



PUBLIC NOTICE

**US Army Corps
of Engineers®**
New England District
696 Virginia Road
Concord, MA 01742-2751

Comment Period Begins: 11 August 2015
Comment Period Ends: 11 September 2015
File Numbers: NAE 2009-1173 & NAE 2013-2022
In Reply Refer To: Mr. Brian E. Valiton
Phone: (978) 318-8166
E-mail: brian.e.valiton@usace.army.mil

The District Engineer has received separate applications to conduct work in waters of the United States from a number of private property owners along Manchester Inner Harbor as well as applications by two marinas and the Town to dredge and retain some structures. The applicants that are the subject of this public notice are Ledyard McFadden (NAE 2013-2022) at 4 Ashland Avenue, Martin Hahn (NAE 2009-1173) at 18 Bridge Street, and David Crosby (NAE 2009-1173) at 22 Bridge Street all in Manchester, Massachusetts. This work, including dredging, is proposed in Manchester Inner Harbor at the addresses listed above. Mr. Hahn and Mr. Crosby are abutters who are applying jointly for a single pier and dredging area. The dredging and pier site coordinates for Mr. McFadden are: Latitude 42° 34' 24.31" N Longitude 70° 46' 26.62" W. The dredging and pier site coordinates for Mr. Hahn and Mr. Crosby are: Latitude 42° 34' 24.34" N Longitude 70° 46' 27.63" W.

The dredged material will be disposed of in the Atlantic Ocean at the Massachusetts Bay Disposal Site (MBDS). The MBDS is a 2.0 nmi (3.7 km) diameter circular area centered at 42° 25.106' N, 70° 34.969' W (NAD 83), is located 12 nmi (22 km) southeast of Gales Point, MA.

The work involves the retention of an unauthorized existing seasonal residential floating dock totalling approx. 672 sq. ft. at the McFadden property now resting partially on intertidal habitat on timber skids and the new and maintenance dredging of approx. 1460 sq. ft. of intertidal habitat and 3851 sq. ft. of subtidal habitat to a depth of - 5 feet m.l.w. for vessel access to the dock. Total amount of material to be dredged is approx. 565 cu. yds. The work at the Hahn - Crosby site similarly involves the retention of an unauthorized seasonal residential floating dock totalling approx. 432 sq. ft. now resting partially on intertidal habitat and the new and maintenance dredging of approx. 1256 sq. ft. of intertidal habitat and 983 sq. ft. of subtidal habitat for vessel access to the dock. The total amount of material to be dredged is approx. 309 cu. yds. The material to be dredged consists of silt and sand and the material has been determined, by the Corps and EPA, to be suitable for unconfined ocean disposal at the MBDS.

The work at the McFadden property is shown on the attached plans entitled "PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK MANCHESTER INNER HARBOR LEDYARD MCFADDEN 4 ASHLAND AVENUE MANCHESTER, MA 01944 COUNTY OF: ESSEX," on 6 sheets, and dated "6/06/2014." The work at the Hahn - Crosby properties is shown on the attached plans entitled "PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK MANCHESTER INNER HARBOR MARTIN HAHN/DAVID CROSBY 18 - 22 BRIDGE STREET, MANCHESTER, MA 01944 COUNTY OF: ESSEX," on 6 sheets, and dated "6/06/2014."

The project has been designed to minimize the landward limits of dredging required so that only minimal

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intertidal resources areas above the mean low water line will be impacted by the dredging. The mitigation through the Massachusetts in lieu fee program will be provided for the loss of the intertidal resource area. Silt producing activities will only be done when work is allowed in these coastal areas as a result of longstanding time of year restrictions.

AUTHORITY

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899
- Section 404 of the Clean Water Act
- Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

Dredged Material Disposal Mitigation Discussion:

The alternatives considered in the dredged material disposal analysis fall into four general categories: beneficial use, upland disposal, confined disposal, and open-water disposal. The feasibility of disposal alternatives was analyzed relative to the physical and chemical quality of the dredged material, the volume of material to be dredged, the availability of suitable disposal and beneficial use sites, and the cost of disposal. When applicable, the biological quality of the disposal of the material at the disposal site was also used to evaluate the feasibility of the open-water disposal alternative.

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Based on the characteristics of the dredged material, the lack of suitable alternate disposal or beneficial use sites and costs, the most feasible, practical, cost-effective and environmentally acceptable alternative for the disposal of dredged materials from the proposed dredging is disposal at the requested disposal site.

Testing Information

The dredged material has undergone physical, chemical, and biological testing and has satisfied the criteria for ocean disposal of dredged material as specified in Part 227 of the Ocean Dumping Act regulations. It is our preliminary determination that the material is acceptable for disposal at this disposal site.

Any permit issued for this project will include special conditions requiring scows to come to a complete stop when disposing of the material at the disposal site. There will also be a time of year restriction included as a special condition which prohibits dredging during ecologically sensitive times of years.

Massachusetts Bay Disposal Site

The Massachusetts Bay Disposal Site is frequently used for disposal of bottom sediments from various harbors in the Boston area. Approximately 300,000 cubic yards of suitable sediments (the suitability was determined with a project-specific evaluation with an established interagency review process) are deposited at this site annually. The site is monitored through the Corps Disposal Area Monitoring System (DAMOS) program. The DAMOS studies show that the site is a low energy environment such that sediments deposited at this location will remain within the site's boundaries. The DAMOS monitoring has also shown that distinct dredged material mounds have been formed at the site. Levels of metals and organics in the sediments within the disposal site are generally above background levels, indicative of the industrial nature of the areas dredged that utilize the site. Sediment deposited at the disposal site has not been found to affect areas outside the disposal site. The Environmental Protection Agency has designated the Massachusetts Bay Disposal Site usable for disposal of dredged sediments.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The dredging portion of these projects will impact a total of approximately 7550 sq. ft. of Essential Fish Habitat (EFH) for American plaice (eggs, larvae, juveniles, adults), Atlantic butterfish (eggs, larvae), Atlantic cod (eggs, larvae, juveniles, adults), Atlantic halibut (eggs, larvae, juveniles, adults), Atlantic mackerel (eggs, larvae, juveniles, adults), Atlantic sea herring (larvae, juveniles, adults), bluefish (juveniles, adults), haddock (eggs, larvae), Ocean pout (juveniles, adults), Pollock (eggs, larvae, juveniles), red hake (larvae, juveniles, adults), White Hake (eggs, larvae, juveniles, adults), whiting (eggs, larvae, juveniles, adults), winter flounder (eggs, larvae, juveniles, adults), windowpane flounder (eggs, larvae, juveniles, adults), and yellowtail flounder (eggs, larvae, juveniles, adults). Habitat at these two sites can be described as intertidal and subtidal sand and silt. Loss of this habitat may adversely affect prey species during dredging but the area is likely to recolonize quickly so any loss is temporary. Loss of this habitat may adversely affect winter flounder. The District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial.

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Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

As indicated, the dredged material disposal is proposed for the MBDS. This is an open water ocean disposal site, which provides Essential Fish Habitat for the same species listed above, with water depths ranging from 269 to 302 feet (82-92 meters) that is utilized now and has been utilized in the past for disposal of dredged material under approved disposal site conditions. The site is monitored under our Disposal Area Monitoring System (DAMOS). Since this is an approved ocean disposal site, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

NATIONAL HISTORIC PRESERVATION ACT

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

ENDANGERED SPECIES CONSULTATION

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any Federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

COASTAL ZONE MANAGEMENT

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, License or Assent from State.

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- (X) Permit from Local Wetland Agency or Conservation Commission.
- () Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Mr. Brian Valiton at (978) 318-8166, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.



Kevin R. Kotelly, P.E.
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____
PHONE: _____



PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

DATUM:
 MLW = 0.0
 MHW = +8.8
 HTL = +11.1

CLE ENGINEERING, INC.
 15 CREEK ROAD
 MARION, MA 02738

VICINITY MAP
USGS MANCHESTER
QUAD SHEET
 SCALE: 1"=24,000'

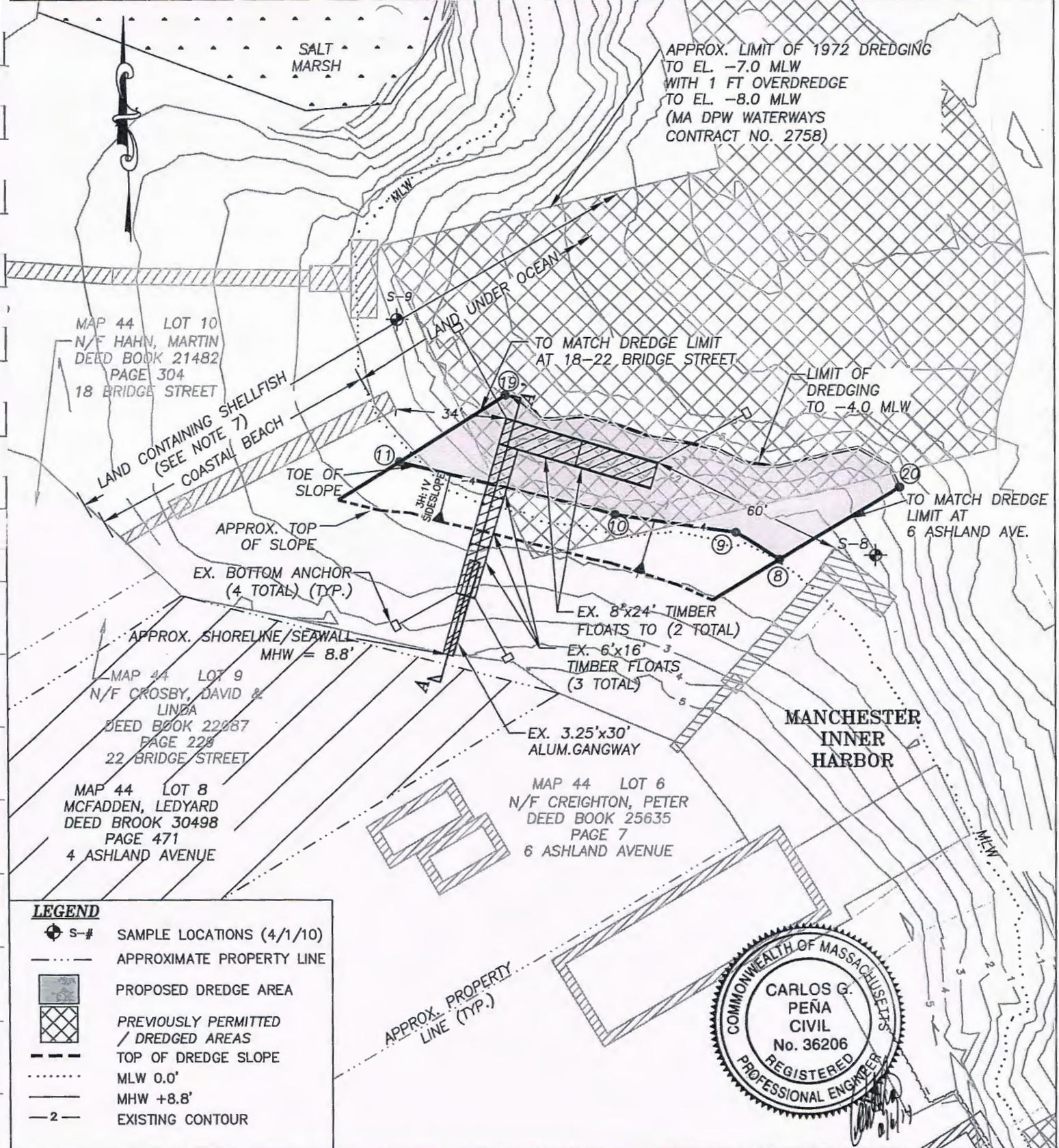
1 inch = 24000ft.

PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

LEDYARD MCFADDEN
 4 ASHLAND AVENUE
 MANCHESTER, MA 01944
 COUNTY OF: ESSEX
 DATE: 06/06/2014

SHEET 1 OF 6



PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

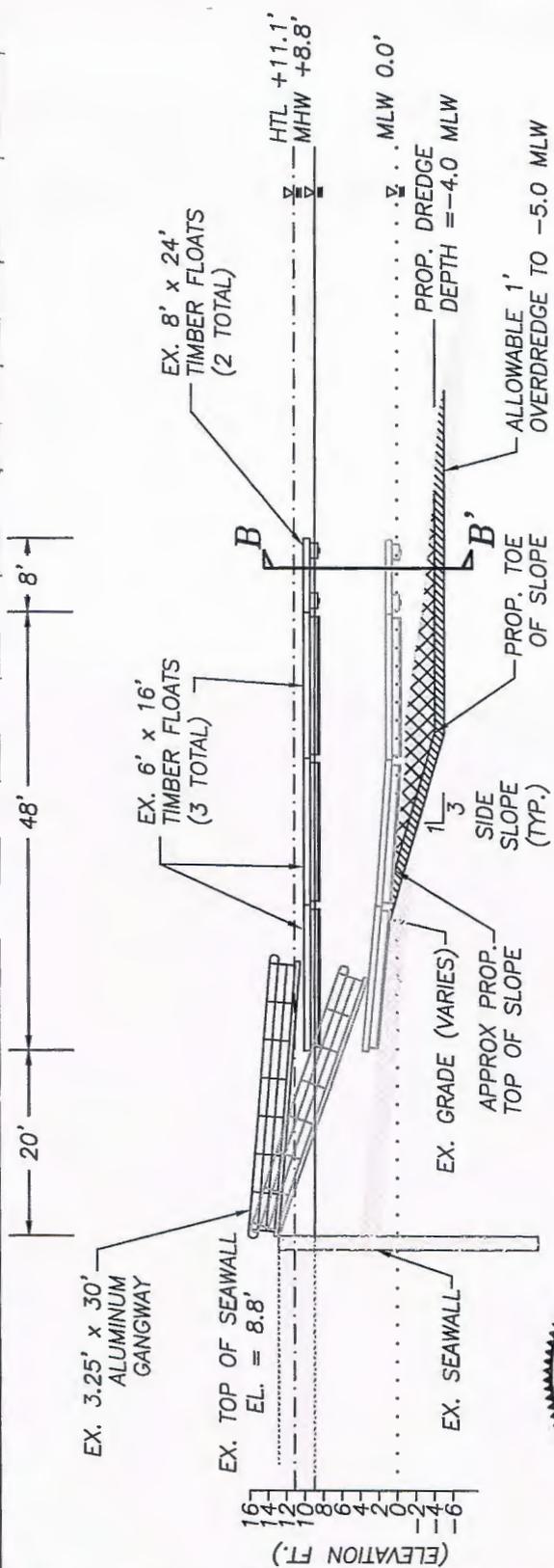
DATUM:
MLW = 0.0
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CLE ENGINEERING, INC.
15 CREEK ROAD
MARION, MA 02738

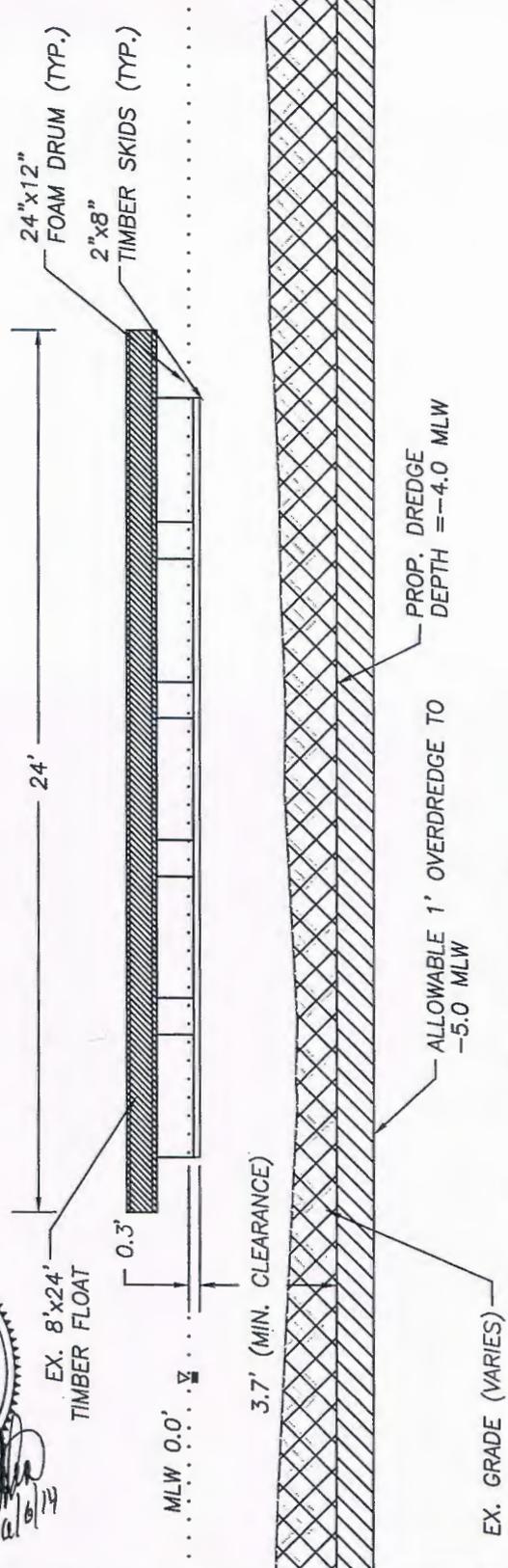
PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

LEDYARD MCFADDEN
4 ASHLAND AVENUE
MANCHESTER, MA 01944
COUNTY OF: ESSEX
DATE: 06/06/2014



TYPICAL PROFILE A-A'
SCALE: 1" = 20'



TYPICAL SECTION B-B'
SCALE: 1" = 5'



PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

DATUM:
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MHW = +8.8
HTL = +11.1

CLE ENGINEERING, INC.
15 CREEK ROAD
MARION, MA 02738

TYPICAL PROFILE & SECTIONS

PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

LEDYARD MCFADDEN
4 ASHLAND AVENUE
MANCHESTER, MA 01944
COUNTY OF: ESSEX
DATE: 06/06/2014

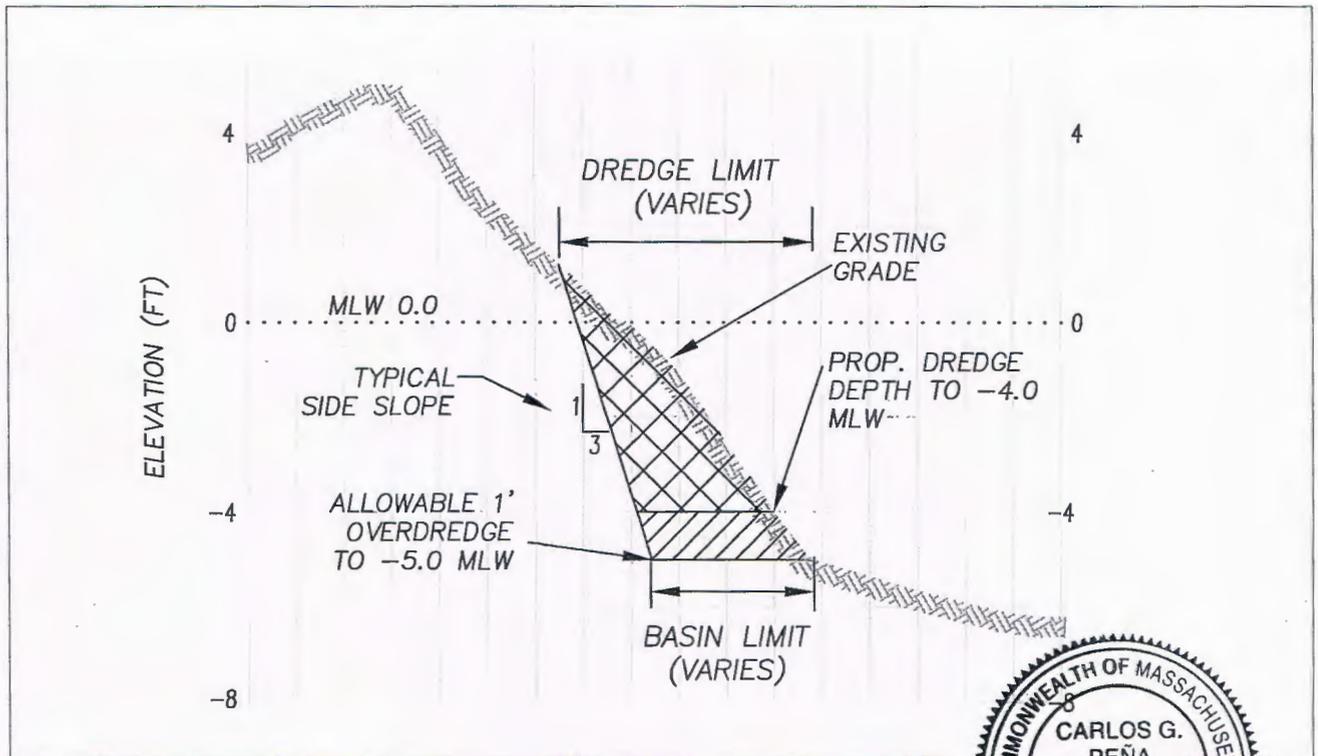
PROPOSED DREDGE DEPTHS, AREAS & ESTIMATED QUANTITIES ⁽¹⁾

LOCATION	PROPOSED DREDGE DEPTH (FT)	FOOTPRINT AREA (SF)			VOLUME (CY)		
		(M)	(I)	TOTAL	(M)	(I)	TOTAL
MCFADDEN 4 ASHLAND AVE.	-4.0 MLW	±2,951	±2,359	±5,310	±304	±261	±565
TOTALS		±2,951	±2,359	±5,310	±304	±261	±565

NOTES:

(M)=MAINTENANCE DREDGING; (I)=IMPROVEMENT DREDGING

(1) INCLUDES 3H:1V SIDESLOPES & 1 FT ALLOWABLE OVERDREDGE.



TYPICAL DREDGE SECTION

4 ASHLAND AVENUE

SCALE: 1" = 40' H

SCALE: 1" = 4' V



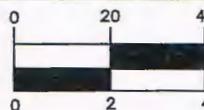
PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

DATUM:

MLW = 0.0
MHW = +8.8
HTL = +11.1

CLE ENGINEERING, INC.
15 CREEK ROAD
MARION, MA 02738

TYPICAL DREDGE SECTION



1 inch = 40 ft. HORIZ.
1 inch = 4 ft. VERT.

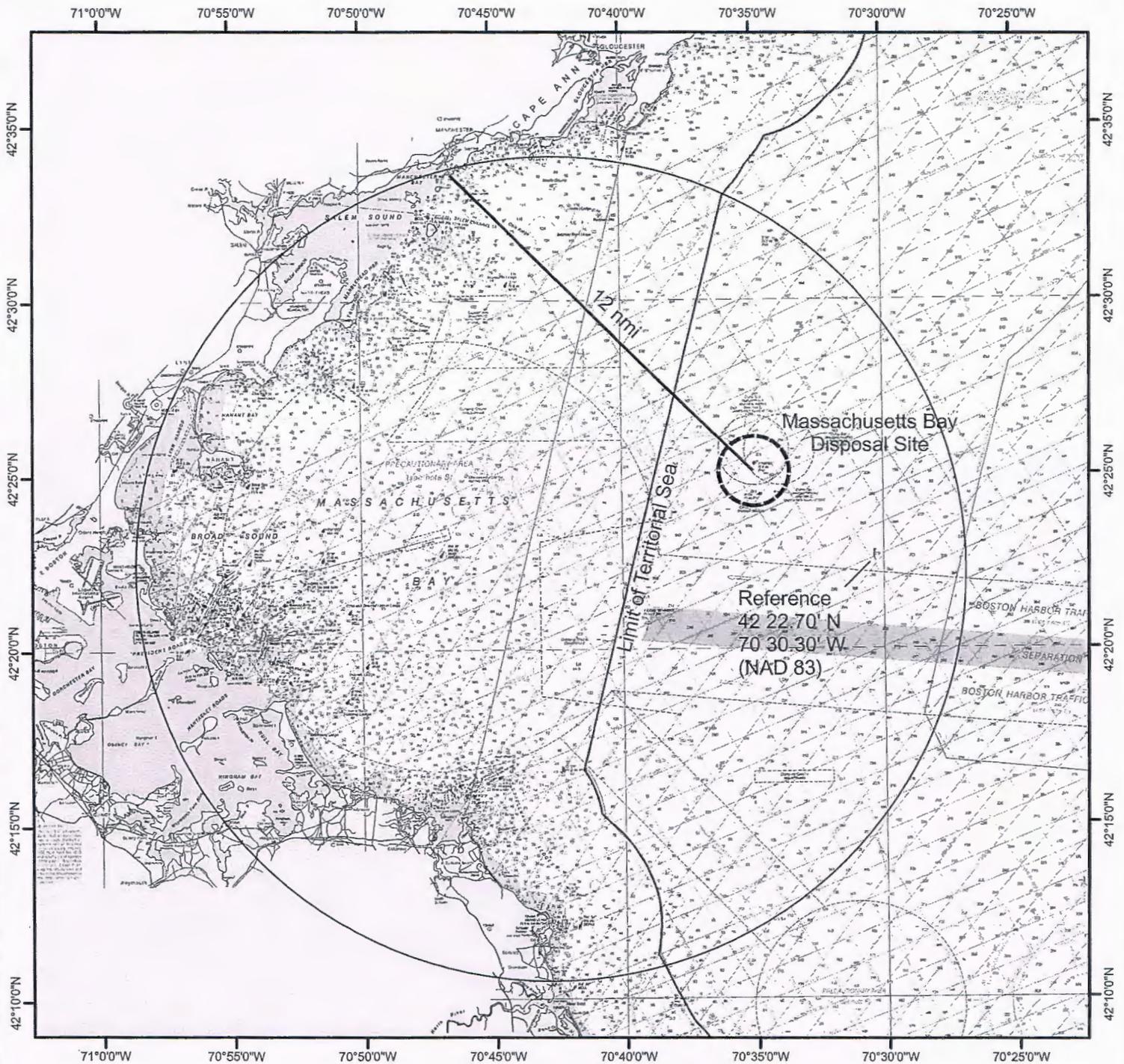
PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

LEDYARD MCFADDEN
4 ASHLAND AVENUE
MANCHESTER, MA 01944

COUNTY OF: ESSEX
DATE: 06/06/2014

SHEET 4 OF 6



PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

DATUM:

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CLE ENGINEERING, INC.
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DISPOSAL AREA

NTS

PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

LEDYARD MCFADDEN
 4 ASHLAND AVENUE
 MANCHESTER, MA 01944
 COUNTY OF: ESSEX
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GENERAL NOTES:

1. DREDGE SEDIMENTS TO BE DISPOSED OFFSHORE AT THE MASSACHUSETTS B. DISPOSAL SITE (MBDS) OR APPROVED MA LANDFILL FACILITY.
2. RESULTS OF HYDROGRAPHY FROM SURVEYS DATED 04-29-02, 05-29-03, 07-18-06 & 3-11-08. RESULTS OF TOPOGRAPHY FROM SURVEY DATED 12-8-08.
3. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO DEPTHS BELOW MEAN LOW WATER. BENCHMARK USED WAS AH-52 BRASS DISK ELEVATION 16.49' MLW LOCATED ON CEMENT FLAGPOLE BASE AT INTERSECTION OF CENTRAL AND CHURCH STREET. SITE BENCHMARK IS CLE PK#6 ELEVATION 13.26' MLW LOCATED AT SOUTH END OF MANCHESTER MARINE ON WOOD DECK ADJACENT TO CONCRETE PAD.
4. COORDINATES ARE BASED ON THE LAMBERT GRID SYSTEM FOR THE COMMONWEALTH OF MASSACHUSETTS. BENCHMARKS = 411A AND 411.
5. LINEWORK SHOWN HEREON ARE A RESULT OF AN ON THE GROUND SURVEY PERFORMED 11/22/04, 11/24/04, 6/15/05 & 6/24/05 BY HANCOCK SURVEY ASSOCIATES, AS DEPICTED ON OAK ENGINEERING PLAN DATED 6/20/06 REVISED 6/27/07 ENTITLED "PLAN TO ACCOMPANY NOTICE OF INTENT 12 ASHLAND AVE."
6. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF HYDROGRAPHIC SURVEYS PERFORMED ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE SEABED CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. NO SURVEYS WERE CONDUCTED TO LOCATE PROPERTY LINES, CHANNEL LIMITS, EASEMENTS, UTILITIES, GEOTECHNICAL FEATURES, SHORELINES, STRUCTURES, HABITATS OR ANY OTHER PHYSICAL FEATURES RELATING TO THE PROJECT SITE, NOR DOES CLE WARRANT THE EXISTENCE OR LOCATION OF SAID PHYSICAL FEATURES.
7. LAND CONTAINING SHELLFISH LIMITS, AS SHOWN, BASED UPON AVAILABLE MA GIS INFORMATION.
8. PROPERTY LINES ARE APPROXIMATE AND USED AS REFERENCE ONLY.
9. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT, ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING, INC.

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HTL	+11.1'
MHW	+8.8'
NGVD1929	+4.3'
MLW	0.0'

HORIZONTAL POSITION COORDINATES PROPOSED DREDGE AREA		
LOCATION	NORTHING	EASTING
(8)	3034777.91	851752.67
(9)	3034786.37	851739.34
(10)	3034791.91	851702.46
(11)	3034808.25	851636.78
(19)	3034828.38	851669.27
(20)	3034800.36	851789.37

DATUM SHIFT CHART

PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

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15 CREEK ROAD
MARION, MA 02738

GENERAL NOTES

PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

LEDYARD MCFADDEN
4 ASHLAND AVENUE
MANCHESTER, MA 01944
COUNTY OF: ESSEX
DATE: 06/06/2014

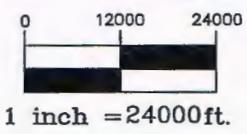


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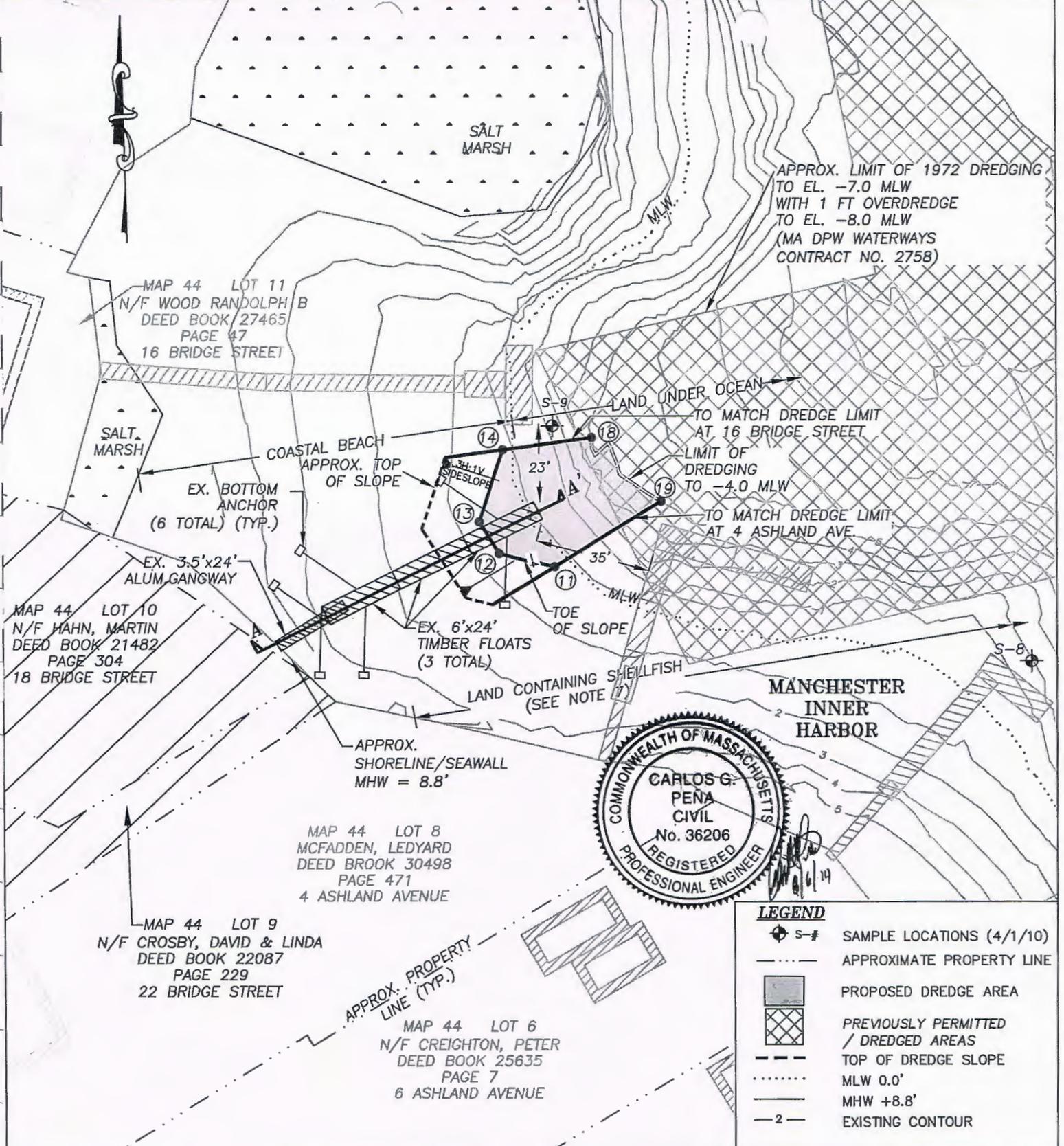
VICINITY MAP
USGS MANCHESTER
QUAD SHEET
SCALE: 1"=24,000'



PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

MARTIN HAHN / DAVID CROSBY
 18-22 BRIDGE STREET
 MANCHESTER, MA 01944
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APPROX. LIMIT OF 1972 DREDGING
 TO EL. -7.0 MLW
 WITH 1 FT OVERDREDGE
 TO EL. -8.0 MLW
 (MA DPW WATERWAYS
 CONTRACT NO. 2758)

MAP 44 LOT 11
 N/F WOOD RANDOLPH B
 DEED BOOK 27465
 PAGE 47
 16 BRIDGE STREET

MAP 44 LOT 10
 N/F HAHN, MARTIN
 DEED BOOK 21482
 PAGE 304
 18 BRIDGE STREET

MAP 44 LOT 8
 MCFADDEN, LEDYARD
 DEED BOOK 30498
 PAGE 471
 4 ASHLAND AVENUE

MAP 44 LOT 9
 N/F CROSBY, DAVID & LINDA
 DEED BOOK 22087
 PAGE 229
 22 BRIDGE STREET

MAP 44 LOT 6
 N/F CREIGHTON, PETER
 DEED BOOK 25635
 PAGE 7
 6 ASHLAND AVENUE



LEGEND

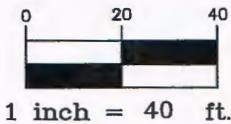
- S-# SAMPLE LOCATIONS (4/1/10)
- APPROXIMATE PROPERTY LINE
- PROPOSED DREDGE AREA
- PREVIOUSLY PERMITTED / DREDGED AREAS
- TOP OF DREDGE SLOPE
- MLW 0.0'
- MHW +8.8'
- EXISTING CONTOUR

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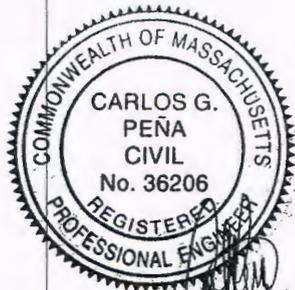
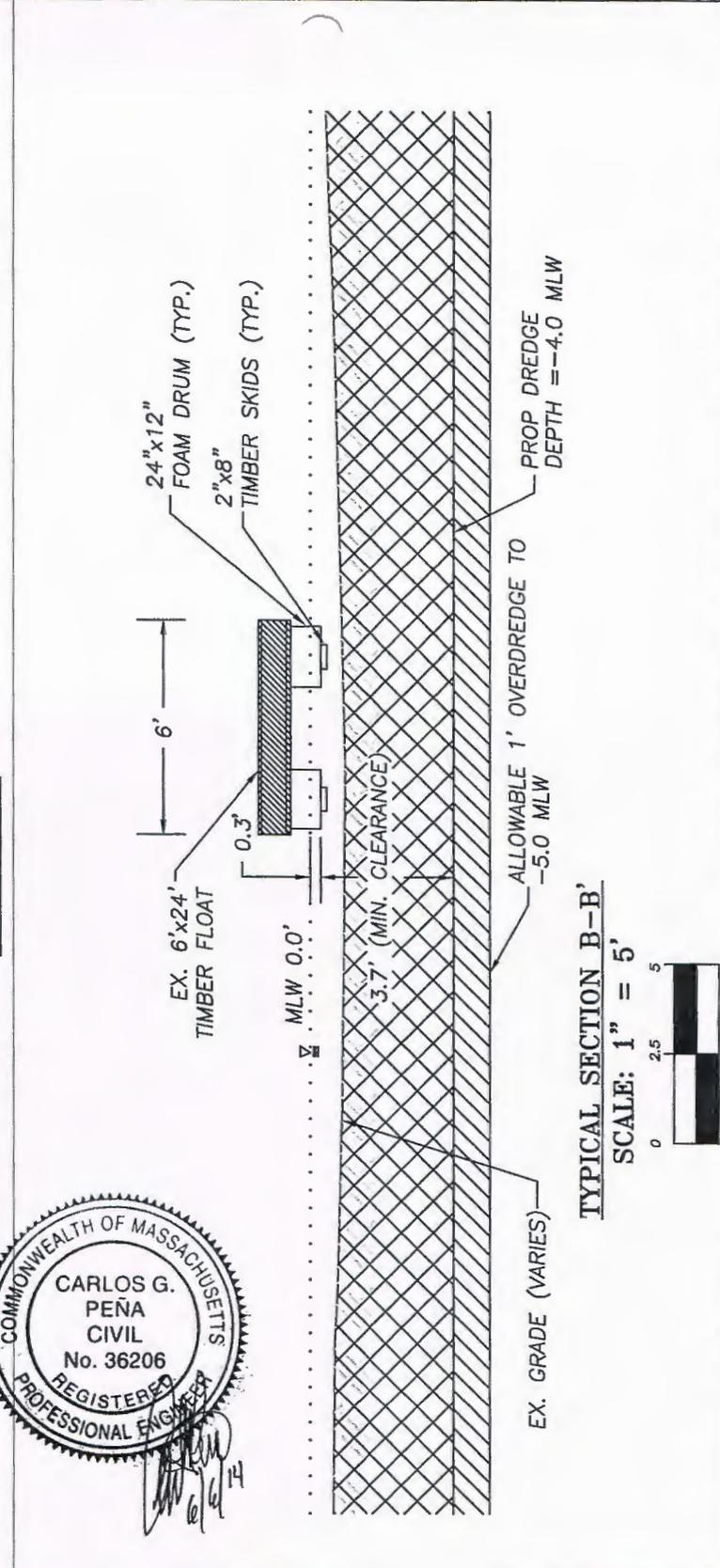
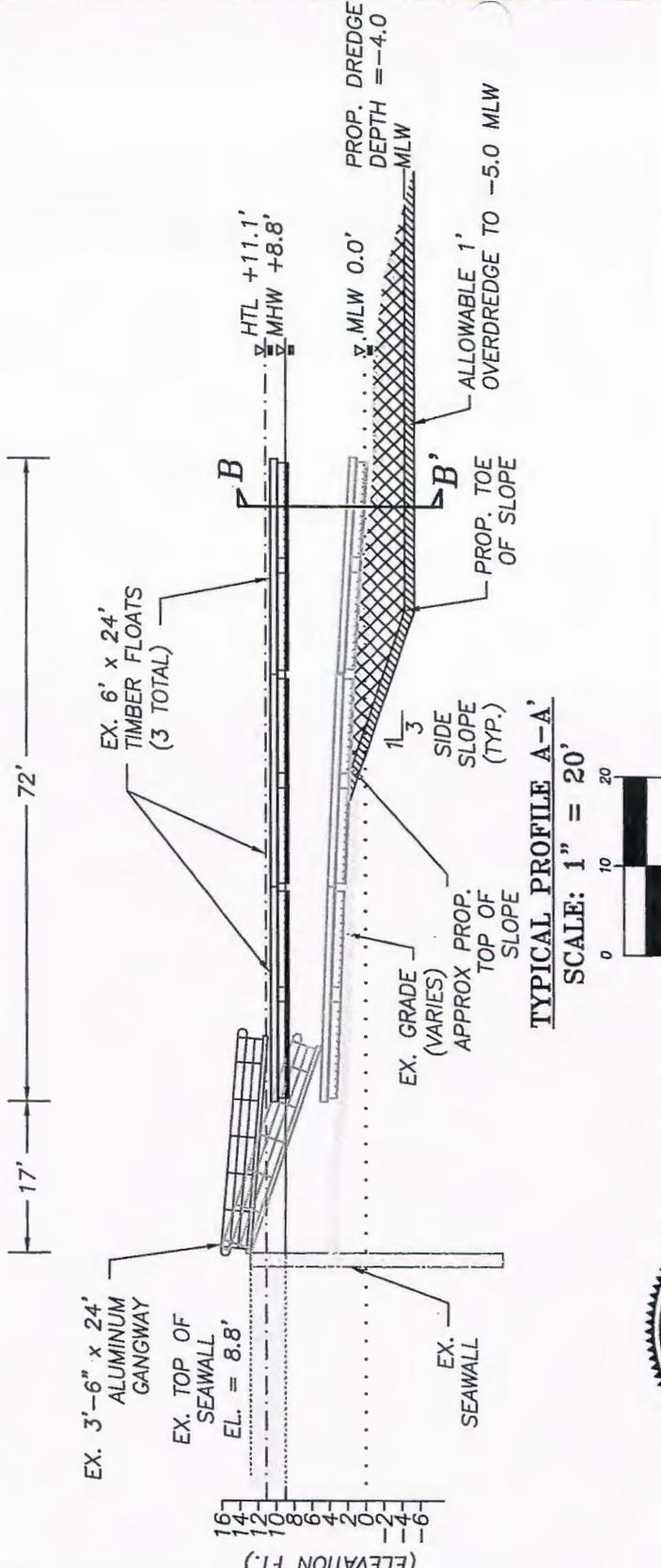
PROPOSED SITE PLAN
 SCALE: 1" = 40'



PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

MARTIN HAHN / DAVID CROSBY
 18-22 BRIDGE STREET
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CLE ENGINEERING, INC.
 15 CREEK ROAD
 MARION, MA 02738

TYPICAL PROFILE & SECTION

PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK.

MANCHESTER INNER HARBOR

MARTIN HAHN / DAVID CROSBY
 18-22 BRIDGE STREET
 MANCHESTER, MA 01944
 COUNTY OF: ESSEX
 DATE: 06/06/2014

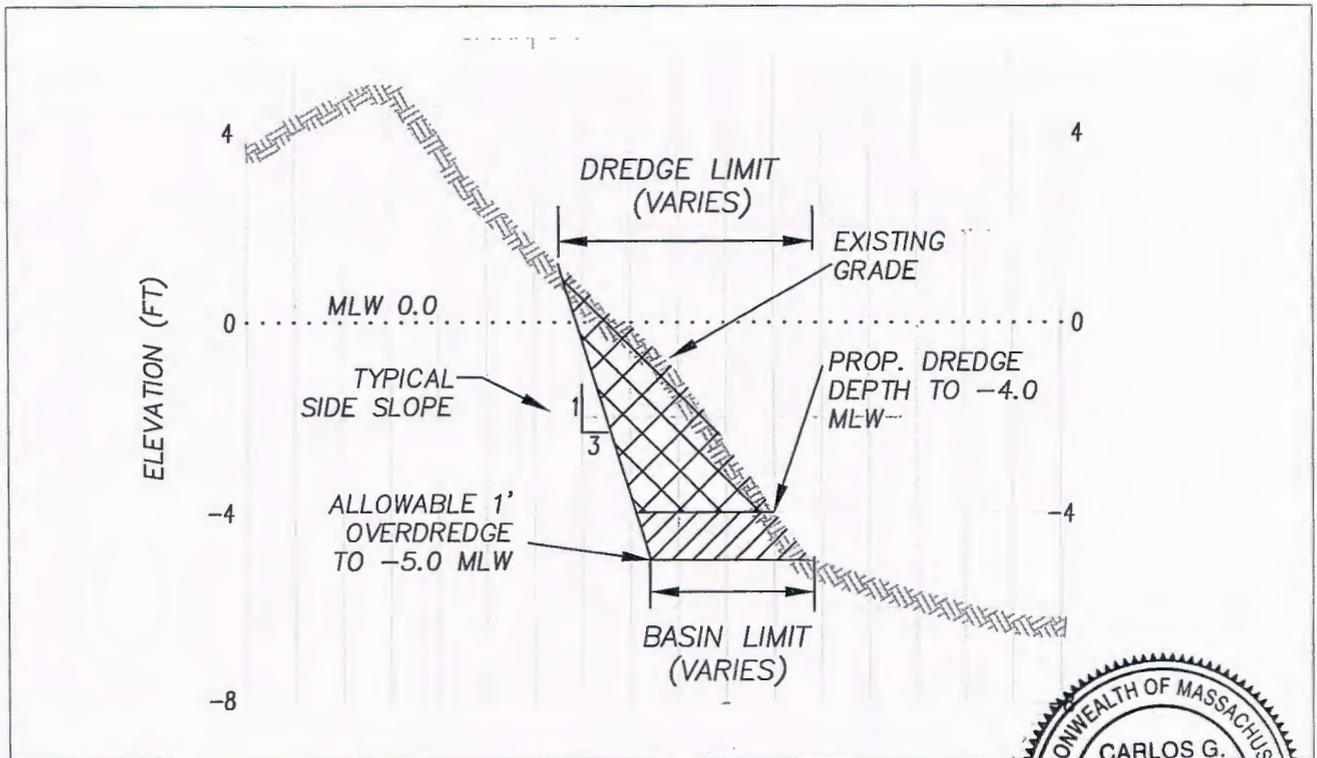
PROPOSED DREDGE DEPTHS, AREAS & ESTIMATED QUANTITIES⁽¹⁾

LOCATION	PROPOSED DREDGE DEPTH (FT)	FOOTPRINT AREA (SF)			VOLUME (CY)		
		(M)	(I)	TOTAL	(M)	(I)	TOTAL
HAHN/CROSBY 18-22 BRIDGE ST.	-4.0 MLW	±226	±2,013	±2,239	±14	±295	±309
TOTALS		±226	±2,013	±2,239	±14	±295	±309

NOTES:

(M)=MAINTENANCE DREDGING; (I)=IMPROVEMENT DREDGING

(1) INCLUDES 3H:1V SIDESLOPES & 1 FT ALLOWABLE OVERDREDGE.



**TYPICAL DREDGE SECTION
18-22 BRIDGE STREET**

SCALE: 1" = 40' H

SCALE: 1" = 4' V



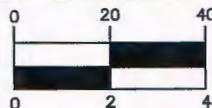
PURPOSE: PROPOSED MAINTENANCE & IMPROVEMENT DREDGING AND AUTHORIZATION OF AN EXISTING RESIDENTIAL DOCK TO RESTORE & IMPROVE ACCESS TO NAVIGABLE WATERS.

DATUM:

MLW = 0.0
MHW = +8.8
HTL = +11.1

CLE ENGINEERING, INC.
15 CREEK ROAD
MARION, MA 02738

**TYPICAL
DREDGE SECTION**



1 inch = 40 ft. HORIZ.
1 inch = 4 ft. VERT.

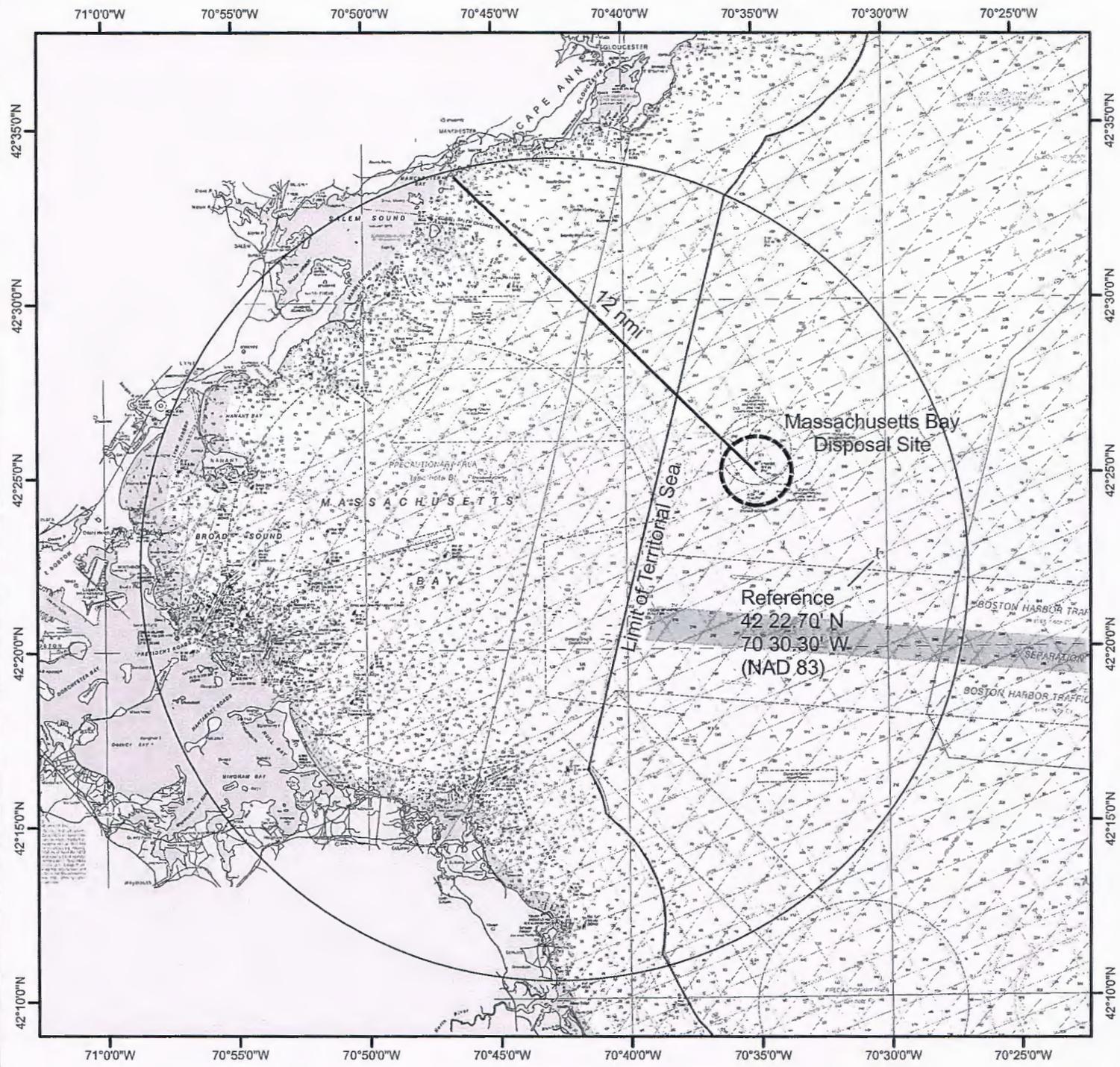
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SHEET 4 OF 6



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DISPOSAL AREA
NTS

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18-22 BRIDGE STREET
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GENERAL NOTES:

1. DREDGE SEDIMENTS TO BE DISPOSED OFFSHORE AT THE MASSACHUSETTS BAY DISPOSAL SITE (MBDS) OR APPROVED MA LANDFILL FACILITY.
2. RESULTS OF HYDROGRAPHY FROM SURVEYS DATED 04-29-02, 05-29-03, 07-18-06 & 3-11-08. RESULTS OF TOPOGRAPHY FROM SURVEY DATED 12-8-08.
3. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO DEPTHS BELOW MEAN LOW WATER. BENCHMARK USED WAS AH-52 BRASS DISK ELEVATION 16.49' MLW LOCATED ON CEMENT FLAGPOLE BASE AT INTERSECTION OF CENTRAL AND CHURCH STREET. SITE BENCHMARK IS CLE PK#6 ELEVATION 13.26' MLW LOCATED AT SOUTH END OF MANCHESTER MARINE ON WOOD DECK ADJACENT TO CONCRETE PAD.
4. COORDINATES ARE BASED ON THE LAMBERT GRID SYSTEM FOR THE COMMONWEALTH OF MASSACHUSETTS. BENCHMARKS = 411A AND 411.
5. LINEWORK SHOWN HEREON ARE A RESULT OF AN ON THE GROUND SURVEY PERFORMED 11/22/04, 11/24/04, 6/15/05 & 6/24/05 BY HANCOCK SURVEY ASSOCIATES, AS DEPICTED ON OAK ENGINEERING PLAN DATED 6/20/06 REVISED 6/27/07 ENTITLED "PLAN TO ACCOMPANY NOTICE OF INTENT 12 ASHLAND AVE."
6. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF HYDROGRAPHIC SURVEYS PERFORMED ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE SEABED CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. NO SURVEYS WERE CONDUCTED TO LOCATE PROPERTY LINES, CHANNEL LIMITS, EASEMENTS, UTILITIES, GEOTECHNICAL FEATURES, SHORELINES, STRUCTURES, HABITATS OR ANY OTHER PHYSICAL FEATURES RELATING TO THE PROJECT SITE, NOR DOES CLE WARRANT THE EXISTENCE OR LOCATION OF SAID PHYSICAL FEATURES.
7. LAND CONTAINING SHELLFISH LIMITS, AS SHOWN, BASED UPON AVAILABLE MA GIS INFORMATION.
8. PROPERTY LINES ARE APPROXIMATE AND USED AS REFERENCE ONLY.
9. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT, ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING, INC.

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HTL	+11.1'
MHW	+8.8'
NGVD1929	+4.3'
MLW	0.0'

DATUM SHIFT CHART

HORIZONTAL POSITION COORDINATES PROPOSED DREDGE AREA		
LOCATION	NORTHING	EASTING
(11)	3034808.25	851636.78
(12)	3034812.31	851620.13
(13)	3034822.02	851614.06
(14)	3034844.09	851621.27
(18)	3034847.76	851648.16
(19)	3034828.38	851669.27

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