

U.S. Army Corps
of Engineers

Baltimore District
PN-23-11

Public Notice

In Reply to Application Number
NAB-2021-60849-M46 (Andrew Amrhein III/Living
Shoreline & Breakwater)

Comment Period: March 9, 2023 to April 8, 2023

THE PURPOSE OF THIS PUBLIC NOTICE IS TO INFORM INTERESTED PARTIES OF THE PROPOSED ACTIVITY AND TO SOLICIT COMMENTS. NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED AT THIS TIME.

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344), as described below:

APPLICANT:

Mr. Andrew Amrhein III
2114 Janer Drive
Pasadena, Maryland 21122

WATERWAY AND LOCATION OF THE PROPOSED WORK:

The proposed project is located at the confluence of Bodkin Creek and the Chesapeake Bay at 2114 Janer Drive, Pasadena, Anne Arundel County, Maryland (Latitude: 39.131942 °N; Longitude: -76.431653°W)

OVERALL PROJECT PURPOSE:

To improve navigable access, create/improve habitat, and provide shoreline erosion control.

PROJECT DESCRIPTION:

The applicant proposes to create a living shoreline by installing approximately 100 linear feet (lf) (1,800 square feet (sf)) of stone sill, emplacing approximately 100 cubic yards of dredged material for beneficial re-use and 165 cubic yards of clean sand fill into an approximate 3,852 sf area, and planting approximately 1,690 sf of low marsh vegetation (*Spartina alterniflora*), 1,060 sf of high marsh vegetation (*Spartina patens*), and 900 sf of seasonal high tide marsh (Tussock Sedge Grass). In addition, the applicant is proposing to mechanically dredge approximately 100 cubic yards of material from an approximate

1,320 sf area to -5.5 feet at MLW, and to temporarily store and dewater the dredge material on a barge within the turbidity curtain. All work will extend a maximum of 230 feet channelward of the approximate mean high water shoreline at the confluence of Bodkin Creek and the Chesapeake Bay at 2116 Janer Drive, Pasadena, Anne Arundel County, Maryland.

All work is proposed in accordance with the attached plans prepared by Firefly Technical Services, LLC, dated June 25, 2019, sheets 1 through 14.

Please refer to the table below for a summary of aquatic resource impacts.

EFFECTS ON AQUATIC RESOURCES:

Activity (i.e. culvert)	WoUS Impact (sf)	Wetland Impact (sf)	Authority (Section 10/404/408)
Stone Sills	1,800	0	Section 10/404
Fill for Living Shoreline (Dredge Material and Clean Sand)	3,852		
Dredging	1,320		

LEAD FEDERAL AGENCY:

The United States Army Corps of Engineers (Corps), as the lead federal agency, is responsible for all coordination pursuant to applicable federal authorities.

APPLICANT'S PROPOSED AVOIDANCE, MINIMIZATION, AND COMPENSATORY MITIGATION:

As part of the planning process for the proposed project, steps were taken to ensure avoidance and minimization of impacts to aquatic resources to the maximum extent practicable based on the existing site conditions and previously authorized work. The applicant has reduced proposed impacts associated with the proposed sills from approximately 1,825 sf of impact to 1,800 sf and has reduced the maximum channelward extent of the proposed sills from 85 feet to 75 feet channelward of the approximate mean high water shoreline.

No compensatory mitigation is proposed. No submerged aquatic vegetation or wetlands will be impacted as a result of the proposed project. The living shoreline would result in the establishment of approximately 3,650 sf of marsh vegetation.

CORPS EVALUATION REQUIREMENTS:

This project will be evaluated pursuant to Corps Regulatory Program Regulations (33 CFR Parts 320-332). The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts 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 reasonable may be expected to 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, economic, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, and consideration of property ownership and in general, the needs and welfare of the people. The evaluation of the impact of this project will also include application of the Clean Water Act Section 404(b)(1) Guidelines promulgated by the Administrator, United States Environmental Protection Agency.

ENDANGERED SPECIES:

A preliminary review of this application indicates that the proposed work is not likely to adversely affect federally listed threatened or endangered species or their critical habitat, pursuant to Section 7 of the Endangered Species Act, as amended. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

ESSENTIAL FISH HABITAT:

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), 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), including species of concern, life cycle habitat, or Habitat Areas of Particular Concern. The project site lies in or adjacent to EFH as described under MSFCMA for managed species under the MSFCMA. The Baltimore District has made a preliminary determination that the project will not have a substantial adverse effect on EFH. The Baltimore District has made a preliminary determination that mitigative measures are not required to minimize adverse effects on EFH at this time. This determination may be modified if additional information indicates otherwise.

HISTORIC RESOURCES:

Pursuant to Section 106 of the National Historic Preservation Act of 1966 and applicable guidance, the Corps has reviewed the latest published version of the National Register of Historic Places and initially determined that no registered properties listed as eligible for inclusion, therein, are located at the site of the proposed work. The Corps has made the preliminary determination that the proposed project would have no effect on historic properties. The Corps final eligibility and effect determination will be based on coordination with the State Historic Preservation Office as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps' identified permit area.

TRIBAL RESOURCES:

Section 106 of the National Historic Preservation Act also requires federal agencies to consult with federally recognized American Indian tribes that attach religious and cultural significance to historic properties that may be affected by the agency's undertaking. Corps Tribal Consultation Policy mandates an open, timely, meaningful, collaborative, and effective deliberative communication process that emphasizes trust, respect, and shared responsibility. The policy further emphasizes that, to the extent practicable and permitted by law, consultation works toward mutual consensus and begins at the earliest planning stages before decisions are made and actions taken. The Corps final eligibility and effect determination will be based on coordination with interested tribes, in accordance with the Corps current tribal standard operating procedures as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on tribal resources.

MODIFICATION OF CIVIL WORKS PROJECTS: 33 USC 408 (SECTION 408):

All Section 408 proposals will be coordinated internally at USACE. The Section 408 decision will be issued along with the Section 404 and/or Section 10 decision. Please see the following link for more information regarding Section 408:
<https://www.nab.usace.army.mil/Missions/Regulatory/Section-408-Requests/>.

WATER QUALITY CERTIFICATION:

The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act.

COASTAL ZONE MANAGEMENT PROGRAMS:

Where applicable, the applicant has certified in this application that the proposed activity complies with and will be conducted in a manner 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 applicant must obtain any state or local government permits which may be required.

SUBMISSION OF COMMENTS:

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 provided will become part of the public record for this action and are subject to release to the public through the Freedom of Information Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Written comments concerning the work described above related to the factors listed above or other pertinent factors must be received by the United States Army Corps of Engineers, Baltimore District within the comment period specified above through postal mail at the address below or electronic submission to the project manager email address below. Written comments should reference the Application Number (NAB-2021-61849-M46).

PUBLIC HEARING REQUESTS:

Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received within the comment period as specified above to receive consideration. Also, it must clearly set forth the interest which may be adversely affected by this activity and the manner in which the interest may be adversely affected. The public hearing request may be submitted by electronic mail or mailed to the following address:

Nicole Nasteff
Nicole.m.voelker@usace.army.mil
U.S. Army Corps of Engineers, Baltimore District
Regulatory Branch
2 Hopkins Plaza
Baltimore, Maryland 21201

It is requested that you communicate this information concerning the proposed work to any persons known by you to be interested, who did not receive a copy of this notice.

General information regarding the Corps' permitting process can be found on our website at <https://www.nab.usace.army.mil/Missions/Regulatory.aspx>. This public notice has been prepared in accordance with Corps implementing regulations at 33 CFR 325.3. If you have any questions concerning this specific project or would like to request a paper copy of this public notice, please contact Ms. Nicole Nasteff at (410) 962-1847, nicole.m.voelker@usace.army.mil. This public notice is issued by the Chief, Regulatory Branch.

PROJECT DESCRIPTION

PROJECT CONSISTS OF CREATING A LIVING SHORELINE BY PLACING 100 LF OF STONE SILLS (140 CU STONE / 1,800 S.F. OF STONE AREA). MECHANICALLY REMOVING 100 CU YARDS OF MATERIAL FROM ON-SITE BORROW AREA. REPLENISHING EXISTING SHORELINE WITH 100 CU YARDS MATERIAL FROM ON-SITE BORROW DREDGE AREA AND IMPORTING 165 CU OF CLEAN SAND. PROJECT INCLUDES MARSH GRASS PLANTING OF 3,650 S.F. PLANTINGS WILL CREATE 1,690 S.F. OF LOW TIDE MARSH AND 1,060 S.F. OF HIGH TIDE MARSH AND 900 S.F. OF SEASONAL HIGH TIDES MARSH.

OWNER

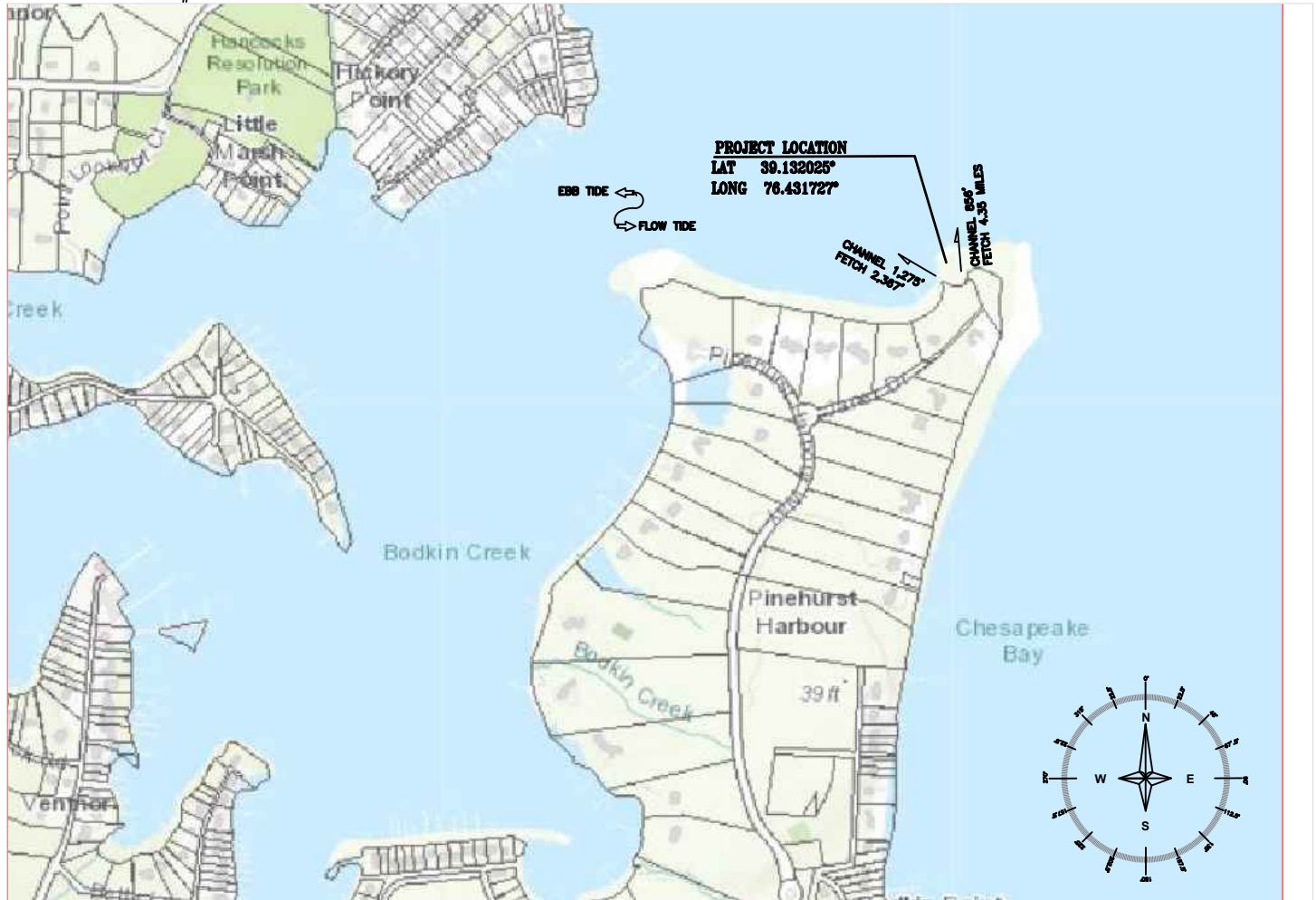
AMRHEIN ANDREW III
AMRHEIN MARCY
2114 JANER DR
PASADENA MD 21122
443-803-4646
aamrhein3@yahoo.com
PARCEL # 020313190054048

DESIGNER

ROBERT J LOUIS
FIREFLY TECHNICAL SERVICES LLC
30B JONES STATION ROAD
SEVERNA PARK MD 21146
PH: 410-844-1532

CONTRACTOR

MAGUIRE MARINE CONSTRUCTION
300 CHRISTY ROAD
PASADENA MD 21122
PH: 443-521-3625
MIHC 112825 (MDE #369(E))



OVERALL PROJECT MAP

PLAN SET INDEX

- 1 TITLE SHEET & PROJECT INFORMATION
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CHANNEL DISTANCE AS MEASURED FROM AERIAL SURVEY PERFORMED ON 3-20-19 AND MEASURED TO A LINE PLOTTED ON A VISIBLE CHANNEL MARKERS ADJACENT TO APPLICANT LOT.

PURSUANT TO SECTION 401 OF THE CLEAN WATER ACT A WATER QUALITY CERTIFICATION IS REQUESTED FOR THE DERDGING OF A BOAT SLIP AND RECYCLING OF THE MATERIAL ON THE ADJACENT LIVING SHORELINE PORTION OF THE PROJECT.



Firefly
Technical
Services LLC
30B JONES STATION
SEVERNA PARK
MARYLAND, 21146
410-844-1532

LIVING SHORELINE
2114 JANER DR
PASADENA MD 21122

AMRHEIN ANDREW III
AMRHEIN MARCY

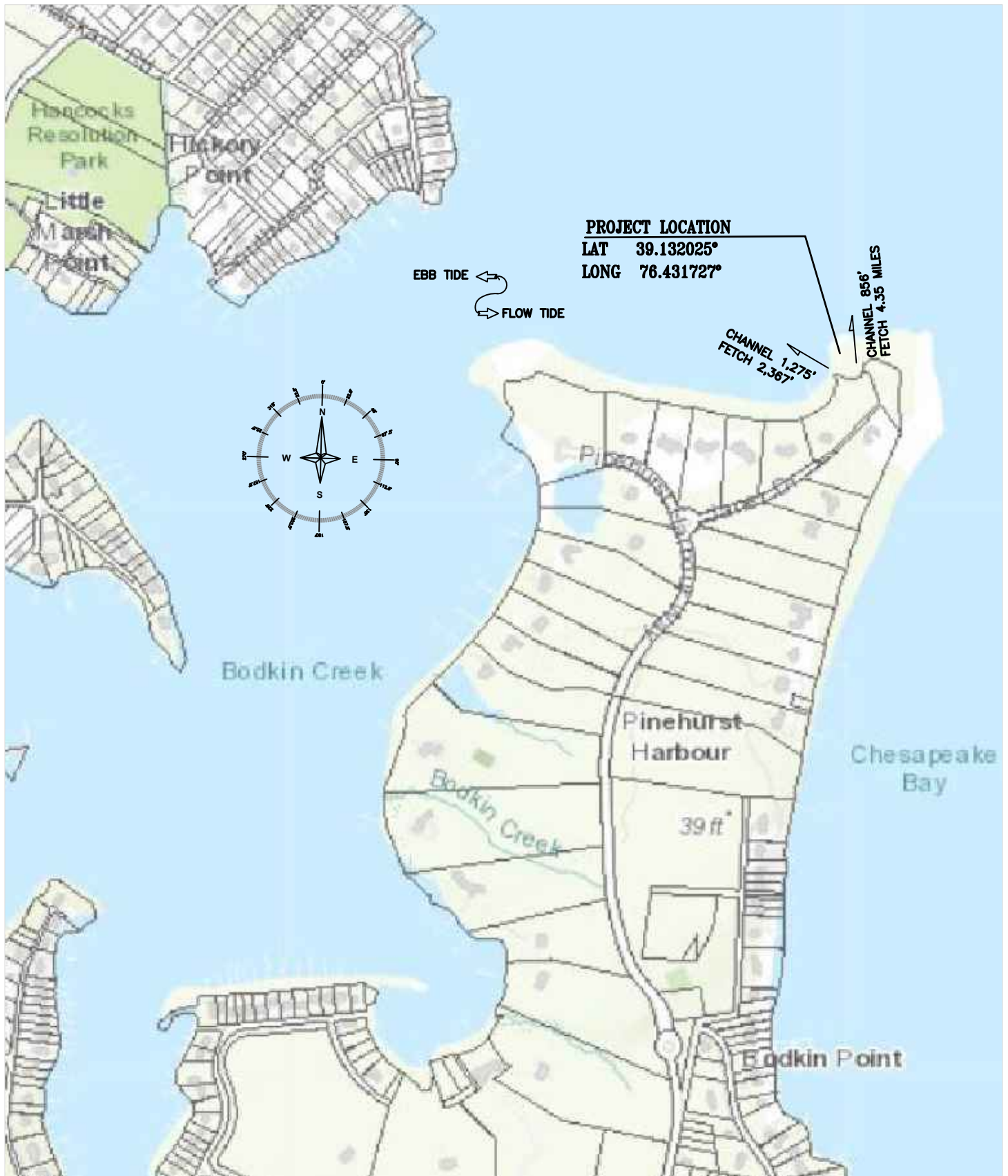
PROJECT INFORMATION

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DREDGE BORROW SITE ADDED 5-23-22

WATER QUALITY REQUEST 1-20-23



OVERALL PROJECT MAP/ PROPOSED DREDGING

NTS



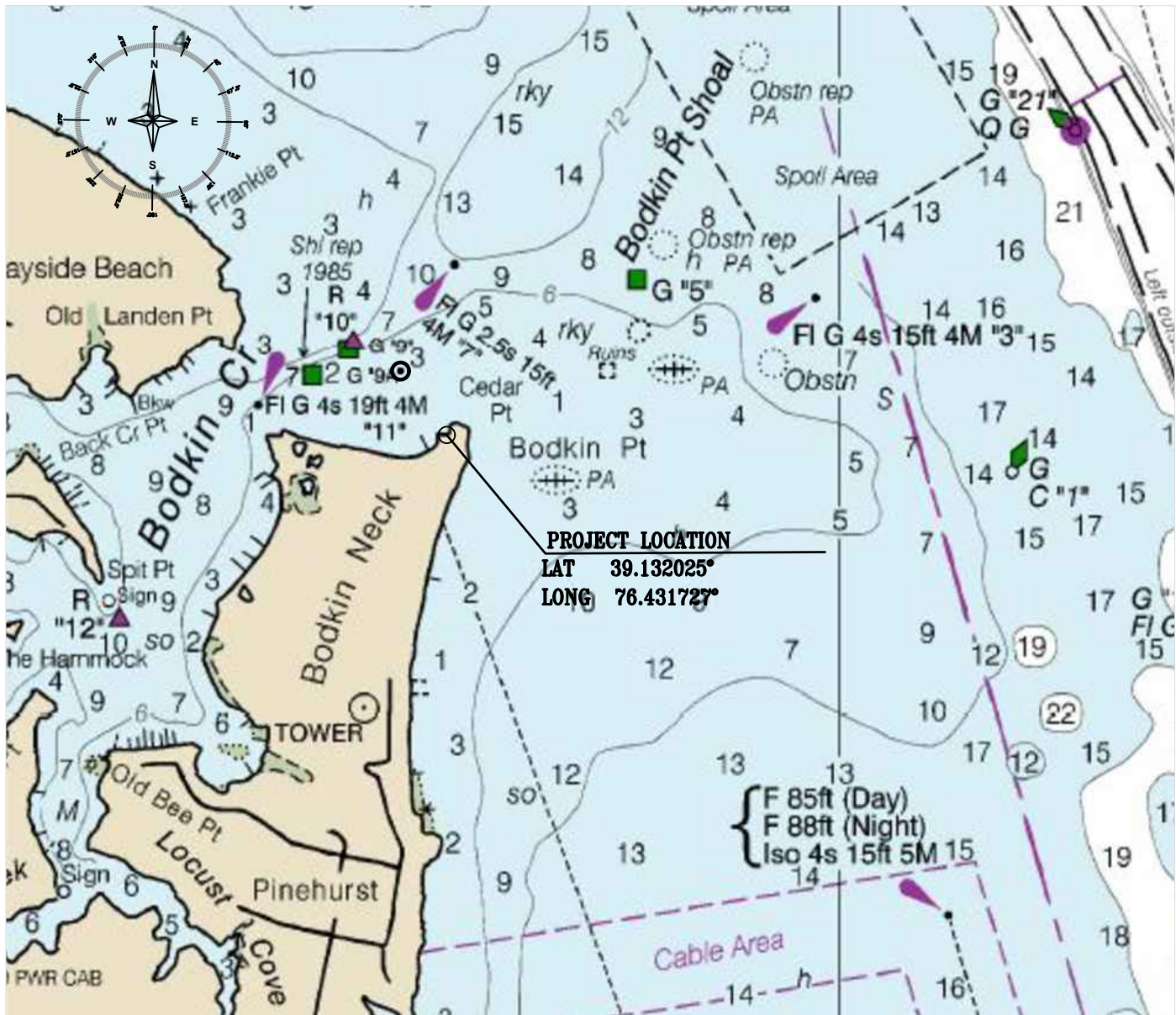
**LIVING SHORELINE
 2114 JANER DR
 PASADENA MD 21122**

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VICINITY MAPS

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VICINITY NAVIGATION CHART MAP

NTS

TIDAL INFORMATION

MEAN LOW WATER BASED HYDROGRAPHIC CHART # 5329, MLW AND HLW
 NOTE FOR HYDROGRAPHIC STUDY SURVEY REPORT DATED DECEMBER 5,
 1933 BY U.S. COAST AND GEODETIC SURVEY LIBRARY AND ARCHIVES.
 PLANE REFERENCE (MEAN LOW WATER) 0.06 FEET AND INDICATED AS 0.0
 FEET HERIN AFTER.
 HEIGHT ABOVE WATER PLANE OF REFERENCE =0.9 FEET

CHANNEL INFORMATION

CHANNEL DISTANCE AS MEASURED FROM AERIAL SURVEY
 PERFORMED ON 3-20-19 AND MEASURED TO A LINE PLOTTED
 BETWEEN TWO VISIBLE CHANNEL MARKERS ADJACENT TO APPLICANT LOT.

⊙ PLOTTED CHANNEL MARKER



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 Technical
 Services LLC**
 303 JONES STATION
 SEVERNA PARK
 MARYLAND, 21146
 410-644-1032

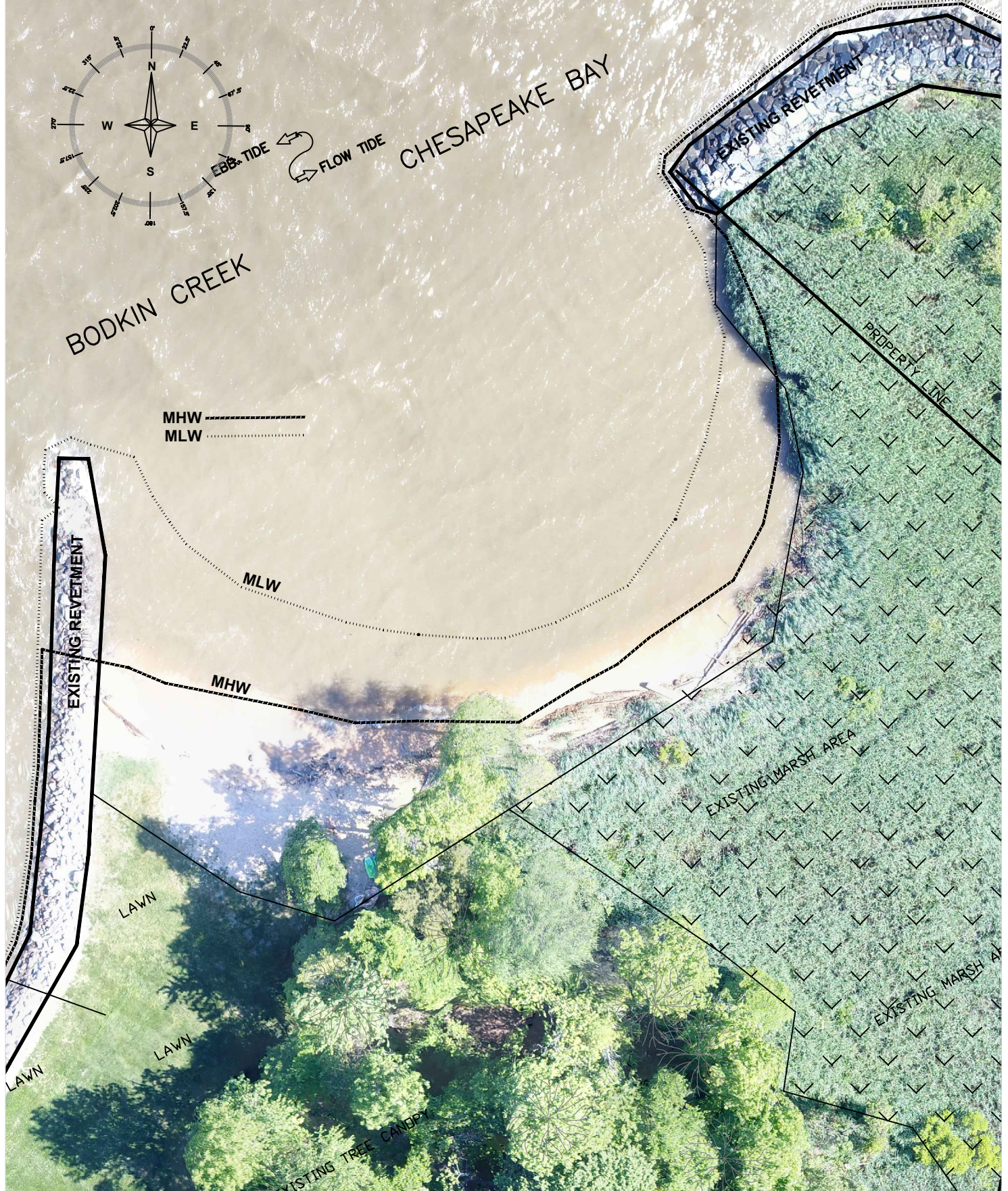
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VICINITY MAPS

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EXISTING CONDITIONS AERIAL IMAGE

SCALE = 1" = 30'



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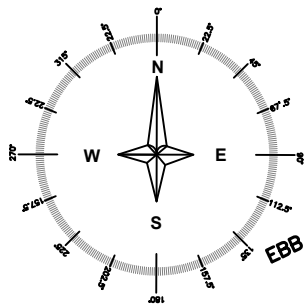
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EXISTING CONDITIONS

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CHESAPEAKE BAY

BODKIN CREEK

MHW
MLW

EXISTING REVETMENT

MLW

MHW

LAWN

LAWN

LAWN

ING TREE CANDPY

EXISTING REVETMENT

PROPERTY LINE

EXISTING MARSH AREA

EXISTING MARSH

EXISTING CONDITIONS

SCALE = 1" = 30'



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LIVING SHORELINE
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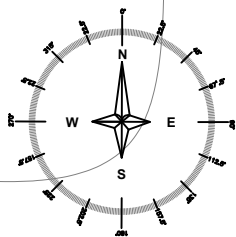
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EXISTING CONDITIONS

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CONTRACTOR TO REMOVE EXISTING DEBRIS AND FIELD ADJUST QUANTITIES.



MHW
MLW

PROPOSED SAND PLACEMENT
5,252 S.F. OF SAND PLACEMENT

NEW STONE SILL WAVE BREAK
1,800 s.f. of NEW STONE AREA

EBB TIDE
FLOW TIDE

CHESAPEAKE BAY

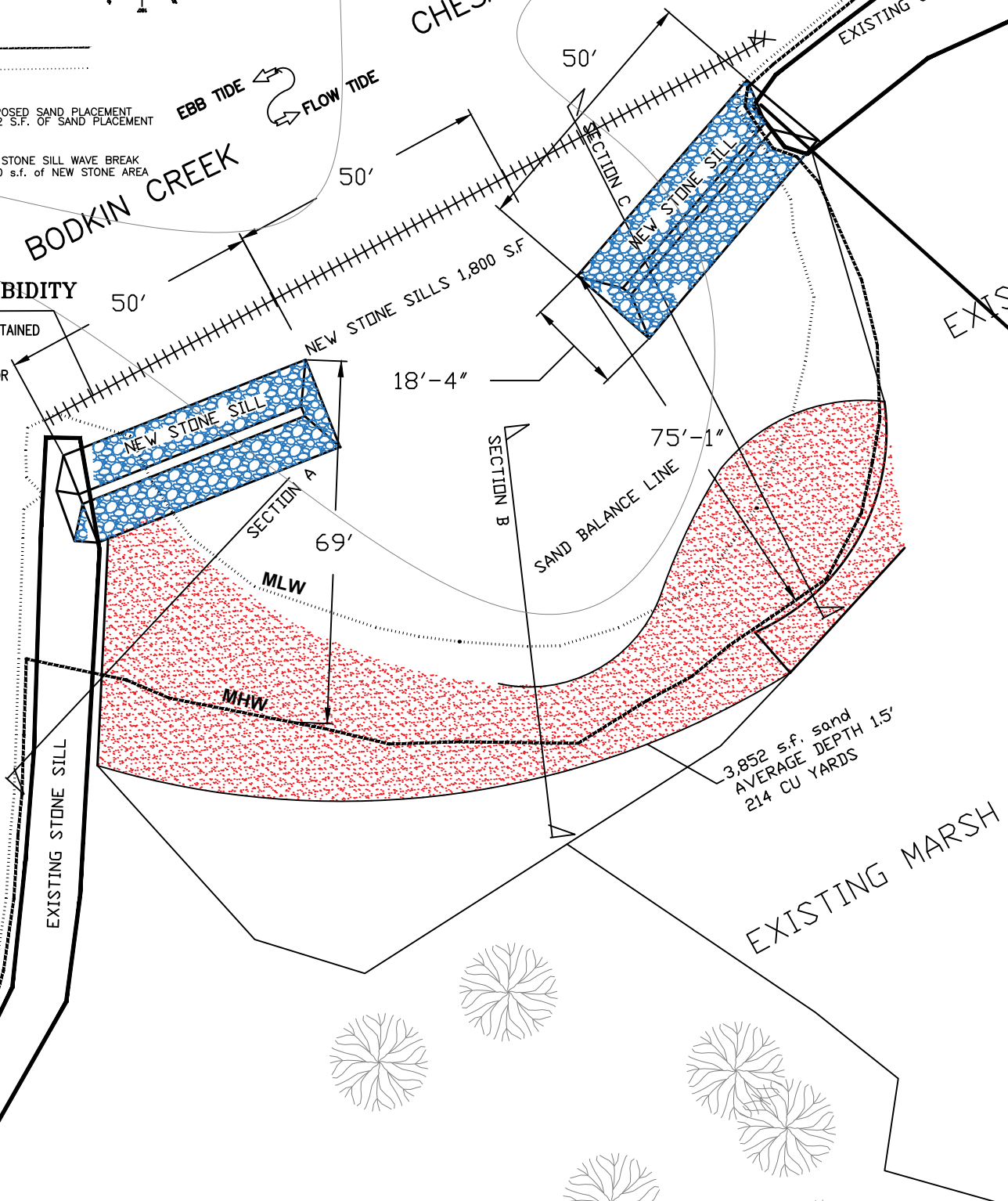
BODKIN CREEK

INSTALL TURBIDITY CURTAIN

CURTAIN SHALL BE MAINTAINED DURING CONSTRUCTION.

REMOVAL OF CURTAIN FOR ACCESS SHALL BE LESS THAN FOR LESS THAN 6 HOURS.

CURTAIN SHALL BE MAINTAINED FOR 72 HRS AFTER CONSTRUCTION IS COMPLETED.



PROPOSED PLAN VIEW

SCALE = 1" = 30'



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303 JONES STATION
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MARYLAND, 21146
410-644-1032

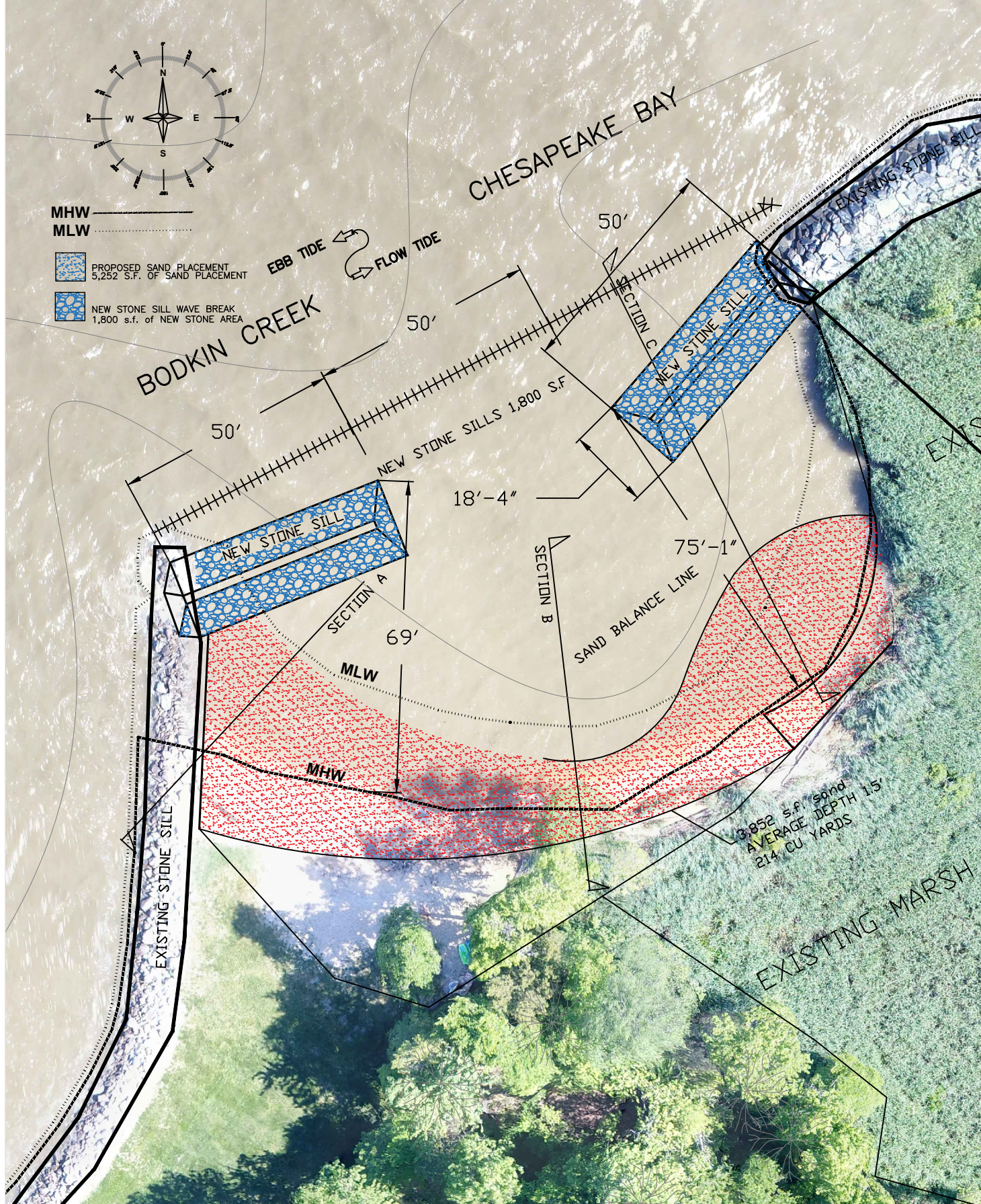
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PROPOSED PLAN

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PROPOSED PLAN VIEW AERIAL

SCALE = 1" = 30'



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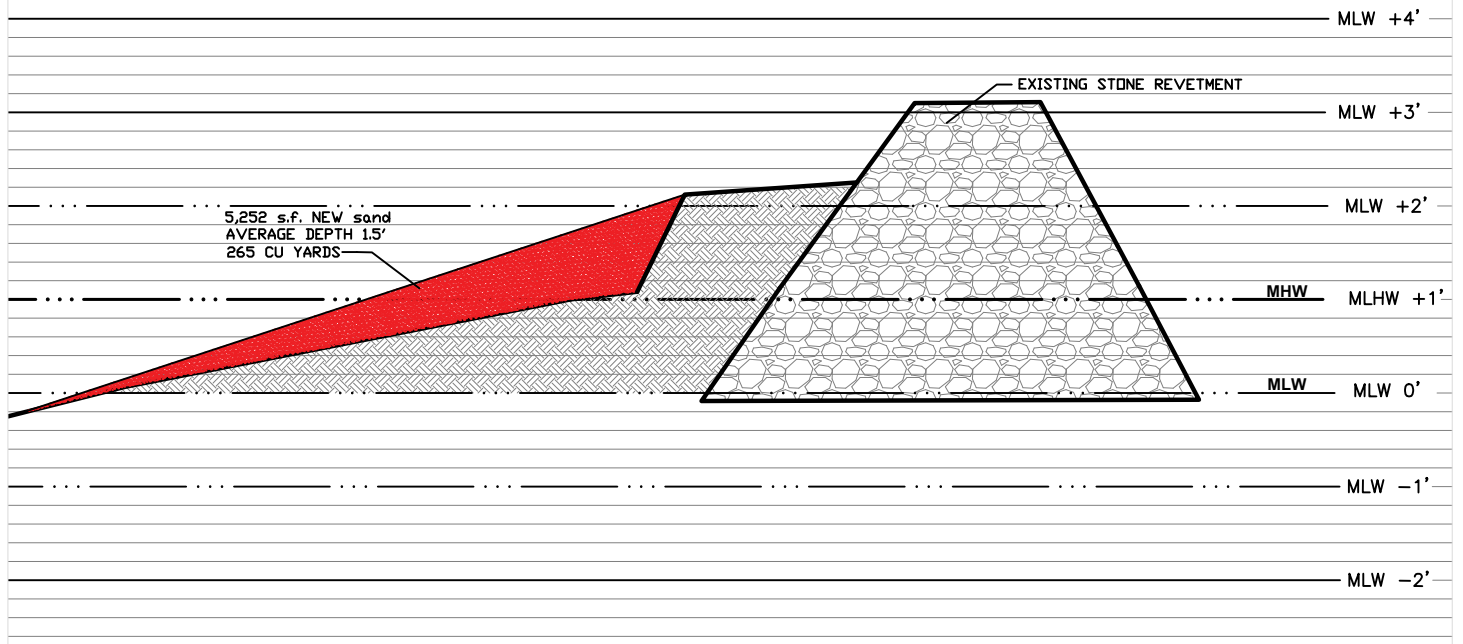
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AMRHEIN MARCY

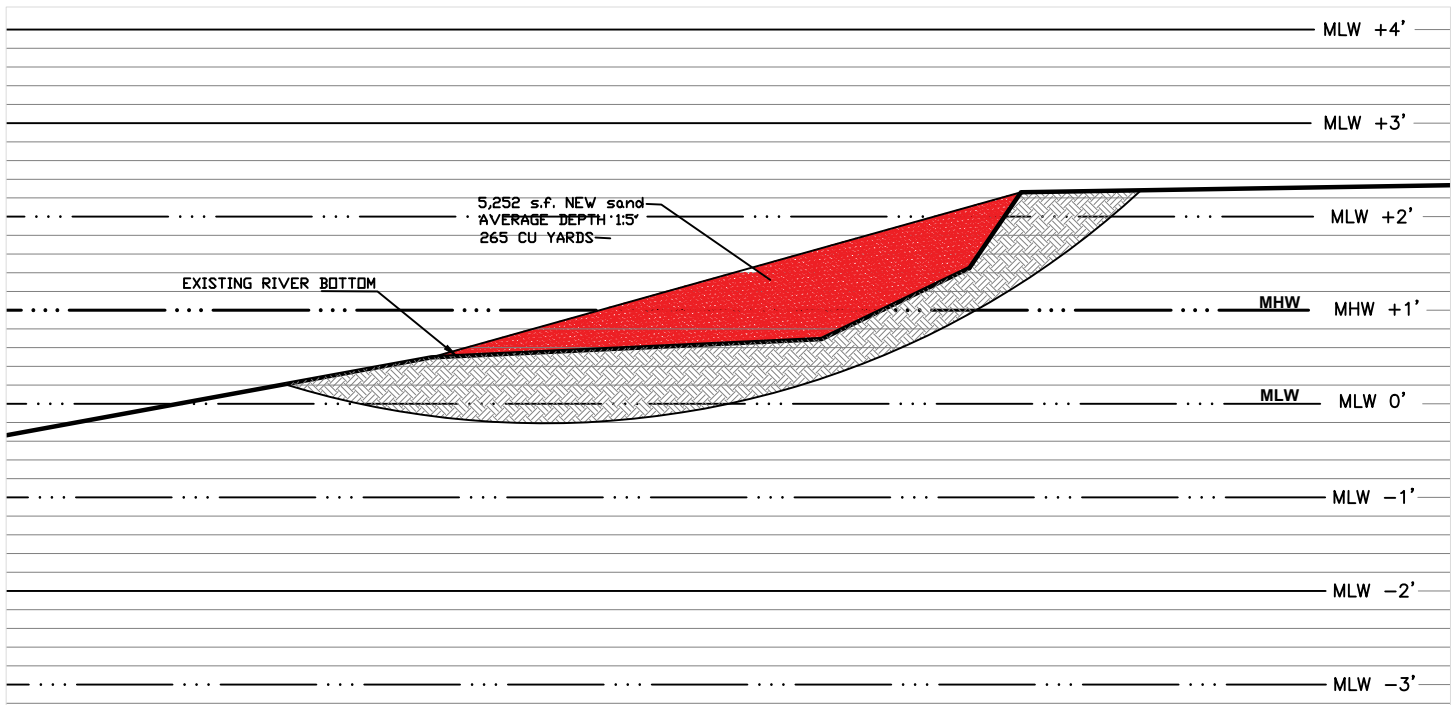
PROPOSED PLAN

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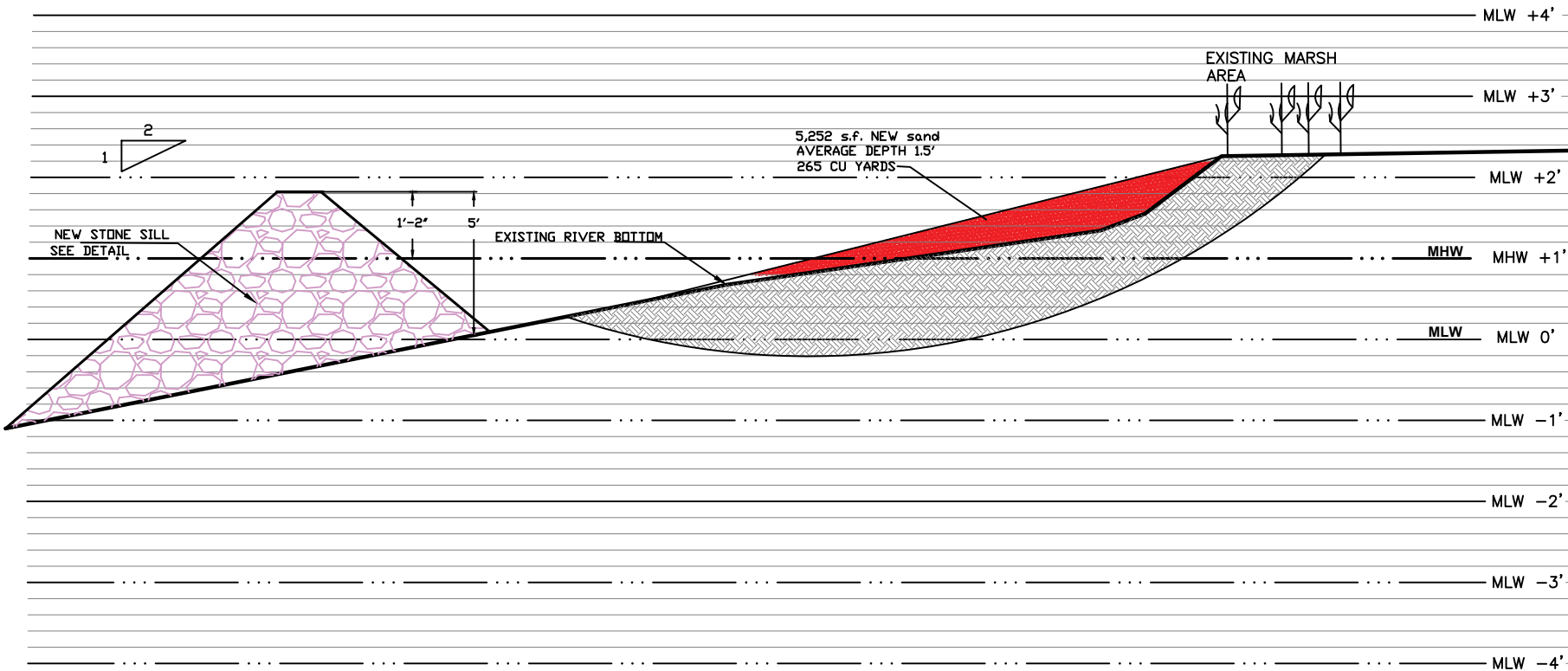
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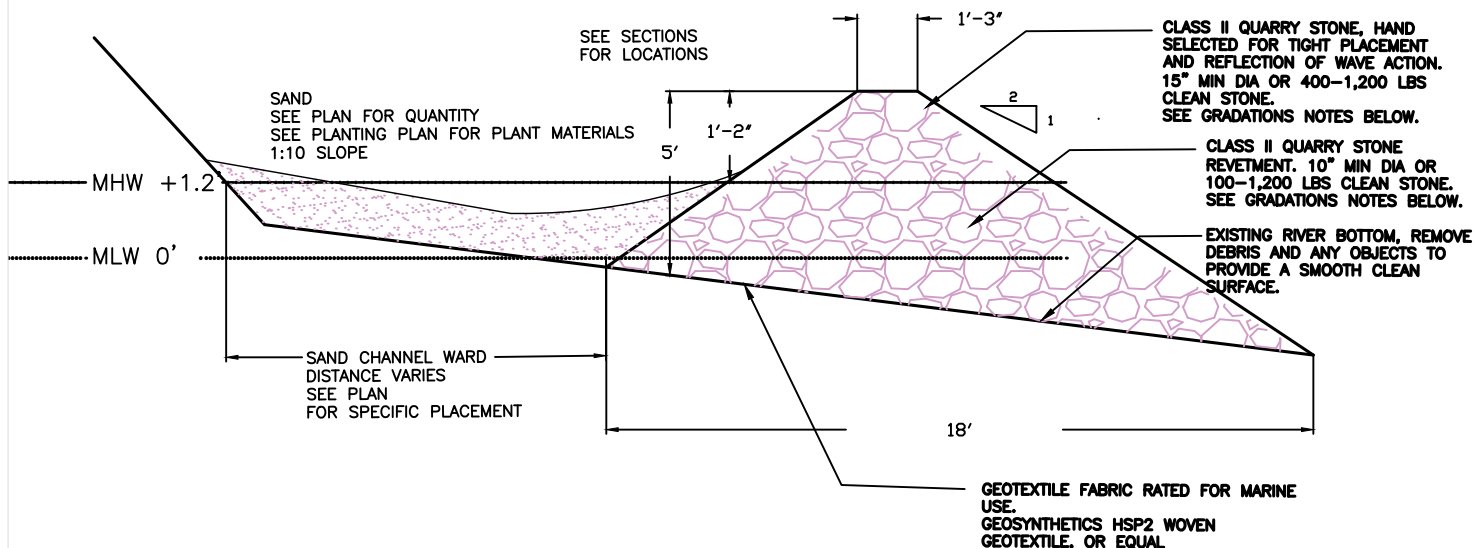
PROPOSED SECTION A
HORIZONTAL SCALE = 3/16" = 1'-0"



PROPOSED SECTION B
HORIZONTAL SCALE = 3/16" = 1'-0"



PROPOSED SECTION C
VERTICAL SCALE = AS SHOWN

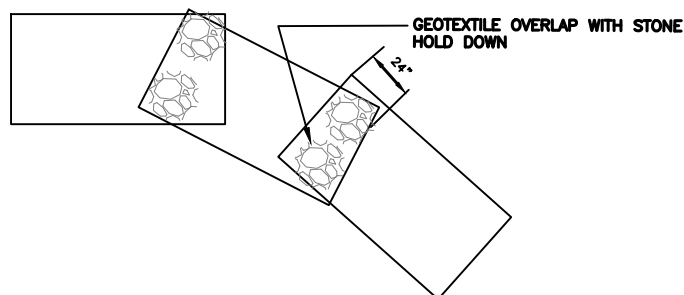


STONE RIP RAP GRADATIONS

1. STONE PLACEMENT SHALL BE IN LIFTS OF 12" AND SINGLE STONE LIFT AT WAVE BREAK.
2. FIRST LIFT OF STONE ALONG GEOTEXTILE SHALL BE 100-200 LB SIZE AND PLACED TO EDGES AND OVERLAPS OF FABRIC TO REDUCE FABRIC MOVEMENT.
3. WAVE BRAKE STONES SHALL BE HAND SELECTED 200-1,200 LB FOR STABILITY AND REDUCTION OF OVER SPRAY ONTO SHORE LINE.

GEOTEXTILE PLACEMENT FOR 955 MAGOTHY ROAD

- 1 GEOTEXTILE SHALL BE RATED FOR MARINE USE WITH REVETMENT
2. OVERLAP AT GEOTEXTILE EDGES SHALL BE MIN 24", CURVES SHALL BE FORMED WITH CUT OVERLAPS OF FABRIC WITH MIN LENGTH OF 8'.





AMRHEIN ANDRE
AMRHEIN MARCY

11 OF 12

- Properly maintain the marsh creation project.* Plants that are removed or die during the early stages of growth must be replaced immediately to insure the undisturbed growth of the remaining plants. The selective pruning of trees is also a good maintenance practice, as plants need sunlight. After significant growth has occurred only periodic inspections may be necessary. Protection measures, such as fencing, must be taken to keep waterfowl from eating the young plants. Proper maintenance will help ensure that the marsh creation project remains successful at preventing erosion and providing wildlife habitat.

- 1) Remove debris and trash.
- 2) Do not mow vegetation.
- 3) Limit use of lawn fertilizers.
- 4) Re-plant as necessary
- 5) **INSPECTIONS & REPORT**

HIGH TIDE PLANTINGS

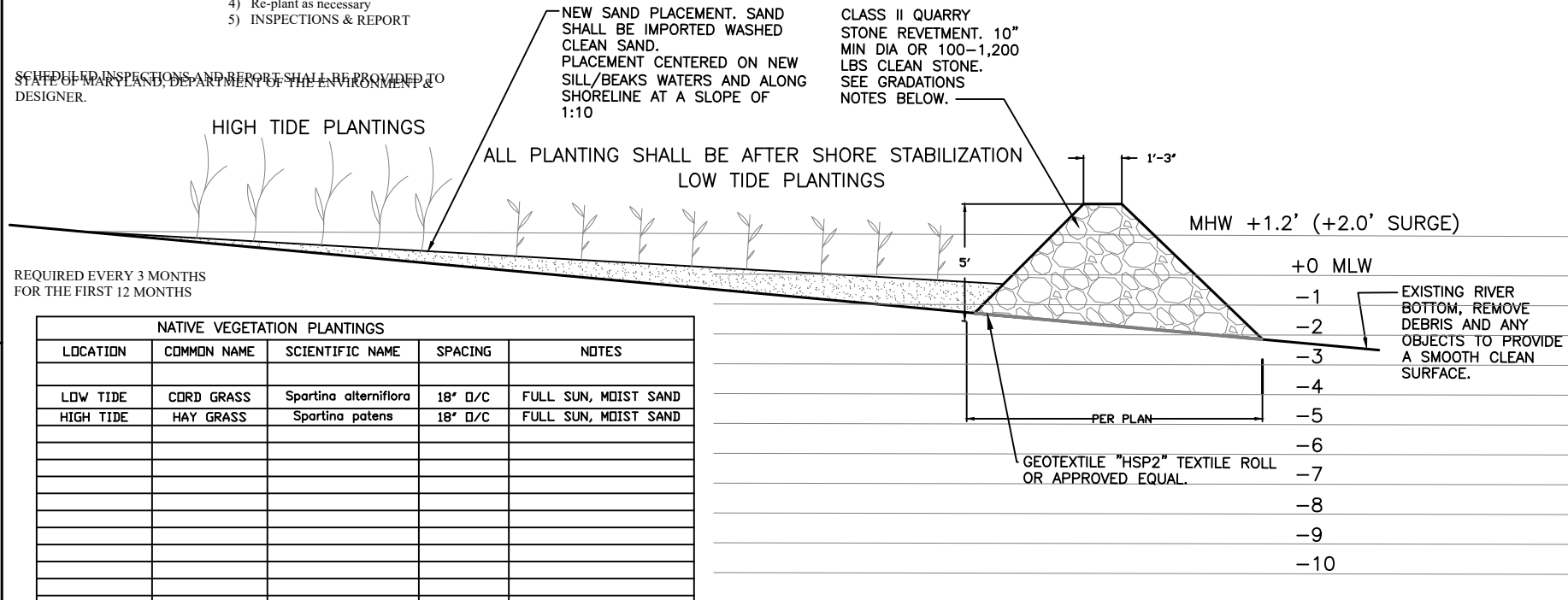
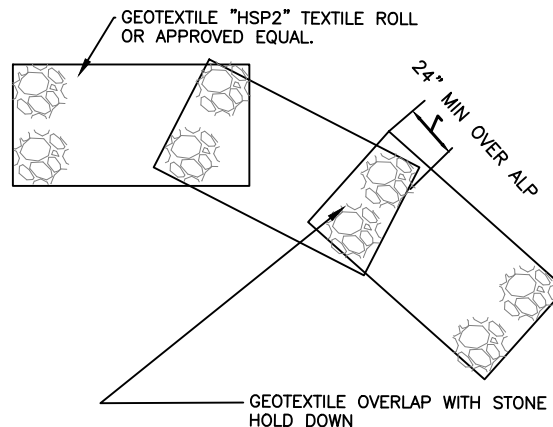
- NEW SAND PLACEMENT. SAND SHALL BE IMPORTED WASHED CLEAN SAND. PLACEMENT CENTERED ON NEW SILL/BEAKS WATERS AND ALONG SHORELINE AT A SLOPE OF 1:10

STONE RIP RAP GRADATIONS

1. STONE PLACEMENT SHALL BE IN LIFTS OF 12" AND 2 STONE LIFT AT WAVE BREAKS TO MINIMIZE RIVER DISTURBANCE.
2. FIRST LIFT OF STONE ALONG GEOTEXTILE SHALL BE 100-200 LB SIZE AND PLACED TO EDGES AND OVERLAPS OF FABRIC TO REDUCE FABRIC MOVEMENT.
3. WAVE BRAKE STONES SHALL BE HAND SELECTED 200-1,200 LB FOR STABILITY AND REDUCTION OF OVER SPRAY ONTO SHORE LINE.

2. OVERLAP AT GEOTEXTILE EDGES SHALL BE MIN 24", CURVES SHALL BE FORMED WITH CUT OVERLAPS OF FABRIC WITH MIN LENGTH OF 8'.

DETAIL SHALL BE NULL AND VOID FOR ANY PROJECT OTHER THAN
LOTS 3-7 OF TURKEY POINT

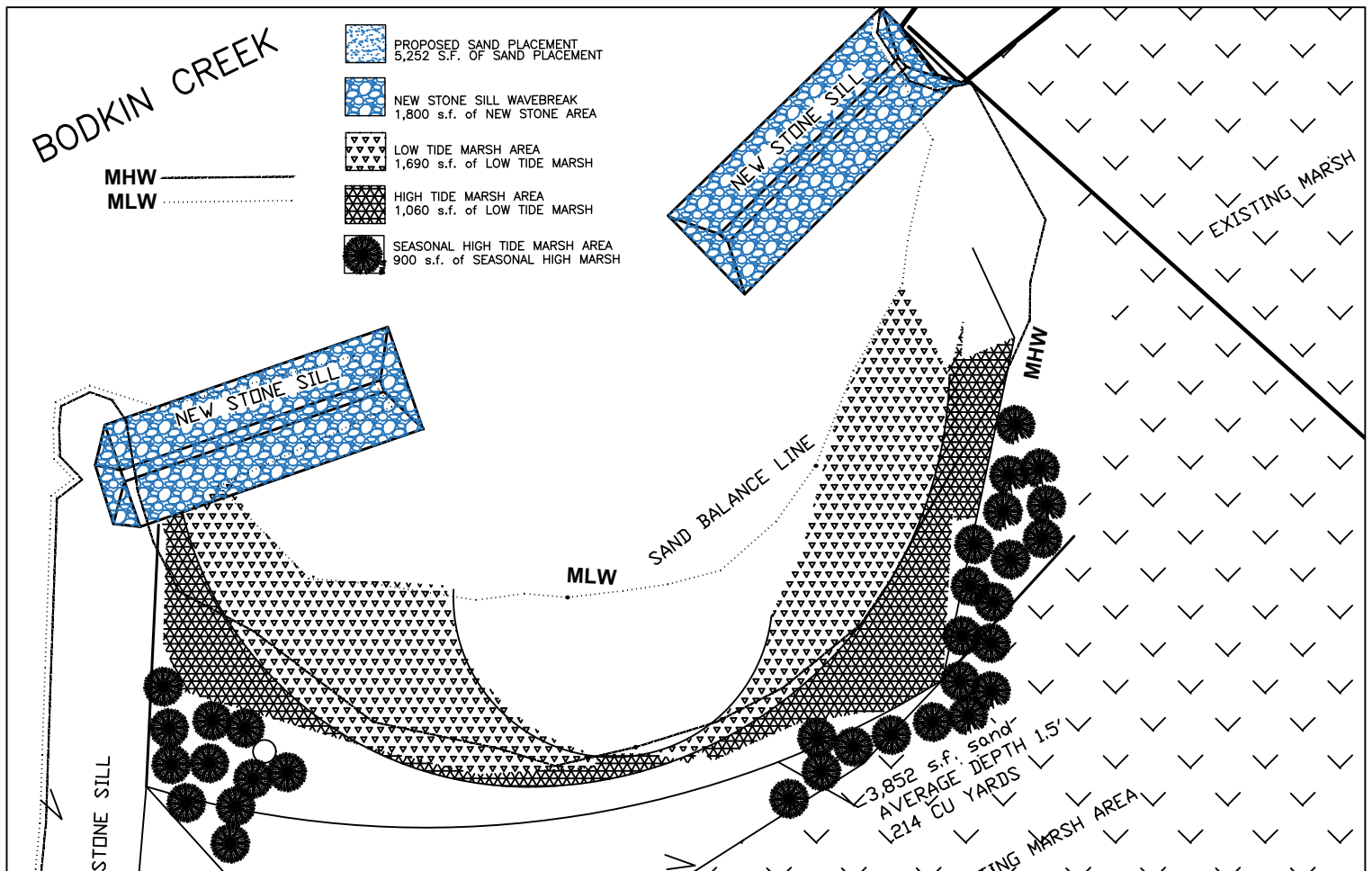
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NATIVE VEGETATION PLANTINGS					
LOCATION	COMMON NAME	SCIENTIFIC NAME	SPACING	NOTES	MAP LEGEND
LOW TIDE	CORD GRASS	<i>Spartina alterniflora</i>	18" □/C 1,690 S.F.	FULL SUN, MOIST SAND	
HIGH TIDE	TUSsock SEDGE GRASS/CLUMP	TUSsock SEDGE GRASS/CLUMP	QUANTITY 56		
HIGH TIDE	HAY GRASS	<i>Spartina patens</i>	18" □/C 1,030 S.F.	FULL SUN, MOIST SAND	

18" apart ON CENTER PLUGS
 Cord Grass is for tide WET 2x a day
 Hay Grass is for WET 1x a day

SAND FILL AND VEGETATION PLANTING

SAND SHALL BE CLEAN WASHED SAND
 IMPORTED BY BARGE.
 SEE SHEET 8 FOR VEGETATION PLANTING.



PLANTING PLAN
 SCALE = 1" = 20'



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AMRHEIN ANDREW III
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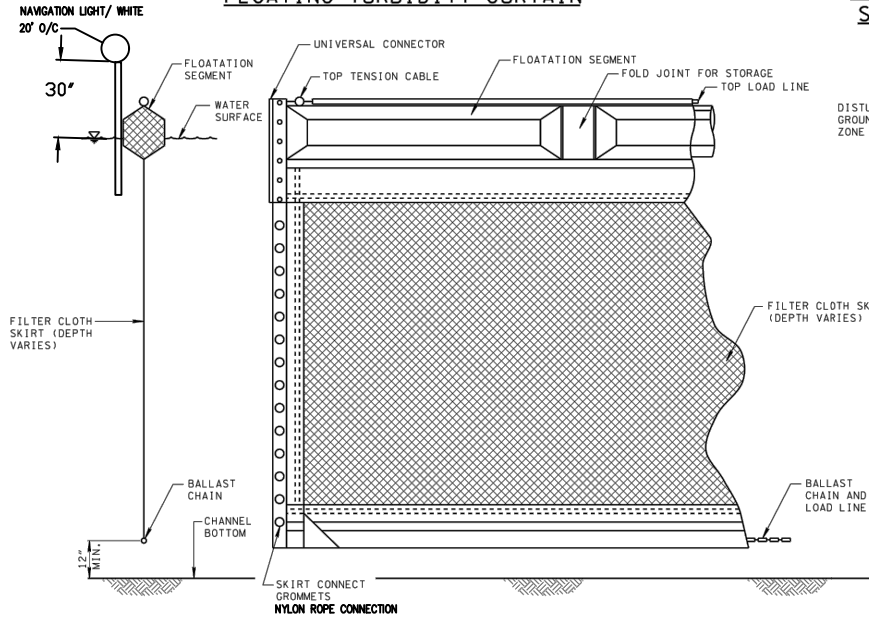
1 OF 1

SILT CURTAIN

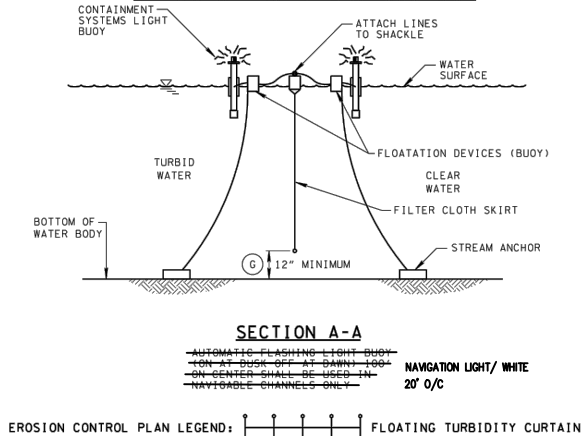
TURBIDITY CURTAIN DETAIL

SCALE = AS NOTED

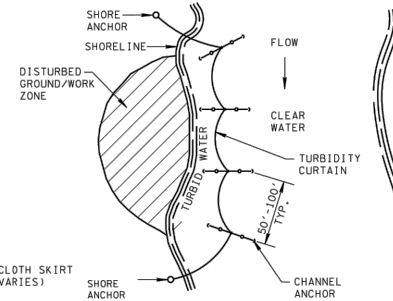
FLOATING TURBIDITY CURTAIN



TYPICAL ANCHORING SECTION

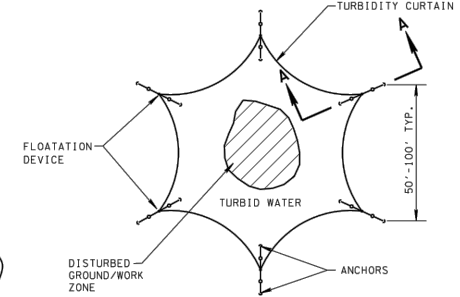


TYPICAL ANCHORING PLAN FOR SHORELINE/RIVER EDGE WORK



PLAN VIEW

TYPICAL ANCHORING PLAN FOR MID CHANNEL WORK (BRIDGE PIER, CAISSON, ETC.)



PLAN VIEW

PHYSICAL PROPERTIES OF TURBIDITY CURTAIN FABRIC

PHYSICAL PROPERTY	MINIMUM REQUIREMENT
THICKNESS, MILS	45
WEIGHT, OZ. / SQ. YD.	18
GRAB TENSILE STRENGTH, LBS.	300
UV INHIBITOR	MUST BE INCLUDED
APPARENT OPENING SIZE (AOS)	FINER THAN OR EQUAL TO #70 U.S. STANDARD SIEVE

FLOATING TURBIDITY CURTAIN GENERAL NOTES

- FLOATING TURBIDITY CURTAINS (ALSO KNOWN AS TURBIDITY BARRIERS OR SILT CURTAINS) CREATE A BARRIER TO PREVENT TURBID WATER FROM ENTERING CLEAR WATER. FLOATING TURBIDITY CURTAINS SHOULD BE USED TO ISOLATE ACTIVE CONSTRUCTION AREAS WITHIN OR ADJACENT TO A BODY OF WATER TO MINIMIZE THE MIGRATION OF SILT LADEN WATER OUT OF THE CONSTRUCTION ZONE.
- TURBIDITY CURTAINS SHALL NOT BE INSTALLED PERPENDICULAR ACROSS THE MAIN FLOW OF A SIGNIFICANT BODY OF MOVING WATER.
- FLOATING TURBIDITY CURTAINS SHALL NOT BE USED WHERE THE ANTICIPATED FLOW VELOCITIES WILL EXCEED 5 FT/SEC.
- TURBIDITY CURTAINS SHALL BE ANCHORED TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. ANCHORAGE SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE. CURTAINS SHALL BE INSTALLED AS CLOSE TO PROJECT SITE AS POSSIBLE. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR "INTERNATIONAL" ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS.
- SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE OF SUFFICIENT SIZE TO STABILIZE THE BARRIER WITH NUMBER AND SPACING DEPENDENT ON WATERWAY VELOCITIES AND MANUFACTURER'S RECOMMENDATIONS.
- IN SHALLOW WATER (2 FEET OF DEPTH OR LESS) A TURBIDITY CURTAIN MAY BE INSTALLED ON STAKES DRIVEN INTO THE BED OF THE WATER BODY.
- FABRIC SECTIONS SHALL BE CONNECTED END TO END WITH A MINIMUM 5/8 INCH DIAMETER POLYPROPYLENE ROPE. FABRIC SHALL BE SEAMED TOGETHER IN A MANNER THAT RETAINS THE OVERALL TENSILE STRENGTH.
- DESIGN OF CURTAIN AND ANCHORAGE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FILTER CLOTH SKIRT SHOULD BE ABLE TO WITHSTAND THE FORCES IMPARTED ON IT DUE TO THE EXPECTED WIND VELOCITY OR STREAM VELOCITY. FABRIC SHALL BE MADE OF A NON-DETERIORATING MATERIAL, SUCH AS PLASTIC OR NYLON, WHICH WILL ALLOW WATER TO PASS THROUGH WHILE STILL RETAINING SEDIMENT.
- THE TURBIDITY CURTAIN AND ADJACENT WORK AREAS SHALL NOT BE DISTURBED 12 HOURS PRIOR TO REMOVAL FROM WATER BODY. MAINTENANCE SHALL BE PERFORMED AS NEEDED. CONTRACTOR SHALL REMOVE THE CURTAIN AT COMPLETION OF WORK IN A MANNER THAT WILL PREVENT SILTATION OF THE WATERWAY. DURING REMOVAL, EXTREME CARE SHOULD BE TAKEN NOT TO DISTURB ANY SEDIMENT DEPOSITS.
- MAINTAIN 12" MINIMUM GAP BETWEEN SKIRT BOTTOM AND CHANNEL BOTTOM TO PREVENT ACCUMULATED SEDIMENT FROM PULLING TOP OF CURTAIN BELOW WATER SURFACE.
- IN WIND OR WAVE ACTION SITUATIONS, THE MAXIMUM DEPTH OF THE CURTAIN SHALL BE 12 FEET.
- CONCENTRATED FLOWS SHALL NOT DISCHARGE BEYOND FLOATING TURBIDITY CURTAIN. CURTAINS ARE NOT TO BE INSTALLED ACROSS FLOWING BODY OF WATER.
- WHEN INSTALLED IN A NAVIGABLE WATERWAY, BUOYS SHOULD BE LIT ACCORDING TO REGULATORY AGENCY STANDARDS.
- WHEN ESTIMATING THE LENGTH OF TURBIDITY CURTAIN, ALLOW 10 TO 20 PERCENT VARIANCE IN STRAIGHT LINE MEASUREMENT.
- FLOATING TURBIDITY CURTAIN SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

209-13.04	TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.05	TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.06	TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.07	TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.08	TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
- PAYMENT SHALL INCLUDE ALL MATERIAL AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TURBIDITY CURTAINS.
- ONLY FLOATING TURBIDITY CURTAINS LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED. ANY PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST AS AN APPROVED ALTERNATE IS ALSO ACCEPTABLE.