



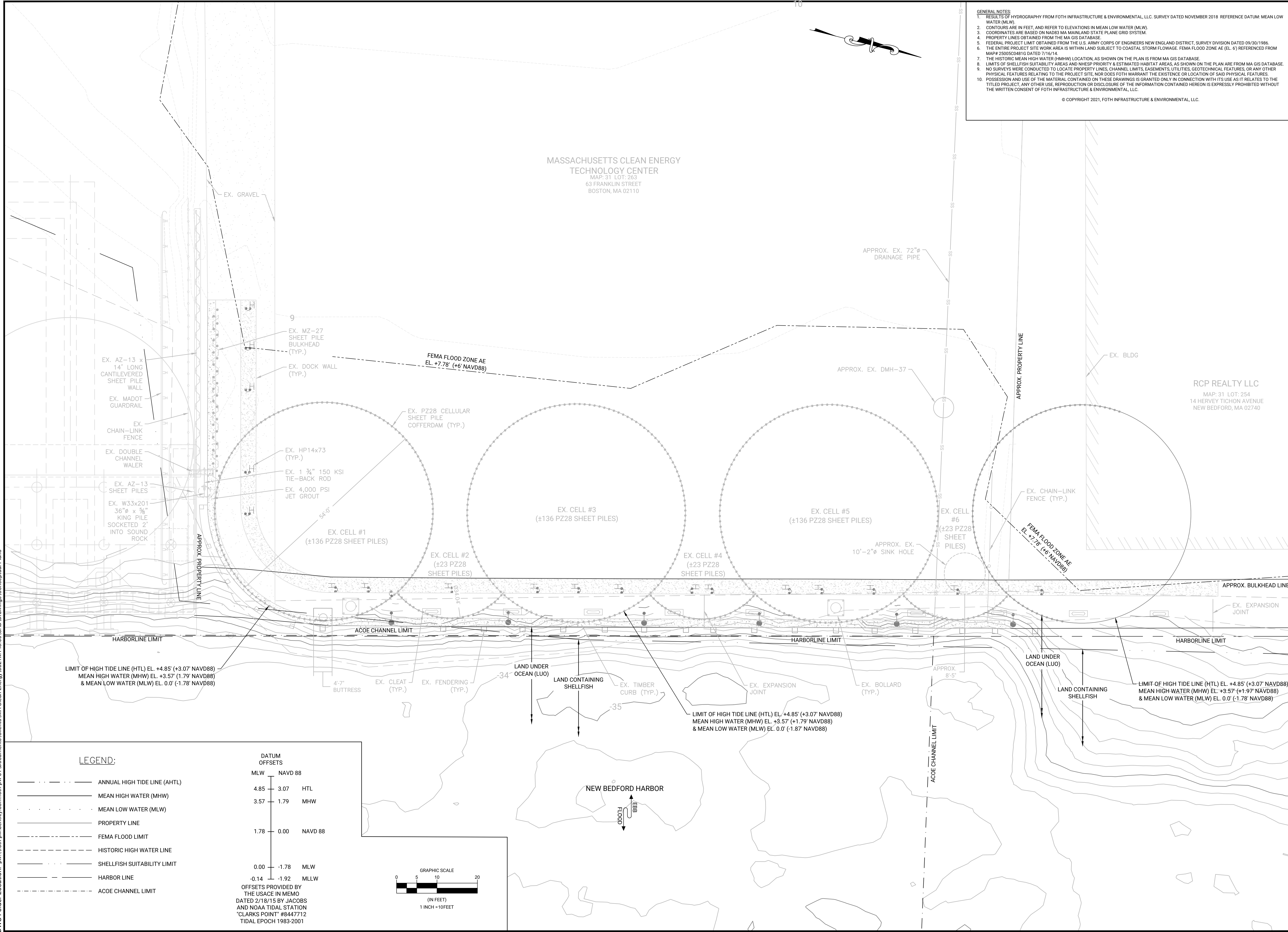
**MASSACHUSETTS CLEAN ENERGY CENTER  
4 WRIGHT STREET,  
NEW BEDFORD, MA 02740**

**SHUSTER BULKHEAD MAINTENANCE &  
REPAIRS**

**GENERAL NOTES:**

- RESULTS OF HYDROGRAPHY FROM FOTH INFRASTRUCTURE & ENVIRONMENTAL, LLC. SURVEY DATED NOVEMBER 2018. REFERENCE DATUM: MEAN LOW WATER (MLW).
- CONTOURS ARE IN FEET, AND REFER TO ELEVATIONS IN MEAN LOW WATER (MLW).
- COORDINATES ARE BASED ON NAD83 MA MAINLAND STATE PLANE GRID SYSTEM.
- PROPERTY LINES OBTAINED FROM THE MA GIS DATABASE.
- FEDERAL PROJECT LIMIT OBTAINED FROM THE U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT, SURVEY DIVISION DATED 09/30/1986.
- THE ENTIRE PROJECT SITE WORK AREA IS WITHIN LAND SUBJECT TO COASTAL STORM FLOWAGE, FEMA FLOOD ZONE AE (EL. 6') REFERENCED FROM MAP# 25050C0481G DATED 7/16/14.
- THE HISTORIC MEAN HIGH WATER (MHW) LOCATION, AS SHOWN ON THE PLAN IS FROM MA GIS DATABASE.
- LIMITS OF SHELLFISH SUITABILITY AREAS AND PRIORITY & ESTIMATED HABITAT AREAS, AS SHOWN ON THE PLAN ARE FROM MA GIS DATABASE.
- NO SURVEYS WERE CONDUCTED TO LOCATE PROPERTY LINES, CHANNEL LIMITS, EASEMENTS, UTILITIES, GEOTECHNICAL FEATURES, OR ANY OTHER PHYSICAL FEATURES RELATING TO THE PROJECT SITE, NOR DOES FOTH WARRANT THE EXISTENCE OR LOCATION OF SAID PHYSICAL FEATURES.
- 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 FOTH INFRASTRUCTURE & ENVIRONMENTAL, LLC.

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MASSACHUSETTS CLEAN ENERGY  
TECHNOLOGY CENTER  
MAP: 31 LOT: 263  
63 FRANKLIN STREET  
BOSTON, MA 02110

RCP REALTY LLC  
MAP: 31 LOT: 254  
14 HERVEY TICHON AVENUE  
NEW BEDFORD, MA 02740

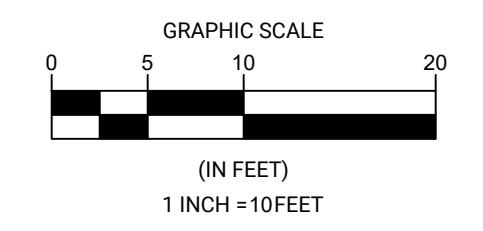
**LEGEND:**

	ANNUAL HIGH TIDE LINE (AHTL)
	MEAN HIGH WATER (MHW)
	MEAN LOW WATER (MLW)
	PROPERTY LINE
	FEMA FLOOD LIMIT
	HISTORIC HIGH WATER LINE
	SHELLFISH SUITABILITY LIMIT
	HARBOR LINE
	ACOE CHANNEL LIMIT

**DATUM OFFSETS**

MLW	NAVD 88
4.85	3.07 HTL
3.57	1.79 MHW
1.78	0.00 NAVD 88
0.00	-1.78 MLW
-0.14	-1.92 MLLW

OFFSETS PROVIDED BY THE USACE IN MEMO DATED 2/18/15 BY JACOBS AND NOAA TIDAL STATION "CLARKS POINT" #8447712 TIDAL EPOCH 1983-2001



NO.	DATE	DESCRIPTION

DATE OF PREPARATION

BY	DATE

SURVEYED

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DRAWN WFG 6/21/2022

DESIGNED

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CHECKED SRS 6/21/2022

SHEET TITLE:  
**EXISTING SITE PLAN**

ISSUANCE:  
**NOTICE OF INTENT**

PROJECT NO: 21M143.0  
SHEET NUMBER

Friday, July 8, 2022 3:16:17 PM  
DWG Filename: shuster structural bulkhead improvements - noi permit.dwg  
DWG Folder Location: p:\f\foth-pw.bentley.com\foth-pw\01\Documents\Clients\MA Clean Energy\0021M143.00\CAD\Drawings\Conceptual Plans



CELL #1: HOLE 4' X 6' @ TOP NEAR CONC. CAP INTERFACE



CELL #4: HOLE 6' X 10' @ TOP @ EXPANSION JOINT



CELL #2: HOLE 2' X 5' @ TOP



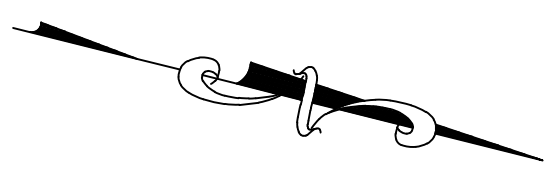
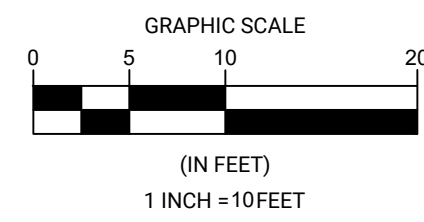
CELL #5: HOLE 2' X 2' @ TOP BY DIVER



CELL #3: HOLE 6' X 30' @ TOP



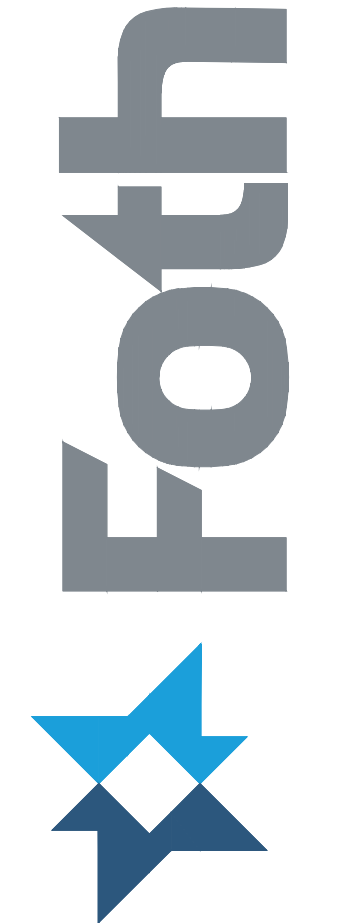
CELL #6: SHEETS SITTING ON ROCKS W/ LARGE VOID SPACE BENEATH SHEETS; WASHOUT OCCURRING BELOW OLD BRIDGE DEPTH LIMIT



MASSACHUSETTS CLEAN ENERGY TECHNOLOGY CENTER  
 MAP: 31 LOT: 263  
 63 FRANKLIN STREET  
 BOSTON, MA 02110

**REPAIR TABLE**

REPAIR ORDER	REPAIR	DESCRIPTION	IMPACT AREA (SF)
1	REPAIR HOLES IN BULKHEAD	1. CLEAN AROUND AREA TO BE PATCHED FROM MARINE GROWTH. 2. CUT THE 3/8" THICK ASTM A588 GR. 50 PLATE 4" LARGER THAN FIELD MEASURED SIZE AND BEND PLATE TO FIT OVER SHEET PILE. 3. COAT THE PLATE WITH MARINE FLEX 570. CENTER THE PLATE WITH HOLE AND APPLY 3/8" WELD ALL AROUND. 4. APPLY TOUCH UP COATING ON THE WELDS AND EXPOSED AREA AROUND THE WELDED PLATE. 5. UNDERWATER WELDING SHALL FOLLOW THE APPLICABLE SECTIONS OF AWS D3.6M, SPECIFICATION FOR UNDERWATER WELDING.	0
2	WELD STEEL PLATING IN BETWEEN CELLS	1. INSTALL SIX (6) STEEL SHEET BRACINGS IN BETWEEN EACH CELL ALONG THE SHUSTER BULKHEAD	6
3	FILL SINK HOLE	1. CONTRACTOR SHALL SUBMIT A PLAN TO BE APPROVED BY THE ENGINEER TO IDENTIFY THE EXTENTS OF THE SINKHOLE AND LOCATE THE 72" DRAIN PIPE THAT RUNS UNDERNEATH THE SINKHOLE. CONTRACTOR SHALL ALSO IDENTIFY 3D EXTENT OF SINKHOLE FROM EXISTING GRADE TO 35 FT DOWN, AND PRESENT RESULTS TO ENGINEER. 2. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL SUBMIT PLANS FOR REPAIR OF THE SINKHOLE FOR APPROVAL BY THE ENGINEER AND REVIEW BY THE NEW BEDFORD CONSERVATION COMMISSION. 3. CONTRACTOR SHALL USE MARINE SAFE GROUT (FX-225 NON-SHRINK UNDERWATER GROUT OR SIMILAR). SPEC SHEET TO BE SUBMITTED FOR APPROVAL BY THE ENGINEER AND REVIEW BY THE NEW BEDFORD CONSERVATION COMMISSION. 4. CONTRACTOR SHALL PERFORM A POST FILL SURVEY OF SINKHOLE TO IDENTIFY EFFECTIVENESS OF FILLING AND CONFIRM NO ADDITIONAL TREATMENT IS REQUIRED. MINIMUM OF 2 BORINGS ONE EACH SIDE OF PILE FOR 35 FT. 5. GROUTING SHALL BE AS PER APPLICABLE SECTIONS OF UFC 3-220-06 (LATEST VERSION). 6. CONTRACTOR SHALL NOT DAMAGE THE 72" DRAINAGE PIPE THAT RUNS UNDERNEATH SINKHOLE. 7. NOTIFICATION OF WORK START TO BE SENT TO THE NEW BEDFORD CONSERVATION COMMISSION PRIOR TO COMMENCEMENT OF IN-WATER WORK.	82



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 4 WRIGHT STREET,  
 NEW BEDFORD, MA 02740  
 SHUSTER BULKHEAD MAINTENANCE & REPAIRS

Friday, July 8, 2022 3:15:22 PM  
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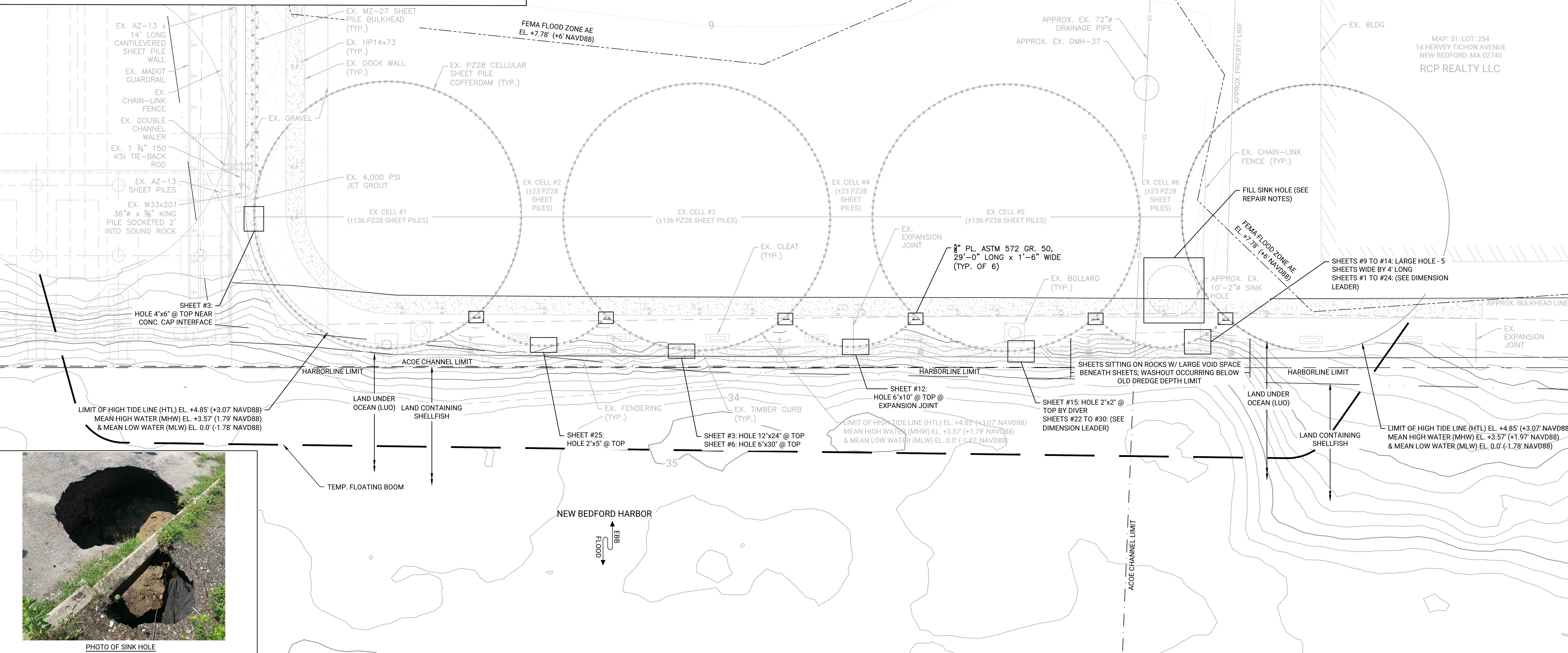


PHOTO OF SINK HOLE

NO.	DATE	DESCRIPTION
1	7/8/2022	CONSERVATION COMMISSION COMMENTS

DATE OF PREPARATION	
BY	DATE
WFG	6/21/2022

SHEET TITLE:  
**PROPOSED REPAIRS PLAN**

ISSUANCE:  
**NOTICE OF INTENT**

PROJECT NO: 21M143.0  
 SHEET NUMBER  
**2 OF 2**