

U.S. Army Corps  
of Engineers

# Public Notice

In Reply to Application  
NAB-2023-61698-M07 (GreenVest LLC/MedStar Harbor  
Hospital/Tidal Wetland)

Baltimore District  
PN-24-17

Comment Period: June 12, 2024 to July 12, 2024

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**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:**

GreenVest LLC  
Attn: Mr. Andrew Forbes  
4201 Northview Drive, Suite 202  
Bowie, Maryland 20716

**WATERWAY AND LOCATION OF THE PROPOSED WORK:**

The proposed project is located in the Patapsco River, 3001-3131 S. Hanover Street, Baltimore City, Maryland. [Latitude: 39.2519, Longitude: -76.6141]

**OVERALL PROJECT PURPOSE:**

This project is part of the overall Reimagine Middle Branch master plan which proposes to create marshlands, habitats, and public access along 11 miles of shoreline of the Middle Branch of the Patapsco River. The MedStar project proposes aquatic habitat reestablishment with the goals of shoreline erosion control, aquatic habitat creation and enhancement, water quality improvement, and public access within the Patapsco River, Baltimore City, Maryland.

## **PROJECT DESCRIPTION:**

To construct an approximate 11.59-acre marsh located at 3001-3131 S. Hanover Street as a phase of the Reimagine Middle Branch master plan. The proposed marsh project at MedStar consists of the following work: construct approximately 2,000 linear feet of segmented stone and gravel sill; fill and grade with approximately 58,465 cubic yards of clean sand fill including a carbon layer to contain existing legacy contaminants; create a living shoreline with approximately 4.29 acres of low marsh vegetation and approximately 4.68 acres of high marsh vegetation with all work extending a maximum of approximately 380 feet channelward of the existing marsh. The proposed marsh includes various woody debris features for both stability and habitat located within the marsh and at the sill vents, and open water and unplanted sand and cobble sections to facilitate fish passage. All work is proposed in accordance with the attached plans dated November 17, 2023.

## **EFFECTS ON AQUATIC RESOURCES:**

Activity	WoUS Impact (LF)	WoUS Impact (Acres/SF)	Authority
Living shoreline fill	2,000	11.59/504,860	Section 10/404
Stone sill	2,000	1.24/54,015	Section 10/404
Low marsh	-	4.29/186,872	Section 10/404
High marsh	-	4.68/203,860	Section 10/404

## **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. The proposed project purpose is aquatic habitat reestablishment with the goals of shoreline erosion control, aquatic habitat creation and enhancement, water quality improvement, and public access within the Patapsco River, Baltimore City, Maryland. Through several iterations, the applicant has reduced the overall footprint of the proposed project from 19 acres to 11.59 acres. The project has been designed to the minimal footprint necessary to achieve the project purpose successfully. No compensatory mitigation is proposed. No wetlands or submerged aquatic vegetation will be impacted as a result of the proposed project.

**CORPS EVALUATION REQUIREMENTS:**

This project will be evaluated pursuant to the 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 adverse 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 the United States Army Corps of Engineers. 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-2023-61698.

**PUBLIC HEARING REQUESTS:**

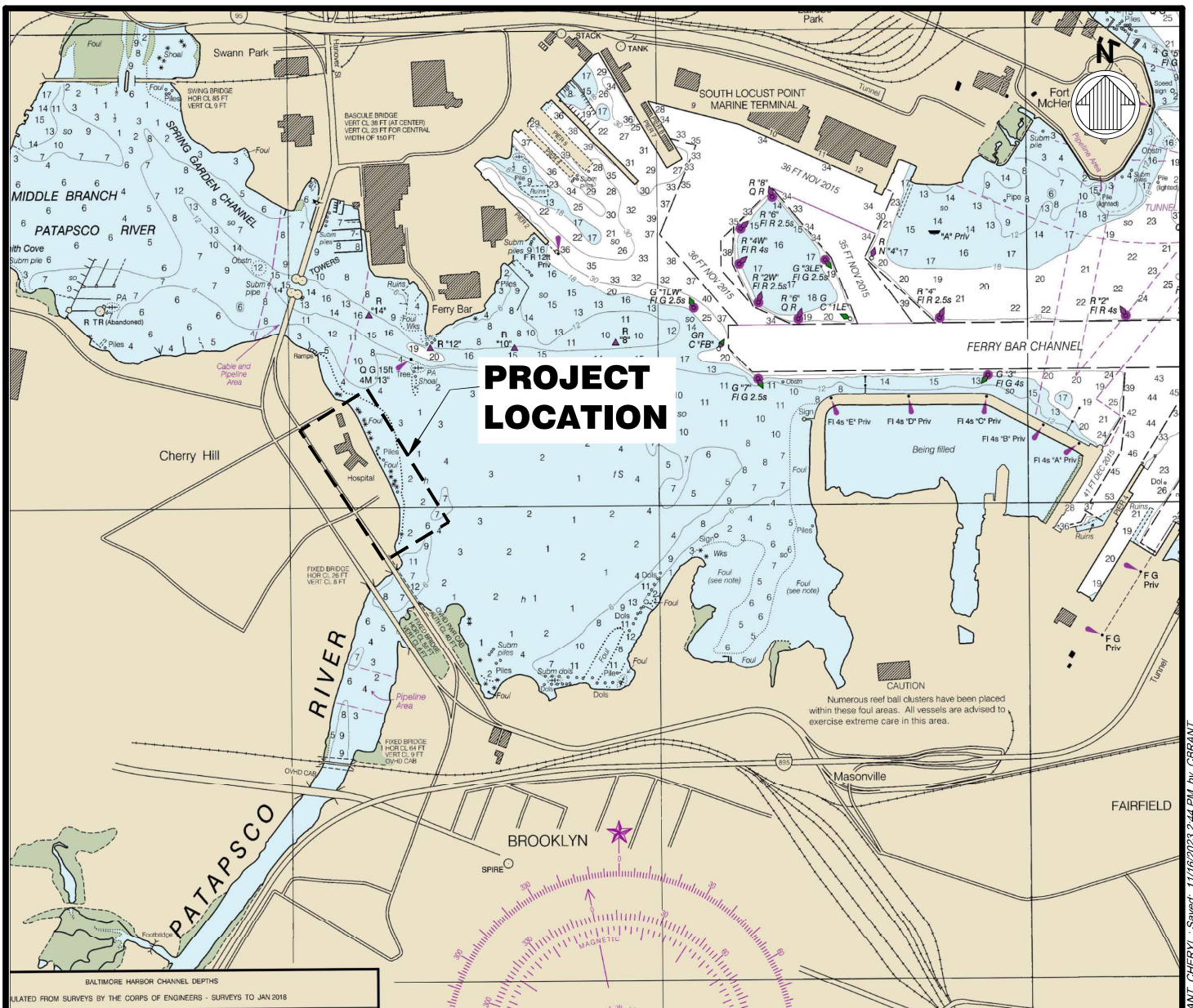
Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received within the comment period as specified above to receive consideration. Also, it must clearly set forth the interest which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

Ms. Maria N. Teresi  
[maria.teresi@usace.army.mil](mailto:maria.teresi@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. Maria Teresi, at (410) 962-4501 or [maria.teresi@usace.army.mil](mailto:maria.teresi@usace.army.mil). This public notice is issued by the Chief, Regulatory Branch.



## VICINITY MAP

23-WL-1096  
24-WQC-0020  
202361698  
5-21-2024  
1 of 12

### SUMMARY:

1. REMOVE LITTER FROM 2,000 LF OF SHORELINE.
2. CONSTRUCT 2,000 LF OF NEW GRAVEL SHORELINE.
3. CONSTRUCT 9.25 AC OF TIDAL WETLANDS BY PLACING 69,740 CY OF CLEAN FILL.

### NOTES:

BACKGROUND TAKEN FROM NOAA CHART  
12281, 57TH ED., NOV. 27, 2018

### APPLICATION BY:

BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

### AGENT/ENGINEER:



## MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

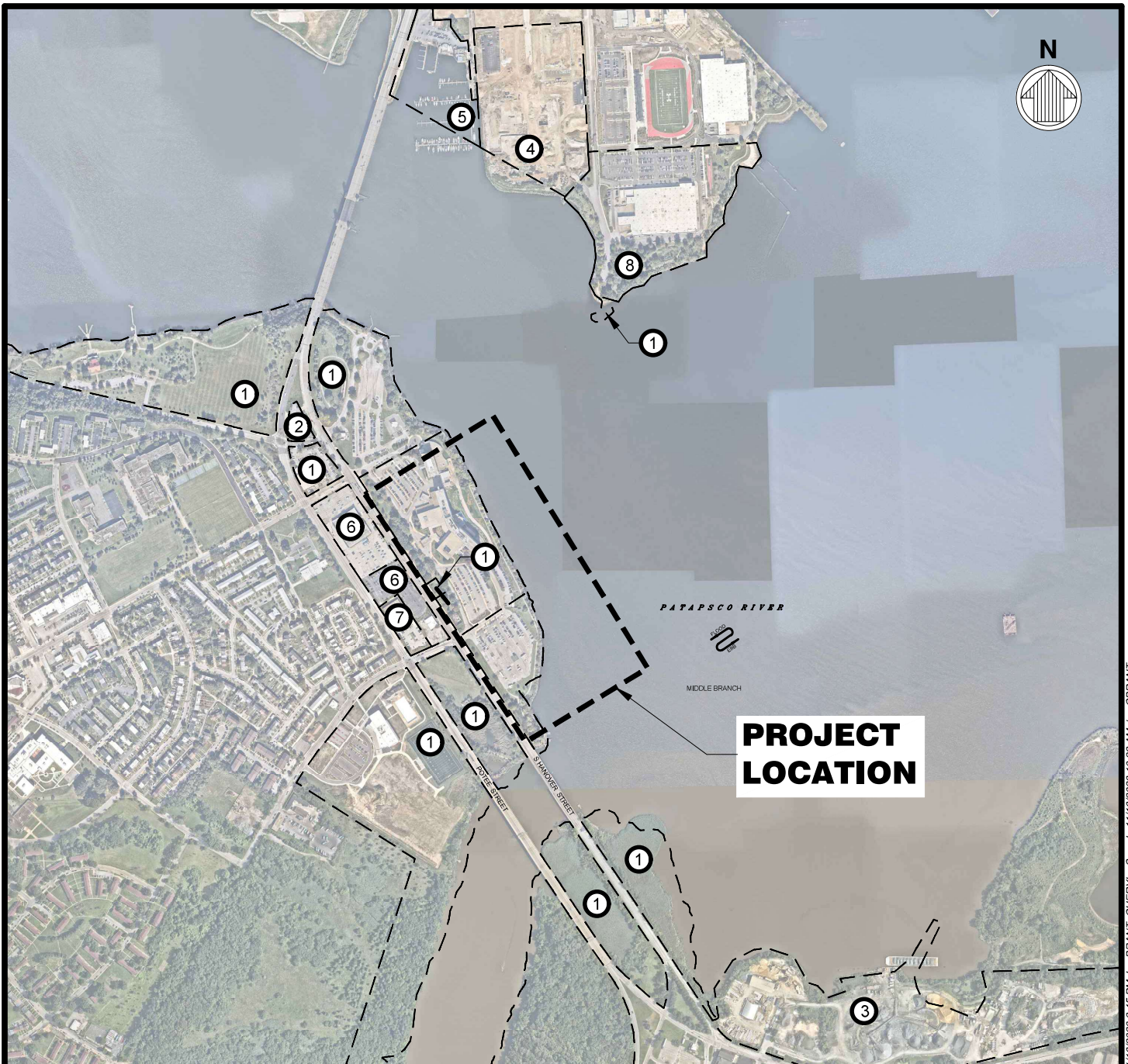
PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND

1000' 0' 1000' 2000'  
SCALE: 1"=2000'

DATE: NOVEMBER 17, 2023

SHEET 1 OF 12





## LOCATION PLAN

### ADJACENT PROPERTIES

- 1** MAYOR AND CITY COUNCIL  
 100 N. HOLLIDAY ST, SUITE 400  
 BALTIMORE, MD, 21202  
 23-WL-1096  
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- 2** HANOVER BRIDGE, LLC  
 100 E. PENNSYLVANIA AVE, SUITE 200  
 BALTIMORE, MD, 21286
- 3** VULCAN MATERIALS  
 P. O. BOX 385014, BIRMINGHAM, AL, 35238

- 4** INSULATOR DRIVE, LLC, (C/O MAG PARTNERS)  
 1500 WHETSTONE WAY, SUITE 101  
 BALTIMORE, MD, 21230
- 5** 2600 INSULATOR DRIVE, LLC, (C/O MAG PARTNERS)  
 101 W. DICKMAN ST, SUITE 200  
 BALTIMORE, MD, 21230
- 6** HARBOR HOSPITAL, INC  
 3001 S. HANOVER ST, BALTIMORE, MD, 21225

- 7** HARBOR HOSPITAL CENTER, INC.  
 C/O HANOVER DEV. ASS. LLC.  
 P. O. BOX 196, STEVENSON, MD, 21153
- 8** UA PORT COVINGTON HOLDINGS, LLC  
 1000 KEY HIGHWAY EAST, BALTIMORE, MD, 21230

### APPLICATION BY:

BRIAN CRAMER  
 GREENVEST, LLC  
 4201 NORTHVIEW DRIVE, SUITE 202  
 BOWIE, MD 20716

### AGENT/ENGINEER:



## MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

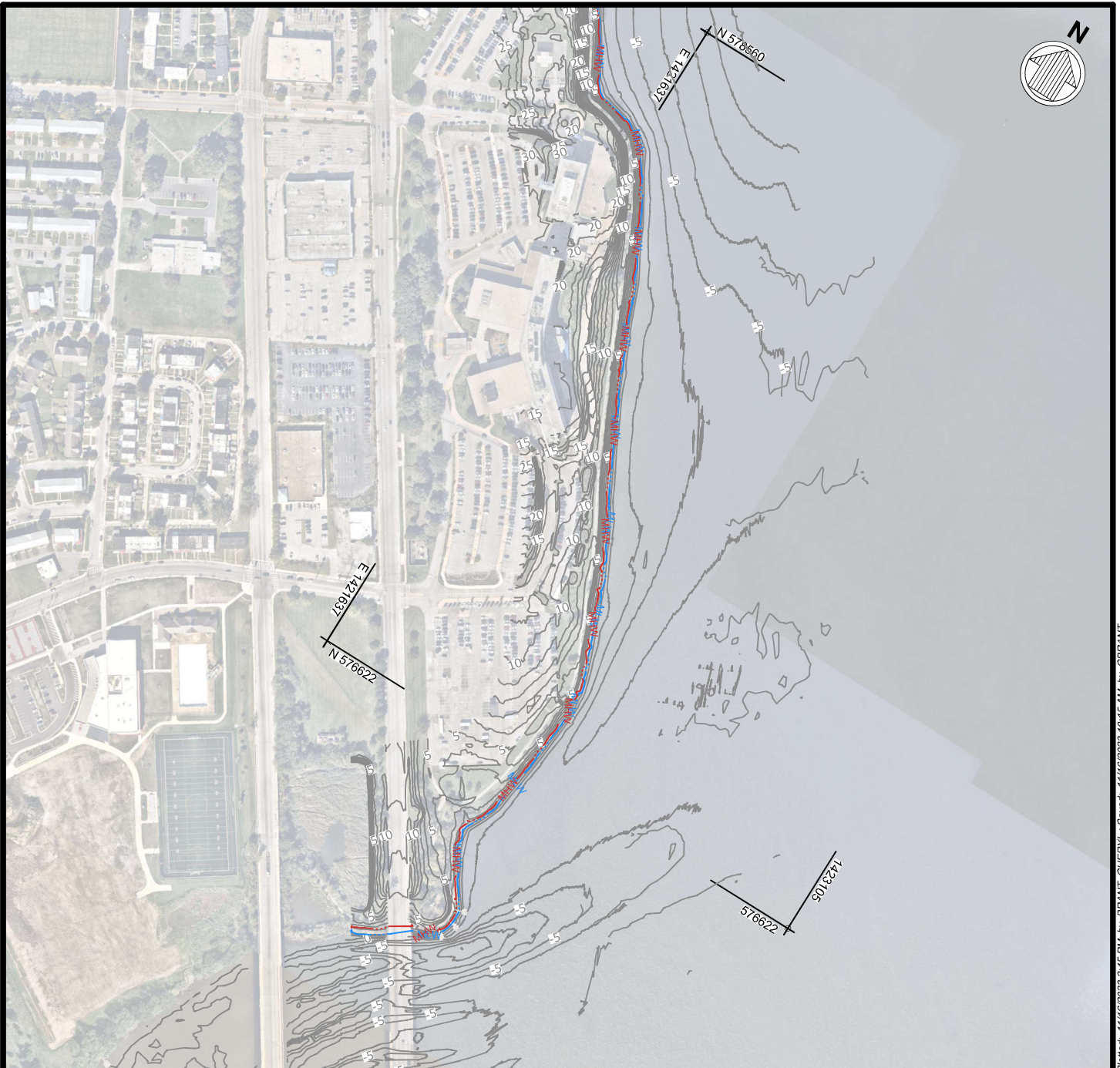
PROJECT LOCATION:  
 MIDDLE BRANCH  
 BALTIMORE CITY, MARYLAND

500' 0' 500' 1000'  
 SCALE: 1"=1000'

DATE: NOVEMBER 17, 2023

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## EXISTING CONDITIONS

### NOTES:

1. TOPOGRAPHIC AND HYDROGRAPHIC SURVEY PERFORMED BY MERCADO CONSULTANTS, INC IN MAY 2023.

### LEGEND

— MHW — MEAN HIGH WATER  
— MLW — MEAN LOW WATER

### APPLICATION BY:

BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

### AGENT/ENGINEER:



## MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

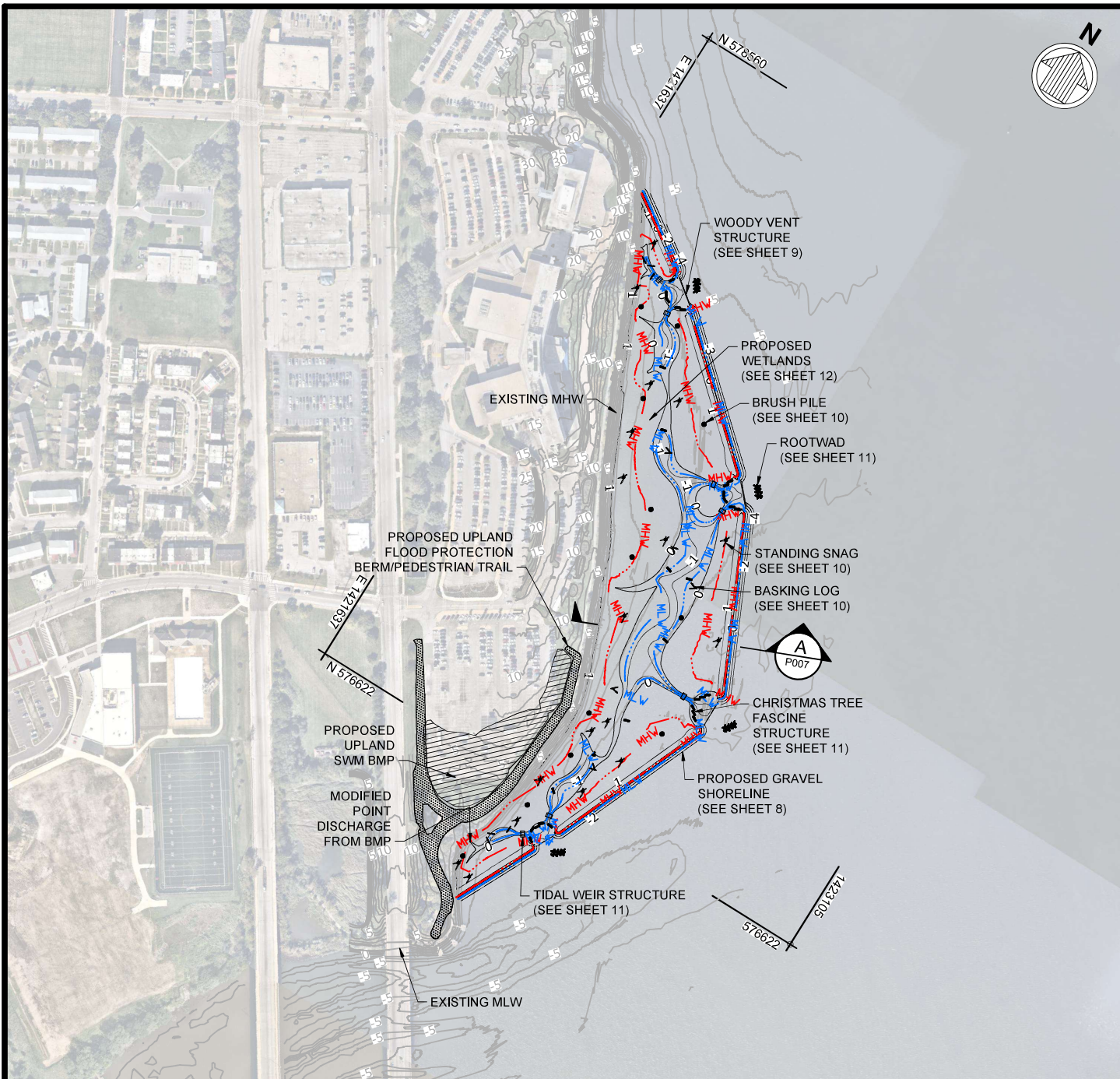
PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND

200' 0' 200' 400'  
SCALE: 1"=400'

DATE: NOVEMBER 17, 2023

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## PROPOSED CONDITIONS

### NOTES:

1. REMOVE LITTER AND OTHER DEBRIS FROM 2,000 LF OF SHORELINE
2. PLACE 69,740 CY OF FILL MATERIAL TO CONSTRUCT INTERTIDAL WETLANDS AND GRAVEL SHORELINE.
3. INSTALL WETLAND PLANTS AND SHRUBS (SEE SHEET 12).

### LEGEND

- MHW — PROPOSED MEAN HIGH WATER  
— MLW — PROPOSED MEAN LOW WATER

### APPLICATION BY:

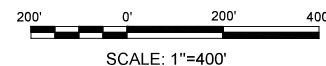
BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

### AGENT/ENGINEER:



## MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

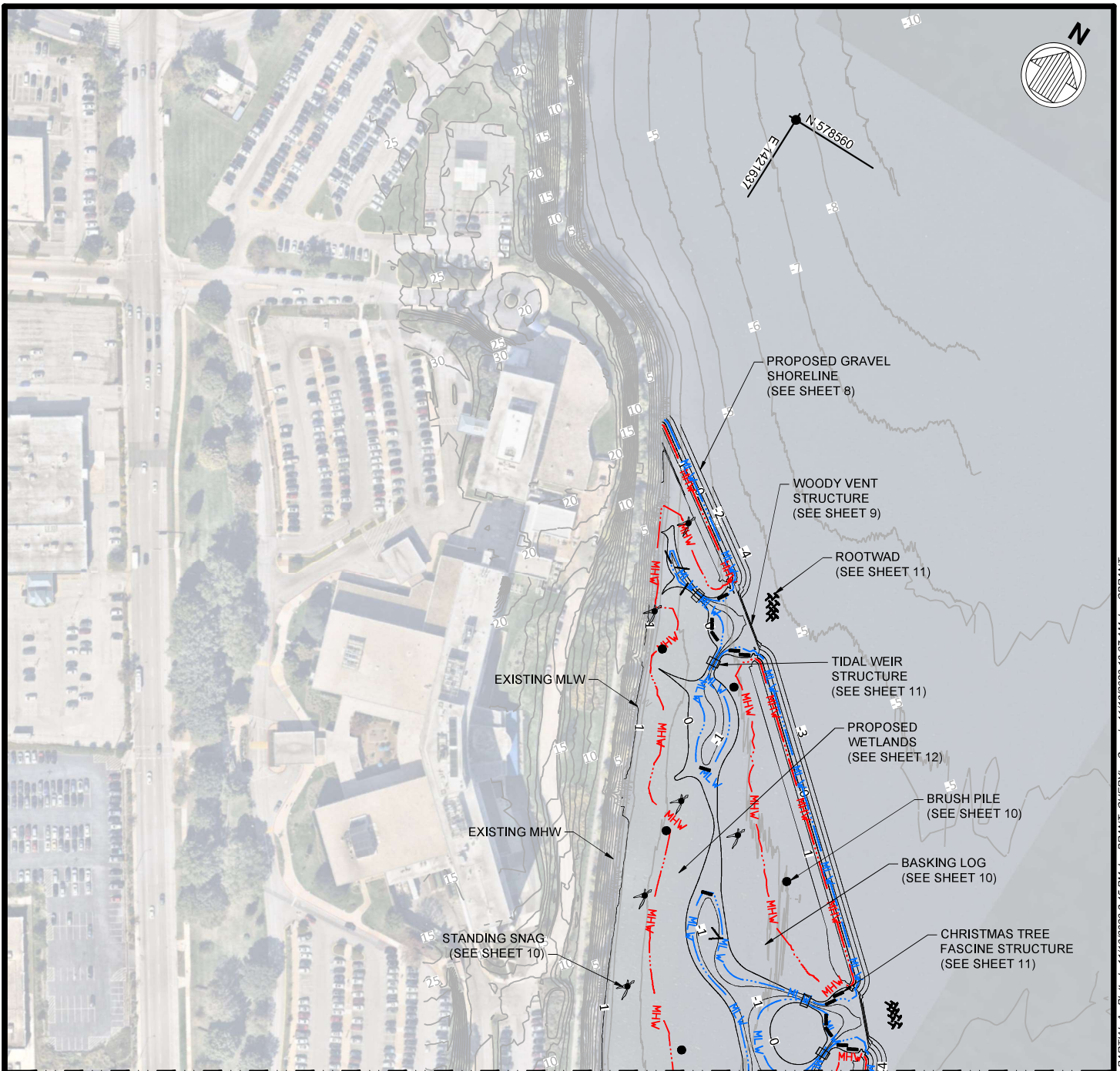
PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND



DATE: NOVEMBER 17, 2023

SHEET 4 OF 12





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MATCHLINE SEE SHEET 6  
**PROPOSED CONDITIONS-PARTIAL-A**

**LEGEND**

— MHW — PROPOSED MEAN HIGH WATER  
— MLW — PROPOSED MEAN LOW WATER

**APPLICATION BY:**

BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

**AGENT/ENGINEER:**



**MEDSTAR HARBOR HOSPITAL  
TIDAL WETLANDS RESTORATION**

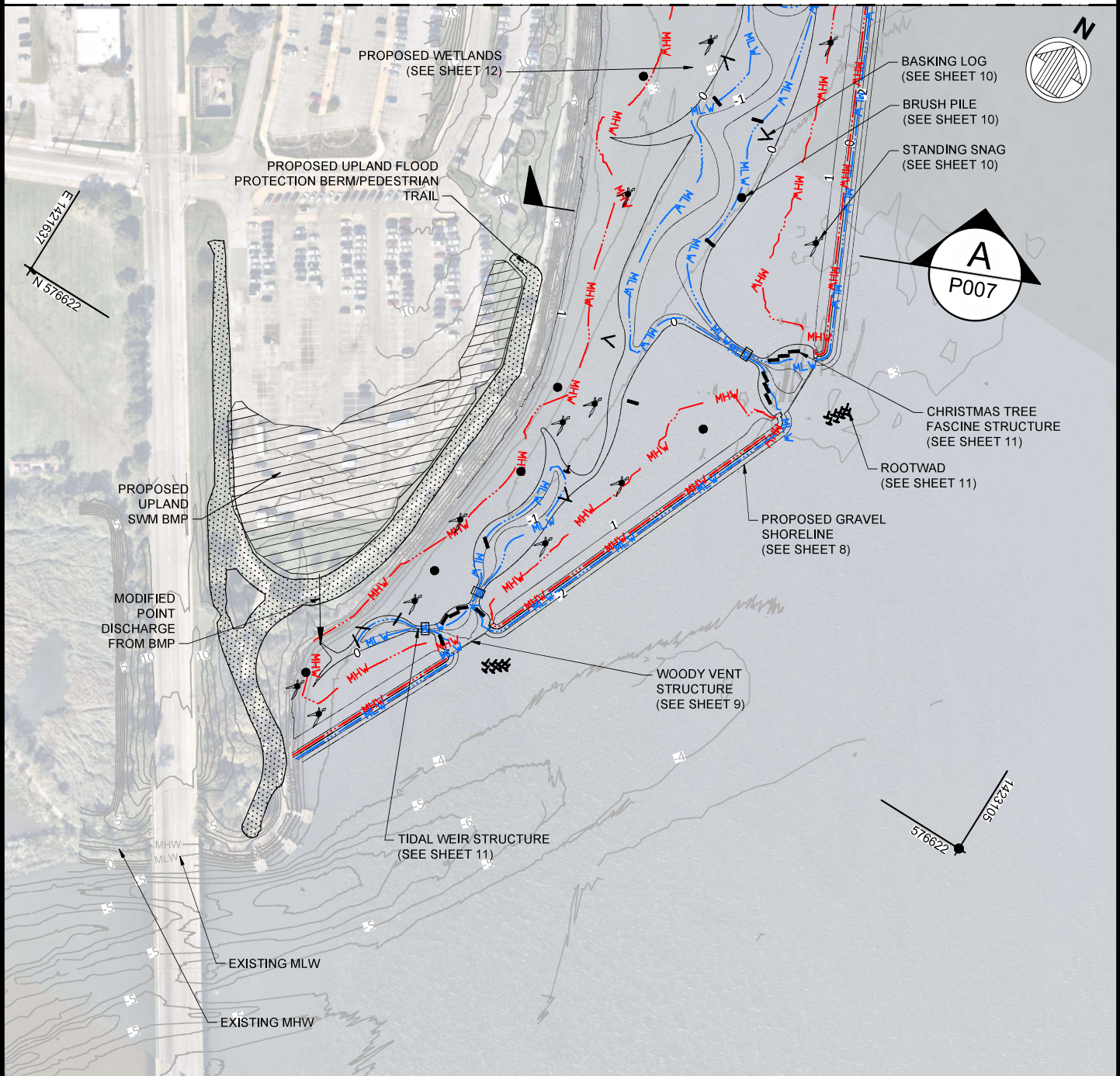
PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND

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SCALE: 1"=200'

DATE: NOVEMBER 17, 2023

SHEET 5 OF 12

MATCHLINE SEE SHEET 5



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## PROPOSED CONDITIONS-PARTIAL-B

### LEGEND

— MHW — PROPOSED MEAN HIGH WATER  
— MLW — PROPOSED MEAN LOW WATER

#### APPLICATION BY:

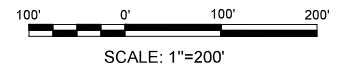
BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

#### AGENT/ENGINEER:



#### MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

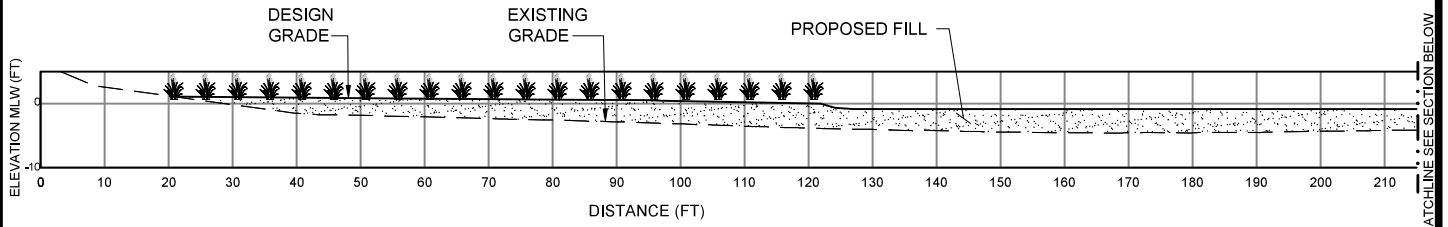
PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND



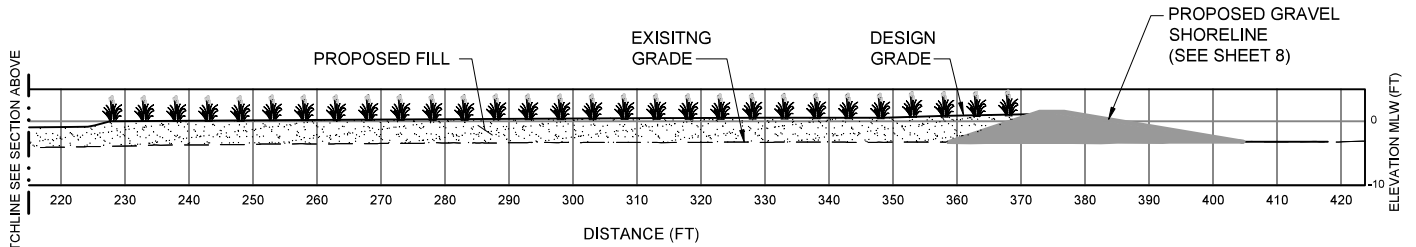
DATE: NOVEMBER 17, 2023

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TYPICAL PARTIAL SECTION A



TYPICAL PARTIAL SECTION A

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APPLICATION BY:

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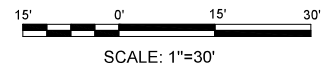
AGENT/ENGINEER:



MEDSTAR HARBOR HOSPITAL  
TIDAL WETLANDS RESTORATION

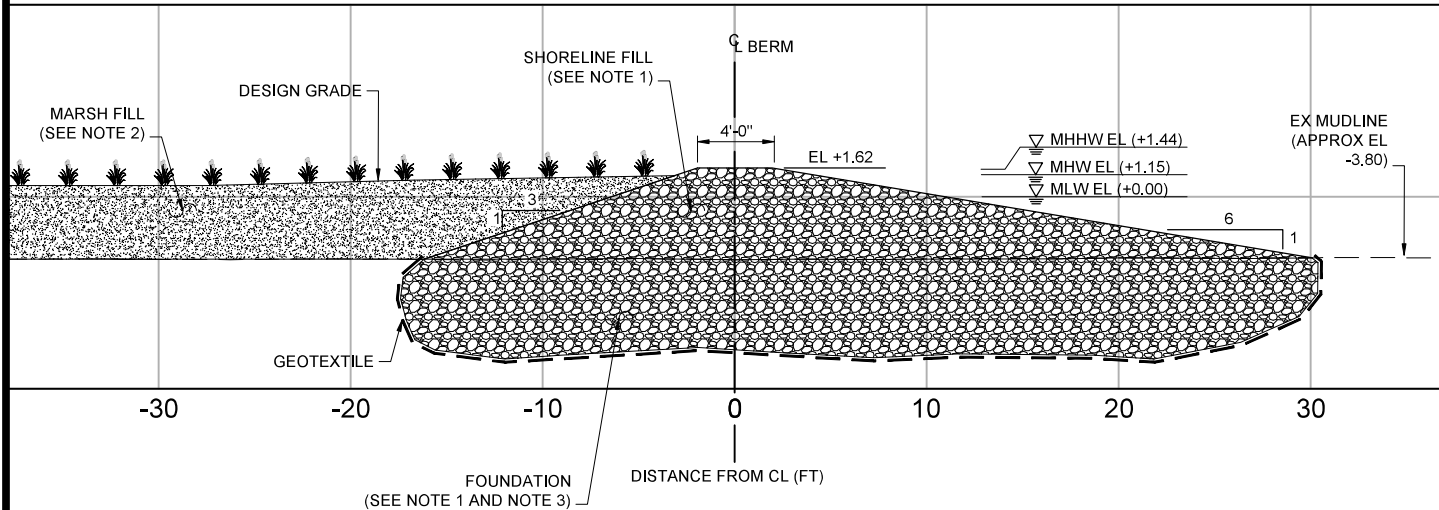
PROJECT LOCATION:

MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND



DATE: NOVEMBER 17, 2023

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## DETAIL - GRAVEL SHORELINE

### NOTES:

1. SHORELINE FILL SHALL BE WASHED NO. 57 COARSE AGGREGATE, (MSHA STANDARD SPECIFICATIONS FOR CONSTRUCTION MATERIALS.)
2. MARSH FILL SHALL BE CLEAN SAND.
3. ELEVATION OF APPROXIMATE BOTTOM OF FOUNDATION BASED ON SETTLEMENT CALCULATION.

### APPLICATION BY:

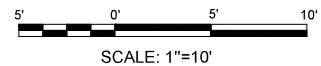
BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

### AGENT/ENGINEER:



### MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND

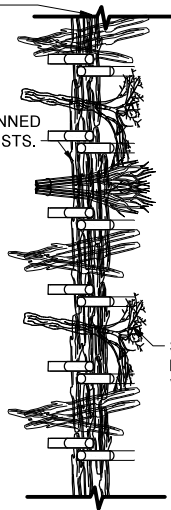
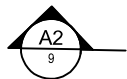


DATE: NOVEMBER 17, 2023

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WOODY VENT  
STRUCTURES TIE  
INTO GRAVEL  
SHORELINE.

RECYCLED WOODY  
MATERIAL TO BE LAID  
HORIZONTALLY AND PINNED  
DOWN BY SUPPORT POSTS.



SELECTIVE WOODY MATERIAL  
LAID PERPENDICULAR TO  
WOODY VENT FEATURE.



**PLAN - WOODY VENT STRUCTURE**  
SCALE: NTS

NEW 16' TELEPHONE POLES USED  
FOR ANGLED SUPPORT POSTS AND  
HORIZONTAL BEAM. SUPPORT POSTS  
TO BE PUSHED INTO SUBSTRATE,  
MIN  $\frac{1}{3}$  TOTAL LENGTH OF POST

MARSH FILL SET AT  
MLLW ALONG VENT  
OPENINGS AND GRADES  
UP TO 1.15' AT SAND  
CONTAINMENT BERMS.

PORTIONS OF WOOD DEBRIS  
ABOVE MLLW WILL BE  
PERIODICALLY OPEN TO  
ALLOW FOR NEKTON PASSAGE



RECYCLED WOODY MATERIAL TO  
BE LAID HORIZONTALLY AND  
PINNED DOWN BY SUPPORT  
POSTS. SELECTIVE WOODY  
MATERIAL LAID PERPENDICULAR  
TO WOODY VENT FEATURE.

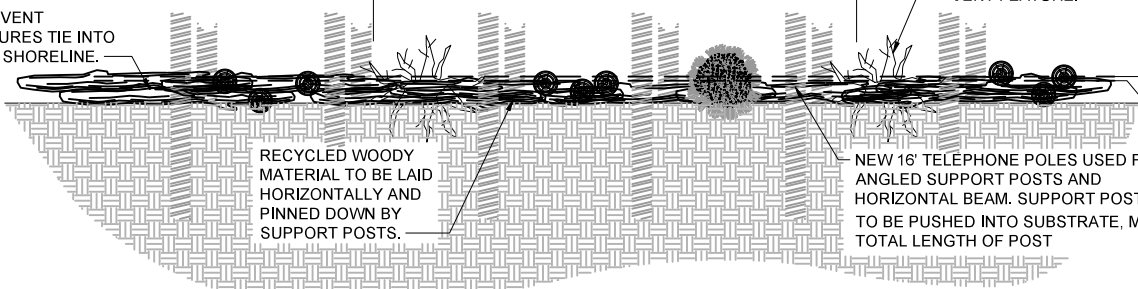


**SECTION - WOODY VENT STRUCTURE**  
SCALE: NTS

WOODY VENT  
STRUCTURES TIE INTO  
GRAVEL SHORELINE.

WOODY VENT TO BE LOWERED TO MLLW IN  
MIDDLE 25', FLANKING EDGES TO RISE TO MLW

SELECTIVE WOODY MATERIAL  
LAID PERPENDICULAR TO WOODY  
VENT FEATURE.



RECYCLED WOODY  
MATERIAL TO BE LAID  
HORIZONTALLY AND  
PINNED DOWN BY  
SUPPORT POSTS.

NEW 16' TELEPHONE POLES USED FOR  
ANGLED SUPPORT POSTS AND  
HORIZONTAL BEAM. SUPPORT POSTS  
TO BE PUSHED INTO SUBSTRATE, MIN  $\frac{1}{3}$   
TOTAL LENGTH OF POST

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**ELEVATION - WOODY VENT STRUCTURE**  
SCALE: NTS

## PROPOSED FEATURE DETAILS - 1

### APPLICATION BY:

BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

### AGENT/ENGINEER:

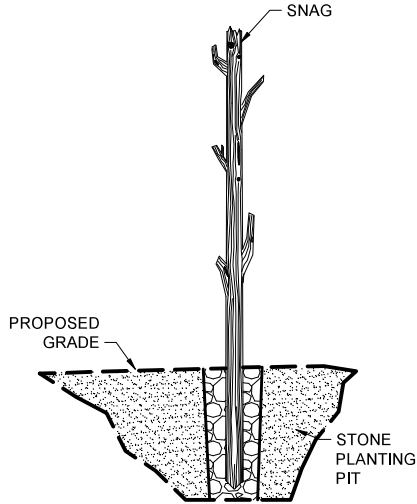


### MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

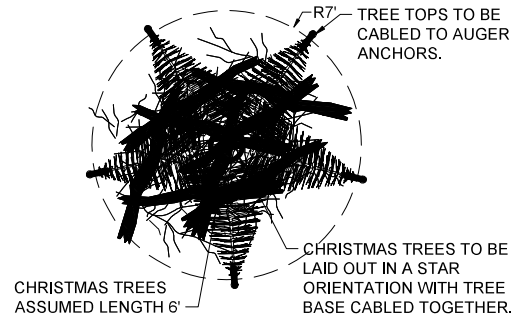
PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND

DATE: NOVEMBER 17, 2023

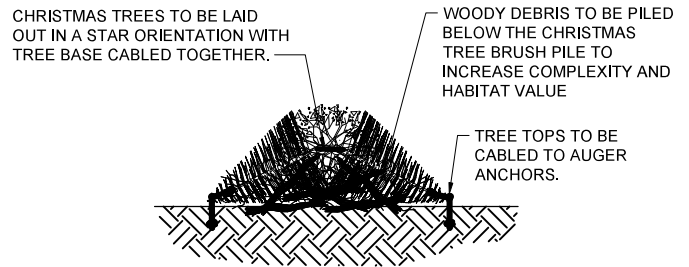
SHEET 9 OF 12



**A1**  
10  
**SECTION - STANDING SNAG**  
SCALE: NTS



**BUSH PILE PLAN**



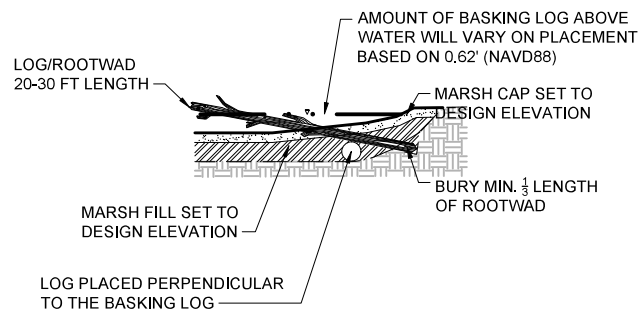
**BUSH PILE SECTION**

**NOTE FOR SNAG INSTALLATION:**

1. INSTALL SNAGS MIN. 1/3 OF LOG LENGTH BELOW GROUND.
2. ABOVE GROUND SNAG LENGTH TO BE 10-20'
3. ALL EXPOSED END OF LOGS TO BE BROKEN. SAWED ENDS WILL BE UNACCEPTABLE.
4. STANDING SNAG SHALL BE LOCATED A MINIMUM DISTANCE OF 1.5 TIMES THE ABOVE GROUND HEIGHT OF THE SNAG AWAY FROM ANY TRAILS OR LANDINGS.
5. ROCK SHALL BE USED IN THE "PLANTING PIT" TO STABILIZE THE UNDERGROUND PORTION OF THE SNAG.
6. PROVIDE 2 FT. MIN. WIDTH OF ROCK ON ALL SIDES OF STANDING SNAG IN PLANTING PIT.

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**B1**  
10  
**PLAN AND SECTION - BUSH PILE**  
SCALE: NTS



**C1**  
10  
**SECTION - BASKING LOG WITH ANCHOR PARTIALLY BURIED**  
SCALE: NTS

**PROPOSED FEATURE DETAILS - 2**

**APPLICATION BY:**

BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

**AGENT/ENGINEER:**

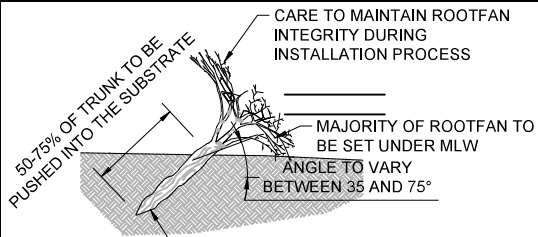


**MEDSTAR HARBOR HOSPITAL  
TIDAL WETLANDS RESTORATION**

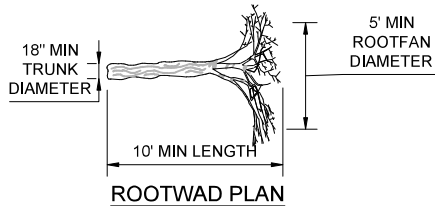
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**SHEET 10 OF 12**

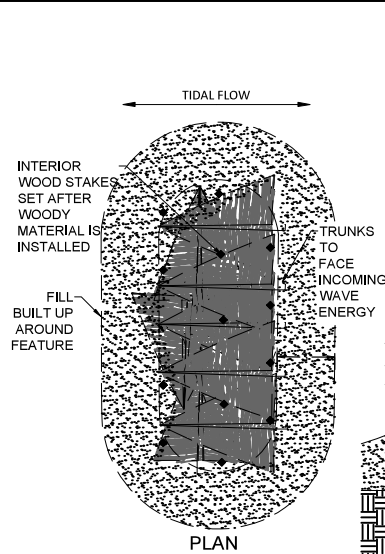


**ROOTWAD SECTION**

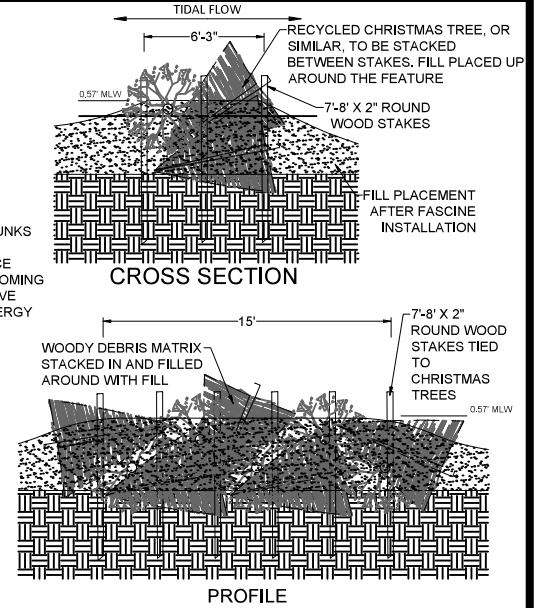


**ROOTWAD PLAN**

**A1** **DETAIL - ROOTWAD**  
SCALE: NTS

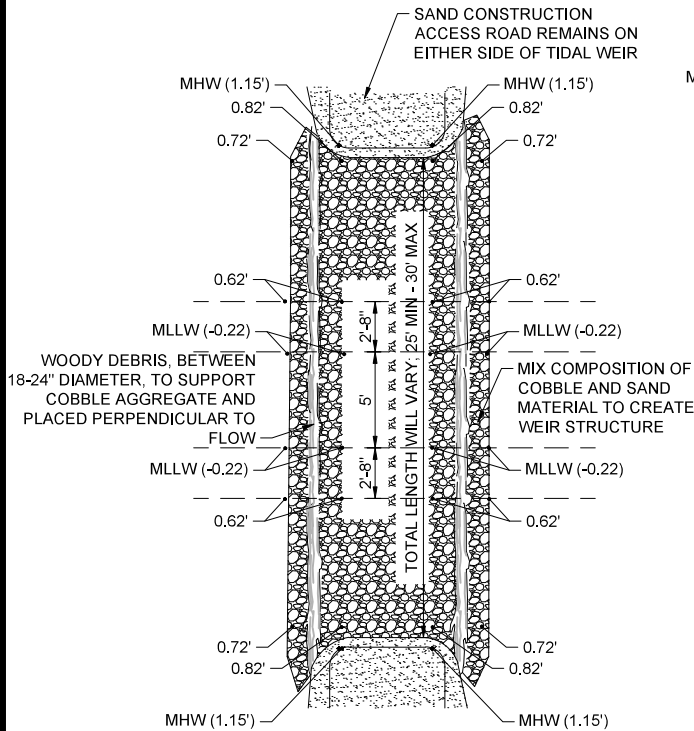


**PLAN**

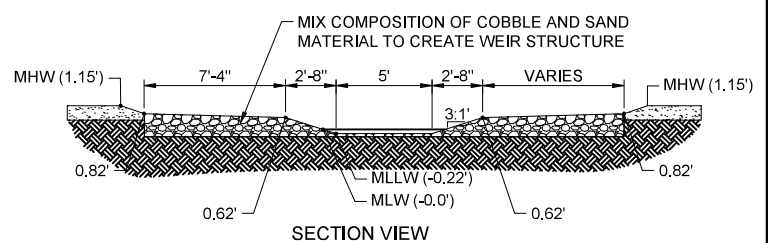


**PROFILE**

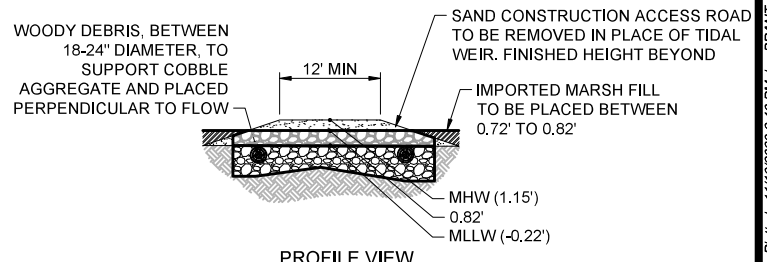
**B1** **DETAIL - CHRISTMAS TREE FASCINE STRUCTURE**  
SCALE: NTS



**PLAN VIEW**



**SECTION VIEW**



**PROFILE VIEW**

**C1** **DETAIL - TIDAL WEIR**  
SCALE: NTS

## PROPOSED FEATURE DETAILS - 3

### APPLICATION BY:

BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

### AGENT/ENGINEER:



### MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND

DATE: NOVEMBER 17, 2023

SHEET 11 OF 12



#### LOW MARSH

- BOLBOSSCHOENUS ROBUSTUS (STURDY BULRUSH)
- SCIRPUS VALIDUS (SOFT-STEMMED BULRUSH)
- SPOROBOLUS ALTERNIFLORUS (SMOOTH CORDGRASS)

#### HIGH MARSH

- BACCHARIS HALIMIFOLIA (GROUNSEL TREE)
- HIBISCUS MOSCHEUTOS (MARSH HIBISCUS)
- IVA FRUTESCENS (MARSH ELDER)
- AMARANTHUS CANNABINUS (TIDALMARSH AMARANTH)
- BOLBOSSCHOENUS ROBUSTUS (STURDY BULRUSH)
- DISTICHLIS SPICATA (SALTGRASS)
- KOSTELETZKYA PENTACARPOS (VIRGINIA SALTMARSH MALLOW)
- SCHOENOPLECTUS PUNGENS (THREE-SQUARE BULRUSH)
- SOLIDAGO SEMPERVIRENS (SEASIDE GOLDENROD)
- SYMPHYOTRICUM UNDULATUM (PERENNIAL SALTMARSH ASTER)
- SPOROBOLUS CYNOSUROIDES (BIG CORDGRASS)
- SCHOENOPLECTUS AMERICANUS (OLNEY'S THREE-SQUARE BULRUSH)
- SPOROBOLUS PUMILUS (SALTMEADOW CORDGRASS)






#### SUPRATIDAL

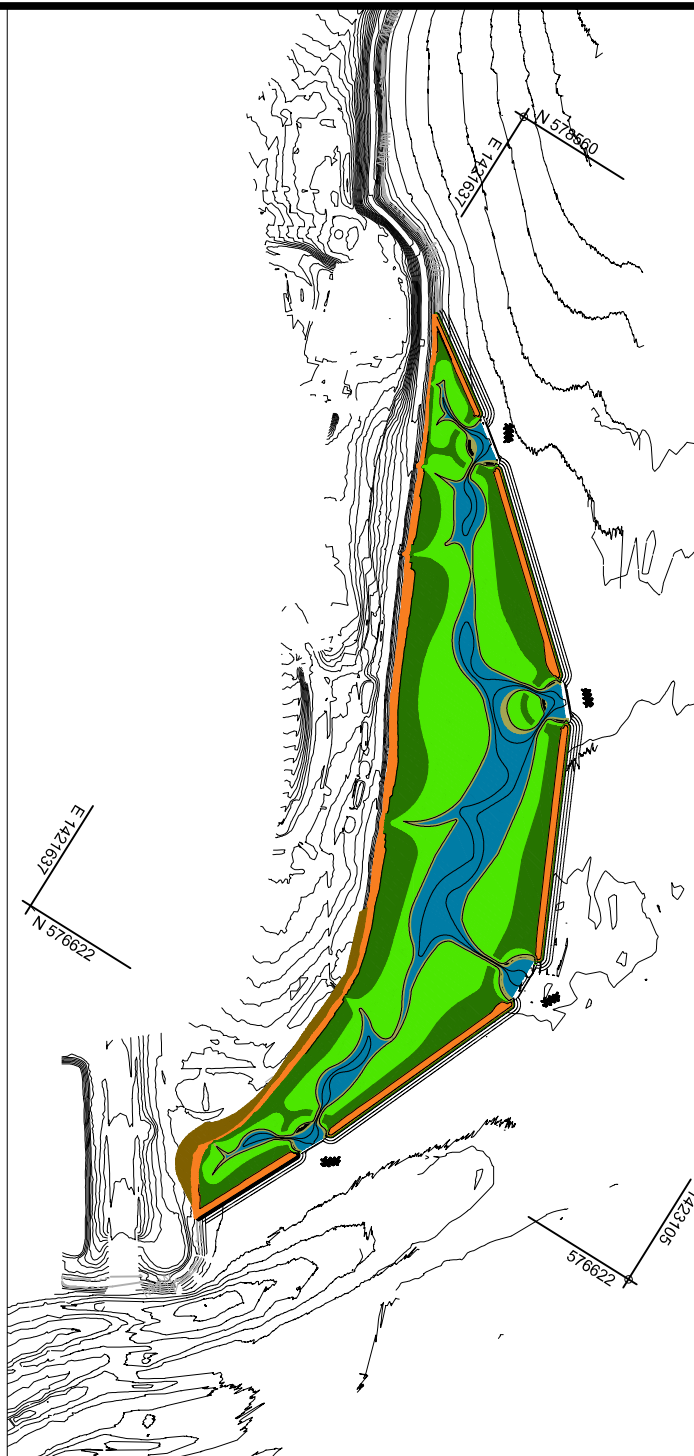
- BACCHARIS HALIMIFOLIA (GROUNSEL TREE)
- HIBISCUS MOSCHEUTOS (MARSH HIBISCUS)
- PRUNUS MARITIMA (BEACH PLUM)
- MORELLA PENNSYLVANICA (NORTHERN BAYBERRY)
- MORELLA CERIFERA (WAX MYRTLE)
- IVA FRUTESCENS (MARSH ELDER)
- PANICUM VIRGATUM (SWITCHGRASS)
- SPARTINA PATENS (SALTMARSH HAY)
- AMARANTHUS CANNABINUS (TIDALMARSH AMARANTH)
- SOLIDAGO SEMPERVIRENS (SEASIDE GOLDENROD)
- SYMPHYOTRICUM UNDULATUM (PERENNIAL SALTMARSH ASTER)

#### MAINTAINED TURF

- COMMERCIAL CONSERVATION MIX

#### LEGEND

	HIGH MARSH (3.39 AC)
	LOW MARSH (4.29 AC)
	SUPRATIDAL (1.27 AC)
	MAINTAINED TURF (0.30 AC)
	OPEN WATER



23-WL-1096  
24-WQC-0020  
202361698

5-21-2024  
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### TYPICAL MARSH PLANTINGS

#### APPLICATION BY:

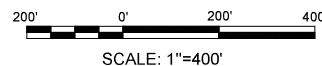
BRIAN CRAMER  
GREENVEST, LLC  
4201 NORTHVIEW DRIVE, SUITE 202  
BOWIE, MD 20716

#### AGENT/ENGINEER:



#### MEDSTAR HARBOR HOSPITAL TIDAL WETLANDS RESTORATION

PROJECT LOCATION:  
MIDDLE BRANCH  
BALTIMORE CITY, MARYLAND



SCALE: 1"=400'

DATE: NOVEMBER 17, 2023

SHEET 12 OF 12