbook.

Seeding is recommended for steep slopes where erosion immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt) etc.

5. Provide a minimum of 4 inches (5 inches loose) of topsoil to all areas to be seeded.

7. STORM DRAIN PILET PROTECTION

1. Storm/High Water Retention Structures

- a. Bales shall be either one bound or string tied with the binding oriented around the slope rather than over and under the bales.
- b. Bales shall be placed lengthwise in a single row surrounding the inlet, with the ends of adjacent bales pressed together.
- c. The silt fence barrier shall be anchored and backfilled. A trench shall be excavated around the inlet the width of bales to a minimum depth of four (4) inches. After the bales are placed, the excavated soil shall be backfilled and compacted against the silt fence barrier.
- d. Each bale shall be securely anchored and held in place by at least two (2) stakes or rebar driven through the bales.
- e. Loose straw/bay shall be wedged between bales to prevent water from entering between bales.
- f. All structures should be inspected after every rainstorm and repairs made as necessary.
- g. Sediment should be removed from the down-drift after the sediment has reached a maximum of one-third the depth of the trap.
- h. Highwater should be removed and the area repaired as soon as the contributing drainage area to the inlet has been completely stabilized.

TIMING OF CONTROLS/MEASURES

As indicated in the sequence of Major Activities the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Areas where construction activity temporarily ceases for more than twenty (20) days shall be stabilized with a temporary seed and mulch within fourteen (14) days of the last disturbance. Once construction activity resumes permanently in an area, all fences and other controls shall be removed once permanent measures are established. All areas shall be stabilized within 72 hours of achieving final grade.

- a. Apply mulch prior to any storm event. It is necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms. Mulch shall be applied within a specified time period. The time period can range from 14 to 21 days of building on a site, the length of time varying with site conditions. Professional judgment shall be used to evaluate the likelihood of site conditions (not including season of year, extent of disturbance, proximity to sensitive resources, etc.) and the subsequent impact of erosion on adjacent areas to choose an appropriate time schedule.

- a. Hazardous Waste: All hazardous waste materials shall be disposed of in the manner specified by local or state regulations or by the manufacturer. Site personnel shall be instructed in their practices by the superintendent.

- a. Spill Prevention: All secondary waste oil shall be collected from the portable units a minimum of once per week by a licensed secondary waste management contractor.

SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spill or other uncontrolled exposure of materials and substances during construction to stormwater runoff.

Good Housekeeping: The following good housekeeping practices will be followed on site during the construction project:

- a. An effort will be made to store only sufficient amounts of materials to do the job.
- b. All materials stored on site will be stored in a neat, orderly manner in their original containers or in approved containers, under a roof or other protection.
- c. Manufacturer's recommendations for proper use and disposal will be followed.
- d. The site superintendent will inspect daily to ensure proper use and disposal of materials.
- e. Substances will not be mixed with one another unless recommended by the manufacturer.
- f. Spill prevention plans for all products will be used up before disposal of the container.

Hazardous Products

- The following practices will be used to reduce the risks associated with hazardous materials:
- a. Products will be kept in their original containers unless they are not reasonable.
 - b. Spilled liquids and materials safety data will be retained for important product information.
 - c. Spills of product that must be disposed of will be discarded according to the manufacturer's recommended methods of disposal.

B. PRODUCT SPECIFICATION PRACTICES

The following product specific practices will be followed on site:

Petroleum Products

- a. All on-site vehicles will be monitored for leaks and routine regular preventive maintenance to reduce leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any spilled petroleum substances used on site will be applied according to the manufacturer's recommendations.

Fertilizers

Fertilizers used will be applied only in the minimum amounts directed by the manufacturer. Once applied fertilizers will be carried into the soil to limit exposure to stormwater. Storage will be in a covered shed or enclosed trailer. The contents of any partially used bags of fertilizer will be transferred to a suitable plastic bin to avoid spills.

Paints

- a. All materials will be tightly sealed and stored when not required for use. Excess paint will not be discarded in the storm water system but will be disposed of properly according to manufacturer's instructions or state and local regulations.

Concrete Products

Concrete trucks will discharge and wash out surplus concrete or drain each water in a contained area on site.

C. SPILL CONTROL PRACTICES

In addition to good housekeeping and material management practices discussed in the previous section the following practices will be followed for spill prevention and cleanup:

- a. Manufacturer's recommended methods for spill cleanup will be clearly posted, and site personnel will be made aware of the procedures and the location of the spill containment and cleanup supplies.
- b. Materials and equipment necessary for spill cleanup will be kept in the material storage area on site. Equipment and materials will include but not be limited to brooms, shovels, bags, rags, gloves, goggles, silt fence, sand, sawdust and plastic or metal trash containers specifically for this purpose.
- c. All spills will be cleaned up immediately after discovery.
- d. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- e. Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.
- f. The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to cleanup the spill if it recurs. A description of the spill, its cause, and the cleanup measures will be included.
- g. The site superintendent responsible for day-to-day site operations will be the spill prevention and cleanup coordinator.

The project proponent is required to manage construction to meet the requirements of ADR 3000 relative to controlling invasive species and controlling fugitive dust in accordance with DRY-1002.

ADR 3000 Prohibited Invasive Plant Species Table

The table, April 2002, states: "The person shall submit, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their authors and varieties, listed in Table 3000.1, New Hampshire prohibited invasive species list." A complete copy of the table can be accessed on the Internet at <http://www.nh.gov/dep/forestry/forestry/forestry.htm>.

DRY-1002 FUGITIVE DUST: Procedures to Prevent, Abate, and Control Fugitive Dust

- a. Any person engaged in any activity which the state shall create fugitive dust, other than those listed in DRY-1002.02(a) shall take procedures throughout the duration of the activity in order to prevent, abate, and control the emission of fugitive dust.

- a. Procedures required by (a), above, shall include but not be limited to the following:

- a. The use of water or hydrophobic material on operations or surfaces, or both;
- b. The application of asphalt, water or hydrophobic material, or large or other such covers to material stockpiles;
- c. The use of hards, fans, fabric filters, or other devices to enhance and vent areas where materials prone to producing fugitive dust are handled;
- d. The use of containment methods for conducting or abating operations; and
- e. The use of vacuums or other suction devices to collect airborne particulate matter.

- a. Strictly limiting water with reduced water 2000 feet of the proposed blasting activities. Develop a groundwater quality monitoring program to monitor for nitrate and nitrite other in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area. The plan must include pre and post blast water quality monitoring and be approved by NDEC prior to following blasting. The groundwater monitoring program must be implemented as approved by NDEC.

- a. The following blasting activities shall be completed after:

- a. (1) Loading practices. The following blasting loading practices to minimize environmental effects shall be followed:

- a. (2) Drilling holes shall be maintained by the driller and communicated directly to the blaster. The blaster shall be responsible for the maintenance of all holes, including, but not limited to, the following:

- a. (3) Explosive products shall be managed on-site so that they are not used in the barrels, returned to the blaster, or placed in secure containers for off-site disposal.

- a. (4) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (5) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (6) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (7) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (8) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (9) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (10) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (11) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (12) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (13) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (14) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (15) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (16) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (17) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (18) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (19) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (20) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

- a. (21) Explosives shall be handled in a manner that prevents release of contaminants to the environment.

CIVILWORKS NEW ENGL
131 WATERMAN ST. SUITE 100
NEWINGTON, NH 03840
(603) 745-0443

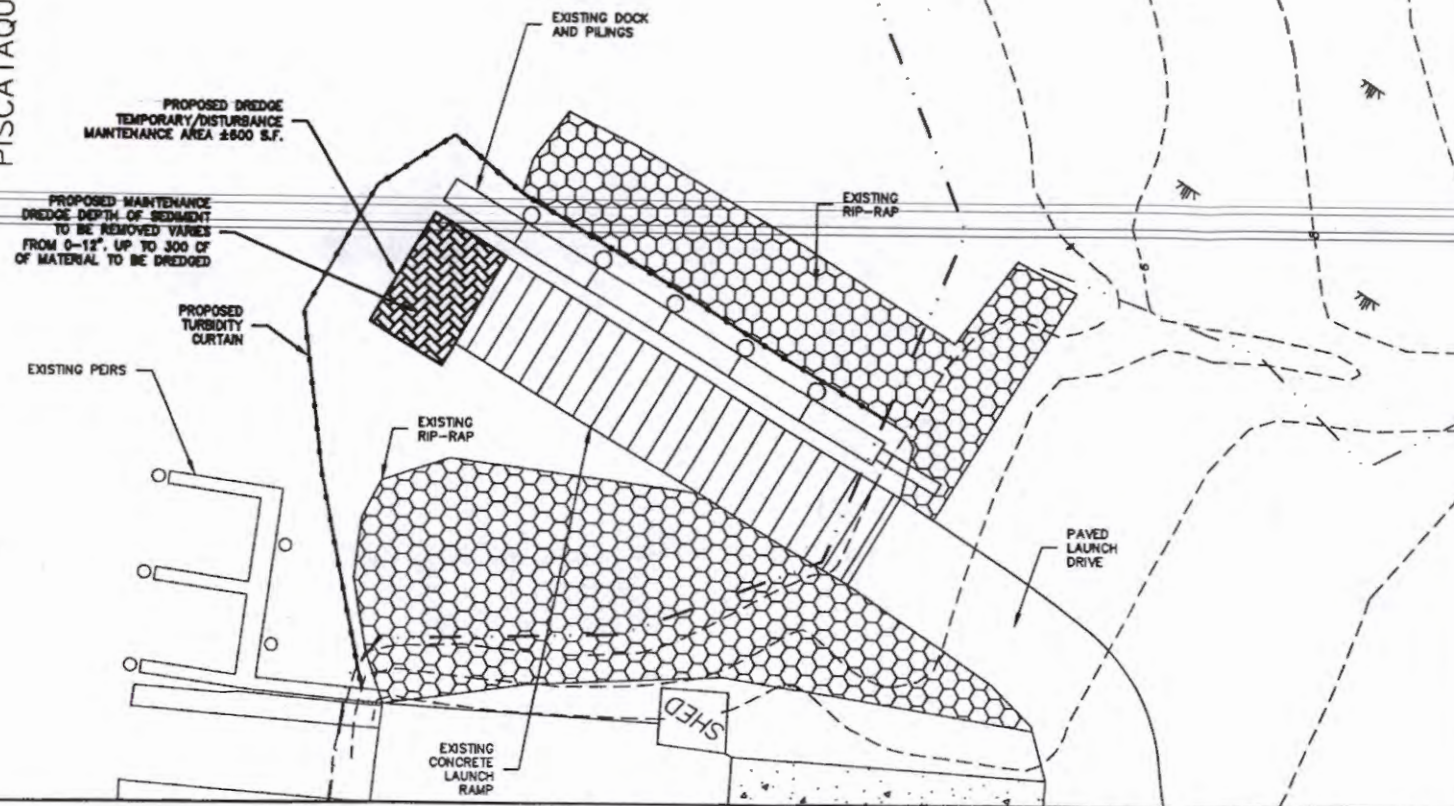
DATE: 0-0-19
SCALE: 1"=30'
DRAWN BY: SMD
DESIGN BY: SMD
APPROVED BY: SMD
PROJECT NO: 1725
FILED: 0-0-19

EROSION CONTROL NOTES

GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH

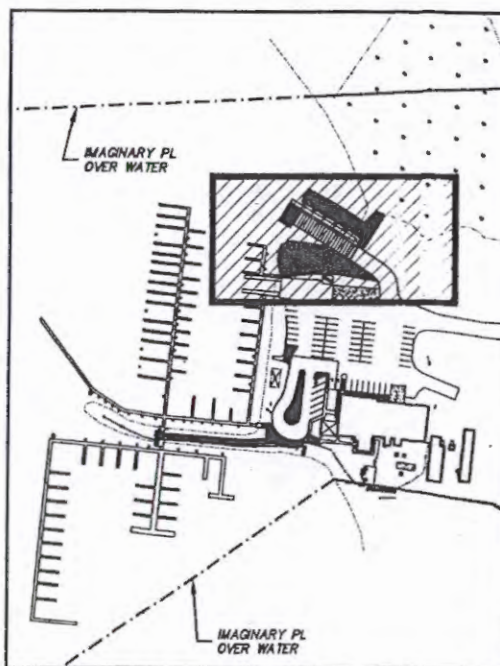
C-5

PISCATAQUA RIVER



DREDGE SITE LOCATION

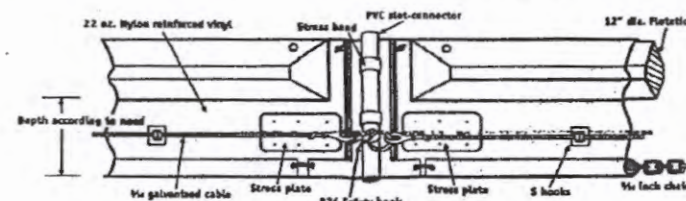
SCALE 1"=20'



KEY MAP

NOT TO SCALE

DREDGE AND OPEN WATER CURTAIN - Application: Sediment Dredging Projects.

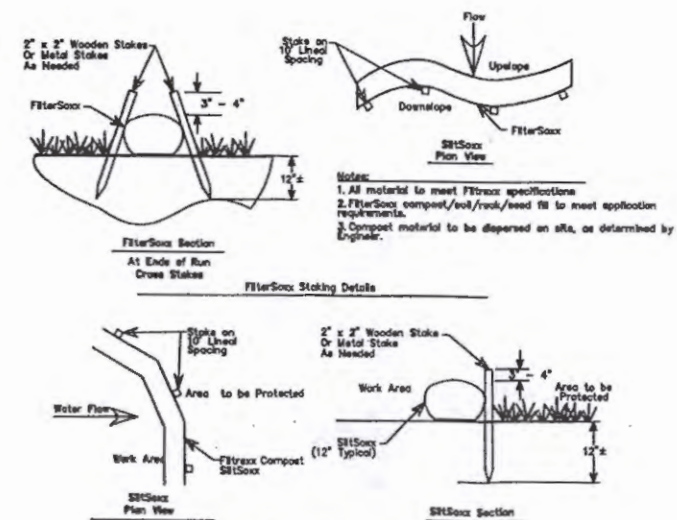


TURBIDITY CURTAIN DETAIL

NOT TO SCALE

NOTES

1. THE INTENT OF THIS PLAN IS TO SHOW THE AREA GREAT BAY MARINA WILL PERFORM ROUTINE MAINTENANCE DREDGING TO CONTINUE SAFE USE OF BOAT RAMP.
2. CONTRACTOR SHALL NOTIFY DEPARTMENT OF ENVIRONMENTAL SERVICES (DES) WETLAND BUREAU PRIOR TO COMMENCING CONSTRUCTION.
3. CONTRACTOR TO OBTAIN A LONG-TERM (7-DAY) WEATHER FORECAST TO ENSURE WORK DOES NOT OCCUR DURING A MAJOR STORM EVENT.
4. CONTRACTOR TO INSTALL TURBIDITY CURTAIN.
5. CONTRACTOR SHALL LEGALLY DISPOSE OF DREDGE MATERIALS.
6. WHEN DONE DREDGING THE CONTRACTOR SHALL REMOVE TURBIDITY CURTAIN AND DEWATER CONTAMINANT AREA.



- Notes:
1. All material to meet Fibrex specifications.
 2. SiltSoxx compost/soil/rock/seed fill to meet application requirements.
 3. SiltSoxx depleted in for minimum slopes. Greater slopes may require larger socks per the Engineer.
 4. Compost material to be dispersed on site, as determined by Engineer.

SiltSoxx Details

NOT TO SCALE

MAINTENANCE DREDGE AT BOAT LAUNCH SITE PLAN

GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH

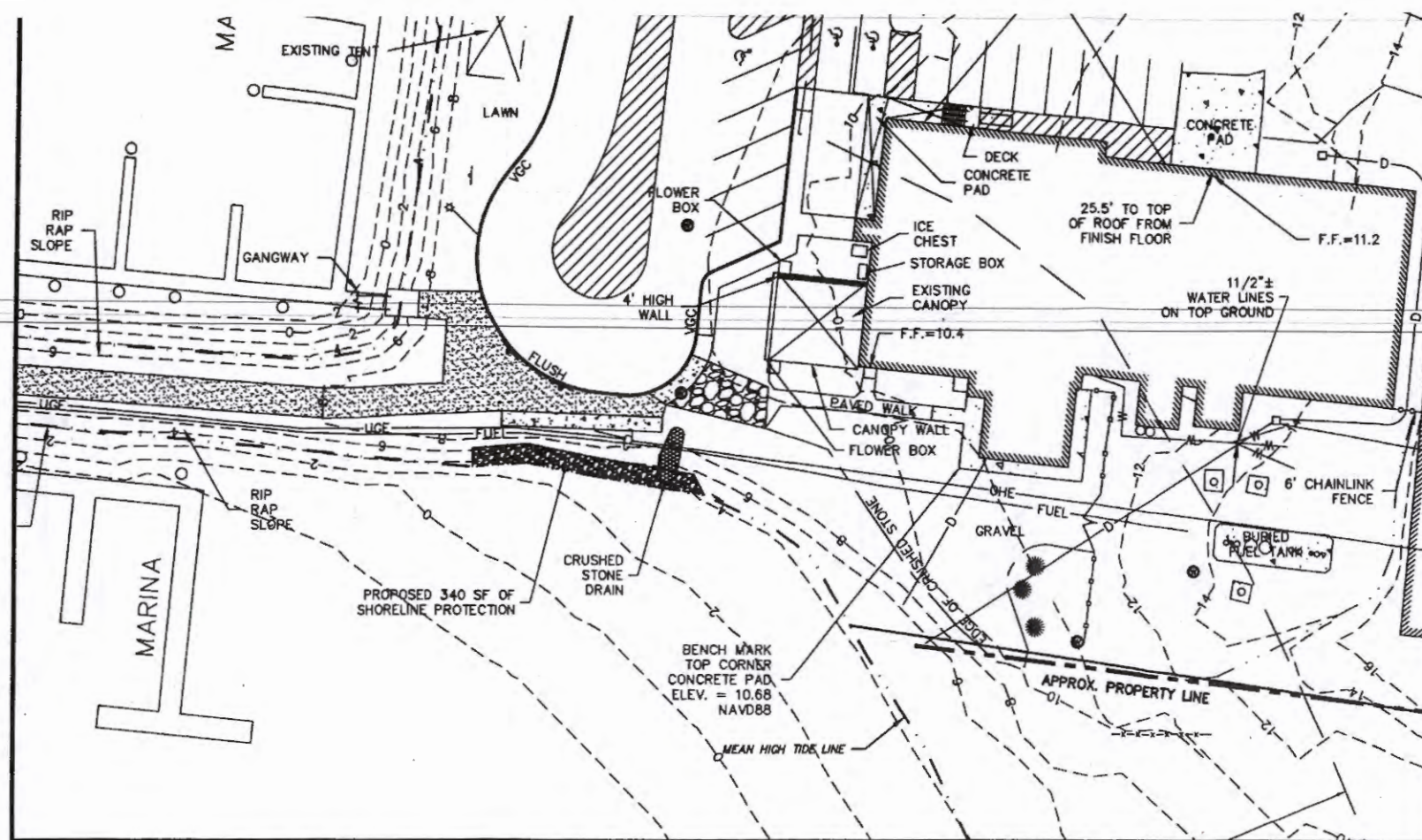
GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH

C-3

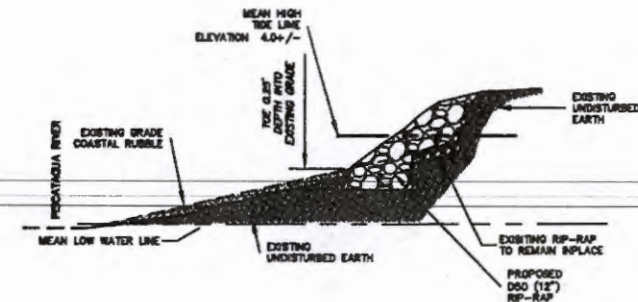
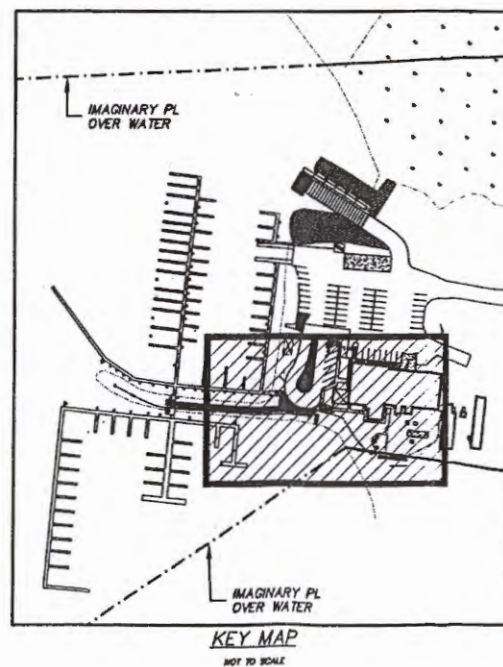
DATE	SCALE	DRAWN BY	DESIGN BY	APPROVED BY	PROJECT NO.	FILE	SITE	PILES	NO.	REVISION	DATE
5-8-19	AS SHOWN	BY: SRD	BY: SRD	BY: SRD	1728	MAINTENANCE DREDGE AT BOAT LAUNCH SITE PLAN					



CIVILWORKS NEW ENGL
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443



RIP-RAP SITE LOCATION
SCALE 1"=20'



NOTES

1. THE INTENT OF THIS PLAN IS TO SHOW THE AREA OF RIP-RAP TO BE ADDED TO EXISTING RIP-RAP.

NOTES

OWNER OF RECORD: GREAT BAY MARINA
81 BEANE LANE
NEWINGTON, NH

TAX MAP 06, LOT 09

ZONED: M - MARINA DISTRICT

1. EXISTING CONDITIONS SURVEY PERFORMED JULY 2017 BY DAVE HESLOP, KNIGHT HILL LAND SURVEYING SERVICES, INC., 34 OLD POST RD., NEWINGTON, NH 03801.
2. VERTICAL DATUM ESTABLISHED FROM EXISTING US ARMY CORP OF ENGINEERS REFERENCE DISK LABELED "GREAT 2014" ELEV.=8.78 NAVD88 ON SITE.
3. THE PARCEL SHOWN HEREON LIES WITHIN ZONE AE (ELEVATION 7) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP 3301800255E, EFFECTIVE DATE MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
4. THE HIGHEST OBSERVABLE TIDE LINE (HOTL) WAS DELINEATED JULY 2017 BY JOSEPH MOEL, CWS AND LOCATED IN THE FIELD BY KNIGHT HILL LAND SURVEYING SERVICES, INC. THIS IS THE REFERENCE LINE FOR THE NEW HAMPSHIRE SHORELINE WATER PROTECTION ACT. LUKA MURLEY, CWS OF DOVE ENVIRONMENTAL SERVICES INC REVERIFIED THE (HOTL) IN APRIL 2019.
5. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF VISIBLE STRUCTURES (E.G. CATCH BASINS, MANHOLES, GATES, ETC.) AND INFORMATION OBTAINED FROM PLANS OF RECORD. THE CONTRACTOR SHOULD NOTIFY IN WRITING UTILITY AGENCIES AND CONTACT DIG-SAFE (1-800-344-7233).

SHORELINE REPAIR AREA SITE PLAN

GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH

GREAT BAY MARINA
61 BEANE LANE
NEWINGTON, NH

C-4

CIVILWORKS NEW ENGLAND
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 745-0443

DATE	APPROVED	REVISION	NO.
DATE: 5-8-19			
SCALE: AS SHOWN			
DRAWN BY: SJD			
DESIGN BY: SJD			
APPROVED BY: SJD			
PROJECT NO: 1728			
FILE SITE-PLAN			

