

U.S. Army Corps  
of Engineers  
Baltimore District

# Public Notice

In Reply to Application Number:  
CENAB-OP-RMN (ANNE ARUNDEL COUNTY DPW / BREWERS  
POND / SHORE EROSION CONTROL / MARSH CREATION)  
2015-60848-M18

PN 15-73

Comment Period: October 30, 2015 to November 30, 2015

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**THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM THE PUBLIC REGARDING THE WORK DESCRIBED BELOW. 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 of 1899 and/or Section 404 of the Clean Water Act (33. U.S.C. 1344)** as described below:

**APPLICANT:** Mr. Richard Osborn  
Anne Arundel County DPW  
2662 Riva Road, 3<sup>rd</sup> floor (MS-7301)  
Annapolis, Maryland 21401

**LOCATION AND WATERWAY:** The proposed project site is located in the Severn River at Brewer's Pond, Annapolis, Anne Arundel County, Maryland.

**PROPOSED WORK:** To install a living shoreline along an actively eroding shoreline which will provide approximately 9,167 square feet of high and low tidal marsh habitat; to reinstall approximately 500 linear feet of low profile stone revetment; to install 15 oyster reef structures (i.e., reef balls or equivalent) along 60 linear feet of shoreline; and to stabilize the western shore of the project area with approximately 360 linear feet of coir fiber logs and native tidal marsh plantings. The proposed project would result in approximately 18,750 square feet of temporary impact to tidal open water and approximately 2,093 square feet of temporary impact to tidal wetlands. Construction access will be from the water using a shallow water barge. The overall project will extend a maximum distance of 48 feet channelward from the approximate mean high water shoreline. The purpose of the project is to stabilize an eroding shoreline and restore and enhance the existing tidal marsh.

All work will be completed in accordance with the enclosed plans dated September 2015.

If you have any questions concerning this matter, please contact Mr. Richard Kibby of this office at 410-962-0694 or [richard.kibby@usace.army.mil](mailto:richard.kibby@usace.army.mil).

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 impacts of the work described above on the public interest will include application of the Clean Water Act 404(b)(1) Guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act.

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. 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 District Engineer, U.S. Army Corps of Engineers, Baltimore District, [Attn: Mr. Richard Kibby, CENAB-OP-RMN], P.O. Box 1715, Baltimore, Maryland, 21203-1715 or [richard.kibby@usace.army.mil](mailto:richard.kibby@usace.army.mil), within the comment period specified above.

**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 (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely effect Essential Fish Habitat (EFH).

The project site is adjacent to EFH as described under MSFCMA for windowpane flounder (*Scopthalmus aquosus*) juvenile and adult; blue fish (*Pomatomus saltatrix*) juvenile and adult; summer flounder (*Paralichthys dentatus*) juvenile and adult; and egg, larvae, juvenile and adult stages of red drum (*Sciaenops ocellatus*), king mackerel (*Scomberomorus cavalla*), spanish mackerel (*Scomberomorus maculatus*), and cobia (*Rachycentron canadum*), all managed species under the MSFCMA.

The project site lies within EFH for juvenile life stages of bluefish and juvenile and adult life stages of summer flounder. The project has the potential to adversely affect EFH or the species of concern by loss of spawning, nursery, forage and/or shelter habitat as described under the MSFCMA for the species and life stages identified above. The Baltimore District has made a preliminary determination that site-specific impacts would not be substantial and an abbreviated consultation will be conducted with NMFS. This determination may be modified if additional information indicates otherwise and would change the preliminary determination.

**WATER QUALITY CERTIFICATION:** The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act from the Maryland Department of the Environment. Any written comments concerning the work described above which relate to water quality certification must be received by the Maryland Department of the Environment, Tidal Wetlands Division, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708 within the comment period as specified above to receive consideration. MDE has a statutory limit of one year from the date of this public notice to make its decision.

**COASTAL ZONE MANAGEMENT PROGRAMS:** The applicant has certified in this application that the proposed activity complies with and will be conducted in a manner consistent with the Maryland Coastal Zone Management (CZM) Program. By this public notice, we are requesting the State concurrence or objection to the applicant's consistency statement. Public comments relating to consistency must be received by the Maryland Department of the Environment, Tidal Wetlands Division, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708 within the comment period specified above to receive consideration. MDE has a statutory limit of 6 months to concur or object to the applicant's consistency determination.

The applicant must obtain any State or local government permits which may be required.

A preliminary review of this application indicates that the proposed work will not affect Federal 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.

Review of the latest published version of the National Register of Historic Places indicates that no registered properties listed as eligible for inclusion, therein, are located at the site of the proposed work. Currently unknown archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the request permit.




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 by the District Engineer, U.S. Army Corps of Engineers, Baltimore District, [Attn: Mr. Richard Kibby, CENAB-OP-RMN], P.O. Box 1715, Baltimore, Maryland 21203-1715, 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.

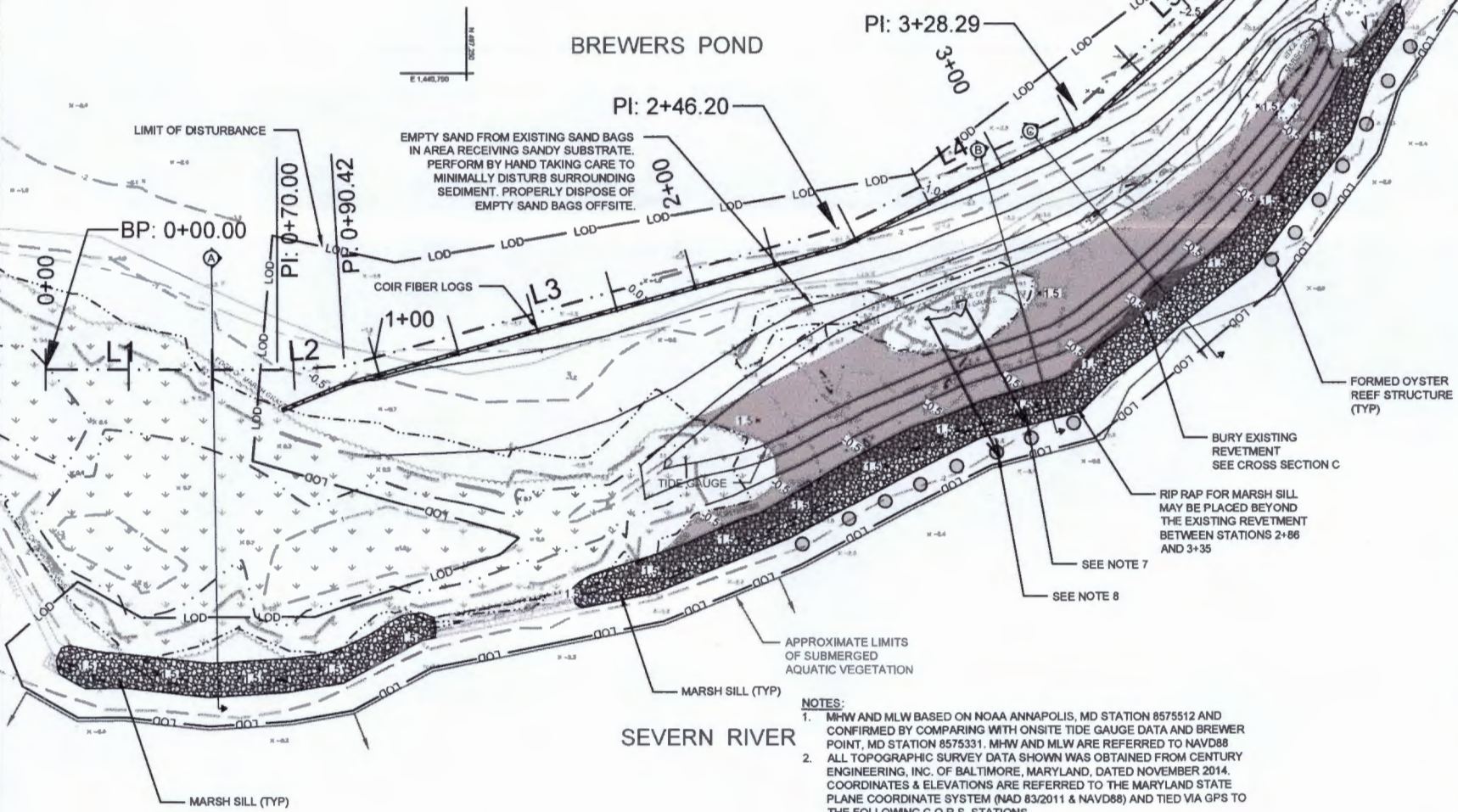
It is requested that you communicate this information concerning the proposed work to any persons know by you to be interested and not being known to this office, who did not receive a copy of this notice.

FOR THE DISTRICT ENGINEER:

Joseph P. DaVia  
Chief, Maryland Section Northern

**LEGEND**

- LOD — LIMIT OF DISTURBANCE
-  MARSH SILL
-  COIR FIBER LOGS
-  FORMED OYSTER REEF STRUCTURES

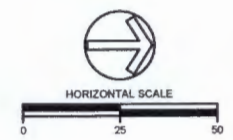


- NOTES:**
1. MHW AND MLW BASED ON NOAA ANNAPOLIS, MD STATION 8575512 AND CONFIRMED BY COMPARING WITH ONSITE TIDE GAUGE DATA AND BREWER POINT, MD STATION 8575331. MHW AND MLW ARE REFERRED TO NAVD88
  2. ALL TOPOGRAPHIC SURVEY DATA SHOWN WAS OBTAINED FROM CENTURY ENGINEERING, INC. OF BALTIMORE, MARYLAND, DATED NOVEMBER 2014. COORDINATES & ELEVATIONS ARE REFERRED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM (NAD 83/2011 & NAVD88) AND TIED VIA GPS TO THE FOLLOWING C.O.R.S. STATIONS.  
DK7737 ANP8 ANNAPOLIS 6 CORS ARP  
DL3640 LOYK LOYOLA LOYK CORS ARP  
AF9648 GODE GODDARD SPACE CTR CORS ARP
  3. PROJECT SITE OWNED BY ANNE ARUNDEL COUNTY, RIGHT OF WAY DIVISION, 2662 RIVA ROAD, ANNAPOLIS, MD 21401.
  4. PROPERTY TO SOUTH ACROSS THE WATER IS OWNED BY SHERWOOD FOREST CLUB, INC. GENERAL DELIVERY, SHERWOOD FOREST, MD 21405-0000.
  5. 750 CY IMPORTED SANDY SUBSTRATE
  6. 220 CY RIP RAP FOR MARSH SILL
  7. 40.95 FT. MARSH SILL MAXIMUM DISTANCE CHANNELWARD FROM MHW
  8. 47.74 FT. OYSTER REEF STRUCTURES MAXIMUM DISTANCE FROM MHW

ANNE ARUNDEL COUNTY, MD  
DEPARTMENT OF PUBLIC WORKS  
HERITAGE OFFICE COMPLEX  
2662 RIVA ROAD, 3RD FLOOR  
ANNAPOLIS, MARYLAND 21401

DATE ISSUES / REVISIONS

SEP 2015



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**BREWER'S POND  
SHORELINE  
PROTECTION  
PROJECT #P468700  
CONTRACT #P468706**

**TITLE: PROPOSED  
CONDITIONS**

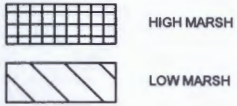
PROJECT NO.: 11011.07

SCALE: AS SHOWN

BY: SR, TB, RS      CHECK: DS

DWG. NO.: 3 OF 7

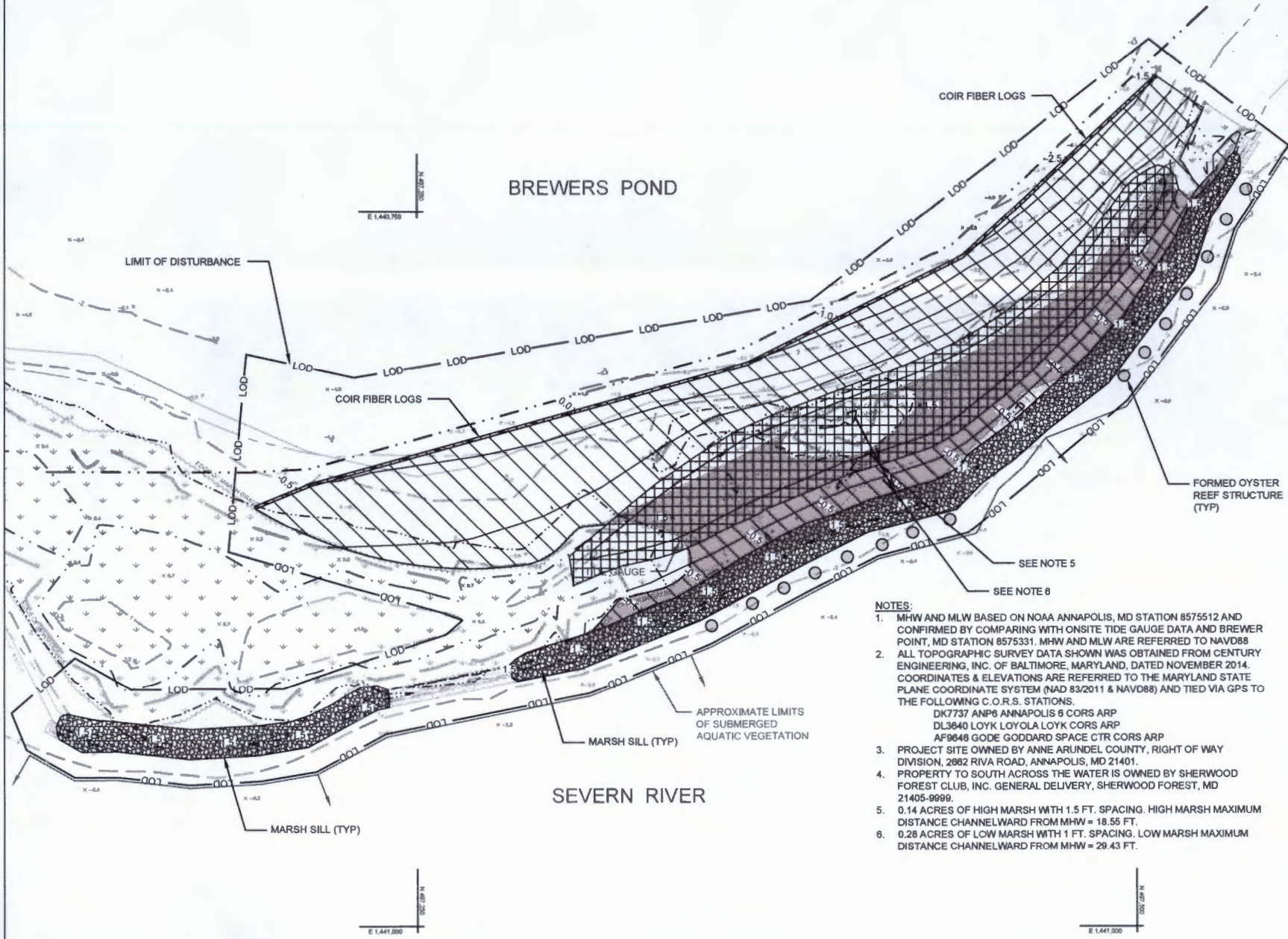
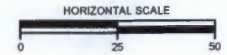
**LEGEND**



ANNE ARUNDEL COUNTY, MD  
 DEPARTMENT OF PUBLIC WORKS  
 HERITAGE OFFICE COMPLEX  
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 DK7737 ANP6 ANNAPOLIS 6 CORS ARP  
 DL3840 LOYK LOYOLA LOYK CORS ARP  
 AF9648 GODE GODDARD SPACE CTR CORS ARP
  - PROJECT SITE OWNED BY ANNE ARUNDEL COUNTY, RIGHT OF WAY DIVISION, 2662 RIVA ROAD, ANNAPOLIS, MD 21401.
  - PROPERTY TO SOUTH ACROSS THE WATER IS OWNED BY SHERWOOD FOREST CLUB, INC. GENERAL DELIVERY, SHERWOOD FOREST, MD 21405-9999.
  - 0.14 ACRES OF HIGH MARSH WITH 1.5 FT. SPACING. HIGH MARSH MAXIMUM DISTANCE CHANNELWARD FROM MHW = 18.55 FT.
  - 0.28 ACRES OF LOW MARSH WITH 1 FT. SPACING. LOW MARSH MAXIMUM DISTANCE CHANNELWARD FROM MHW = 29.43 FT.

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**BREWER'S POND  
 SHORELINE  
 PROTECTION  
 PROJECT #P468700  
 CONTRACT #P468706**

**TITLE:  
 PLANTING PLAN**

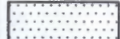
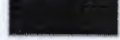

PROJECT NO.: 11011.07

SCALE: AS SHOWN

BY: SR, TB, RS      CHECK: DS

DWG. NO.: 4 OF 7

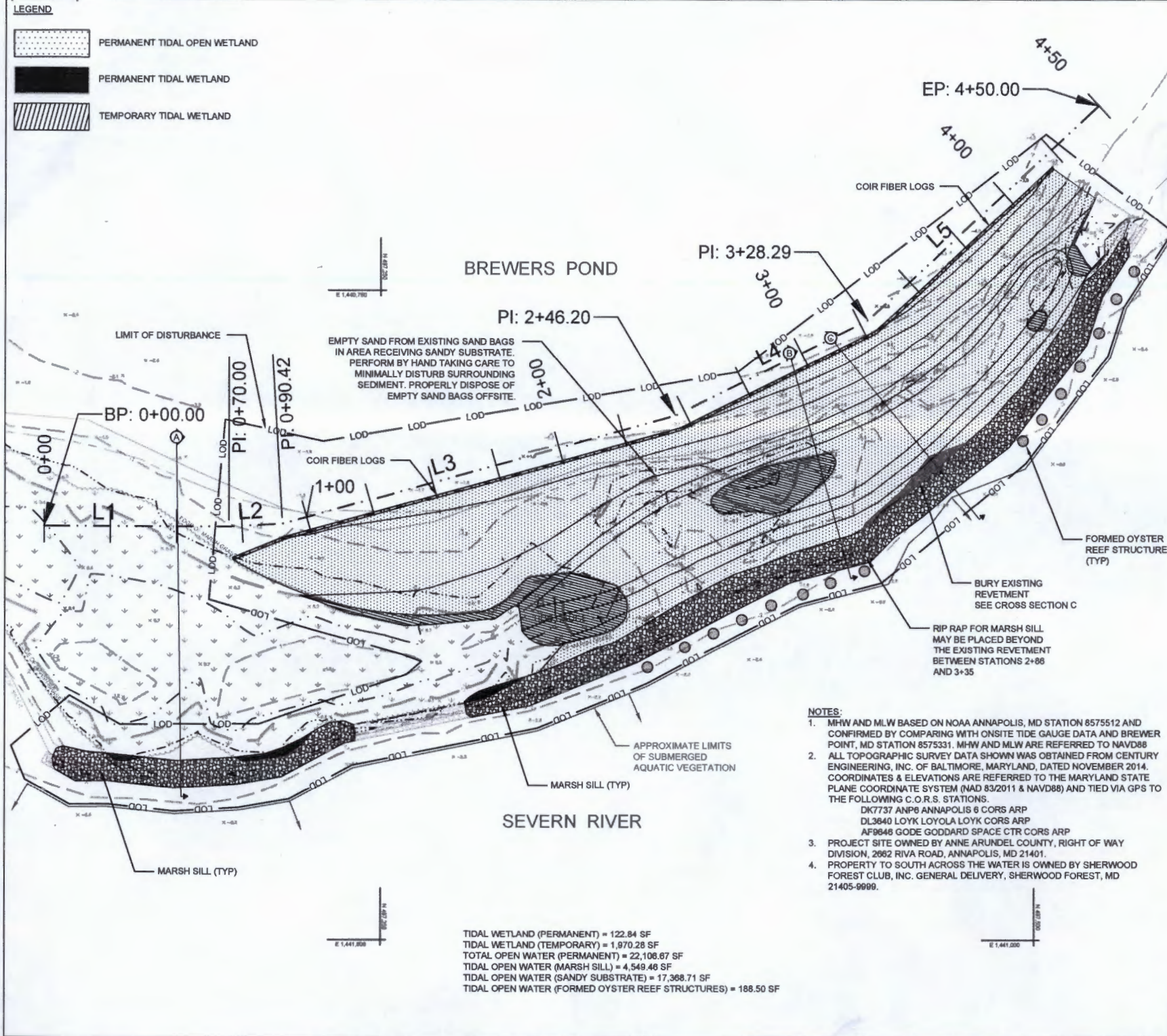
**LEGEND**

-  PERMANENT TIDAL OPEN WETLAND
-  PERMANENT TIDAL WETLAND
-  TEMPORARY TIDAL WETLAND

ANNE ARUNDEL COUNTY, MD  
DEPARTMENT OF PUBLIC WORKS  
HERITAGE OFFICE COMPLEX  
2662 RIVA ROAD, 3RD FLOOR  
ANNAPOLIS, MARYLAND 21401

DATE ISSUES / REVISIONS

SEP 2015



E 1,440,780

E 1,441,000

E 1,441,000

TIDAL WETLAND (PERMANENT) = 122.84 SF  
 TIDAL WETLAND (TEMPORARY) = 1,970.28 SF  
 TOTAL OPEN WATER (PERMANENT) = 22,106.87 SF  
 TIDAL OPEN WATER (MARSH SILL) = 4,549.46 SF  
 TIDAL OPEN WATER (SANDY SUBSTRATE) = 17,368.71 SF  
 TIDAL OPEN WATER (FORMED OYSTER REEF STRUCTURES) = 188.50 SF

EMPTY SAND FROM EXISTING SAND BAGS  
IN AREA RECEIVING SANDY SUBSTRATE.  
PERFORM BY HAND TAKING CARE TO  
MINIMALLY DISTURB SURROUNDING  
SEDIMENT. PROPERLY DISPOSE OF  
EMPTY SAND BAGS OFFSITE.

BURY EXISTING  
REVEMENT  
SEE CROSS SECTION C

RIP RAP FOR MARSH SILL  
MAY BE PLACED BEYOND  
THE EXISTING REVEMENT  
BETWEEN STATIONS 2+86  
AND 3+35

- NOTES:**
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**BREWER'S POND  
SHORELINE  
PROTECTION  
PROJECT #P468700  
CONTRACT #P468706**

TITLE: **IMPACT PLAN**

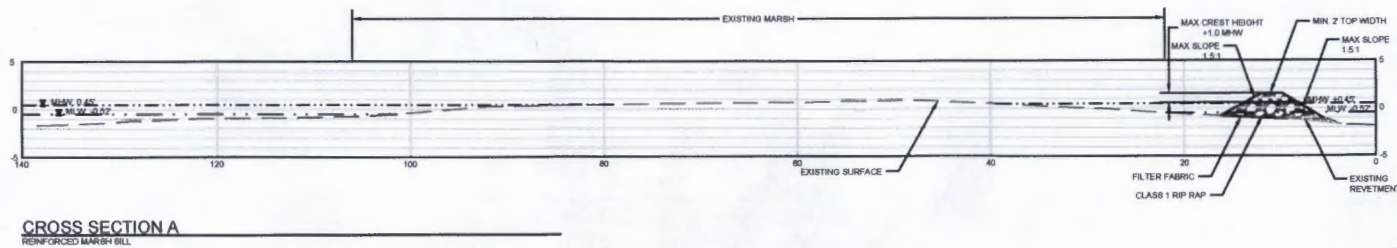
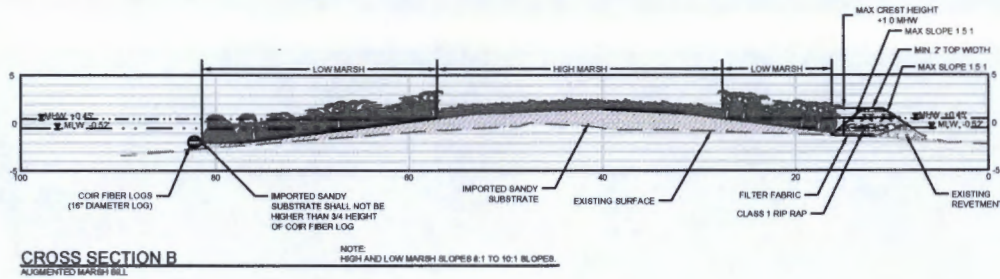
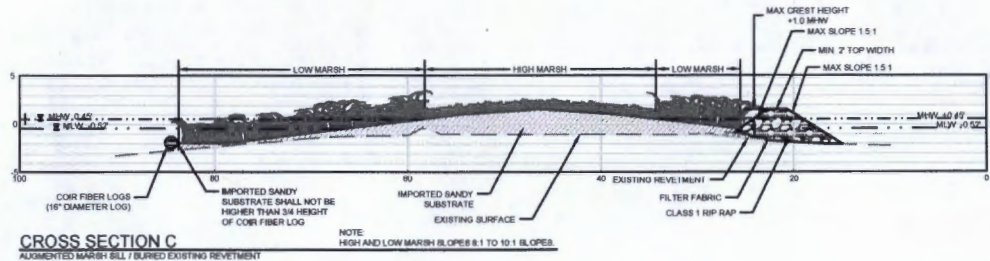
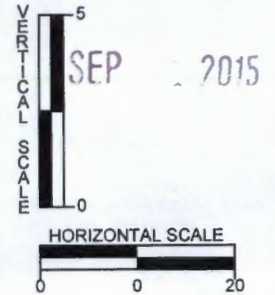
PROJECT NO.: **11011.07**

SCALE: **AS SHOWN**

BY: SR, TB, RS CHECK: DS

DWG. NO.: **5 OF 7**

DATE ISSUES / REVISIONS



NOTES:  
 MAXIMUM CHANNELWARD DISTANCE =  
 CLEAN SANDY SUBSTRATE FILL =  
 RIPRAP =  
 HIGH MARSH PLANTING AREA =  
 LOW MARSH PLANTING AREA =

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**BREWER'S POND  
 SHORELINE  
 PROTECTION  
 PROJECT #P468700  
 CONTRACT #P468706**

TITLE: **PROFILE**

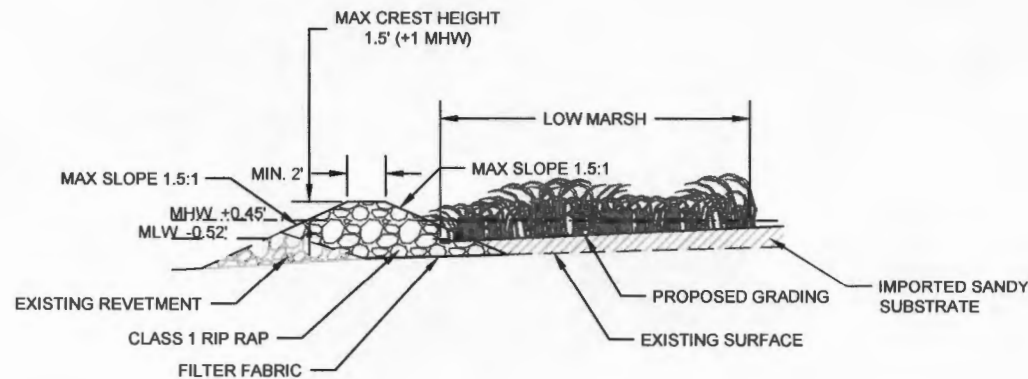
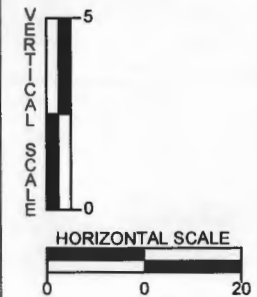
PROJECT NO.: **11011.07**

SCALE: **AS SHOWN**

BY: **SR, TB, RS** CHECK: **DS**

DWG. NO.: **6 OF 7**

SEP 22 2015

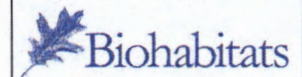


NOTE:

1. IMPORTED SANDY SUBSTRATE MUST BE USED FOR ALL FILL MATERIAL. ONSITE MATERIAL IS NOT SUITABLE FOR RE-USE.
2. REFER TO CROSS SECTIONS AND CROSS SECTION A-C DETAILS, FOR MORE DETAIL ABOUT MARSH SILL.
3. TIE THE SEVERN RIVER SIDE OF MARSH SILL INTO EXISTING REVETMENT, DO NOT PLACE RIP-RAP BEYOND EXISTING REVETMENT WITH THE EXCEPTION OF BETWEEN STATION 2+88 AND 3+35.
4. WHERE PLACING IMPORTED SANDY SUBSTRATE ON MARSH SIDE OF MARSH SILL, BURY RIPRAP AS NEEDED TO ACHIEVE PROPOSED GRADE OF -0.5 ALONG MARSH SILL.

**MARSH SILL  
 PROFILE**

NOT TO SCALE



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**BREWER'S POND  
 SHORELINE  
 PROTECTION  
 PROJECT #P468700  
 CONTRACT #P468706**

TITLE: **DETAILS**

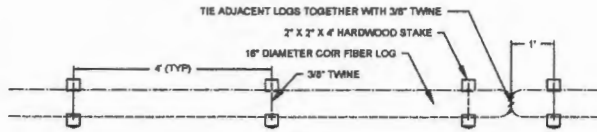
PROJECT NO.: **11011.07**

SCALE: **NA**

BY: **SR, TB, RS** CHECK: **DS**

DWG. NO.: **7 OF 7**

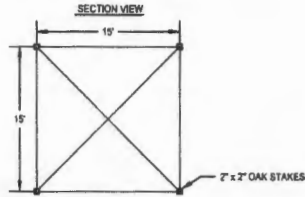
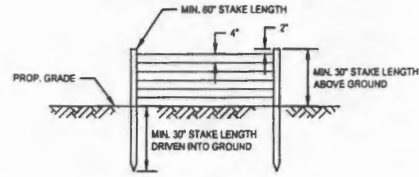




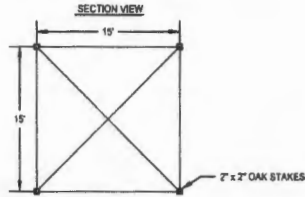
- CONSTRUCTION NOTES:**
- LACE ENDS OF ADJACENT COIR FIBER LOGS WITH TWINE BY MAKING A NUMBER OF PASSES IN THE END NETTING BETWEEN LOGS.
  - SPACE HARDWOOD STAKES AT 4' INTERVALS ALONG THE LENGTH OF COIR FIBER LOG. SPACE HARDWOOD STAKES 1 FOOT FROM THE END OF THE COIR FIBER LOG.

**COIR FIBER LOGS**  
PLAN VIEW - TYPICAL

NOT TO SCALE



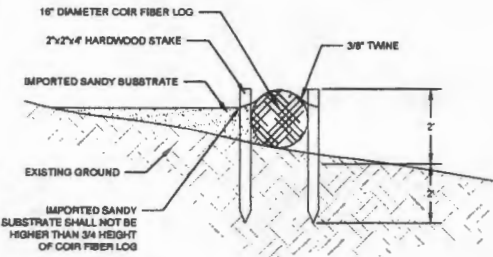
SECTION VIEW



- CONSTRUCTION NOTES:**
- GOOSE EXCLUSION FENCE TO REMAIN IN PLACE FOR A PERIOD OF 2 YEARS UNTIL PLANT MATERIAL IS ESTABLISHED.
  - REGULAR MAINTENANCE & REPLACEMENT OF TWINE AND STAKES WILL BE NECESSARY DURING THIS TIME.
  - GOOSE FENCING SHALL ENCLOSE THE ENTIRETY OF THE MARSH PLANTING AREA.
  - STRANDS SHALL BE PLACED EVERY 4" FROM SUBSTRATE TO 2" FROM TOP OF STAKE.
  - A SINGLE STRAND SHALL BE ATTACHED DIAGONALLY BETWEEN TOPS OF STAKES.

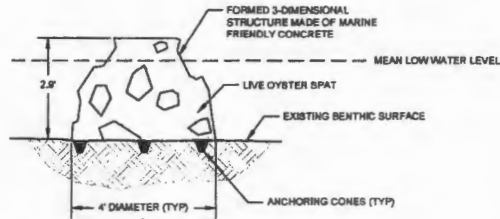
**GOOSE FENCE**

NOT TO SCALE



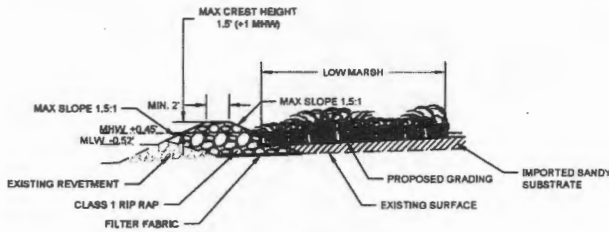
**COIR FIBER LOG**  
SECTION

NOT TO SCALE



**FORMED OYSTER REEF STRUCTURE**  
SECTION VIEW

NOT TO SCALE



- NOTE**
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  - REFER TO CROSS SECTIONS AND CROSS SECTION A-C DETAILS, FOR MORE DETAIL ABOUT MARSH SILL.
  - TIE THE BEVERLY RIVER SIDE OF MARSH SILL INTO EXISTING REVETMENT. DO NOT PLACE RIP-RAP BEYOND EXISTING REVETMENT WITH THE EXCEPTION OF BETWEEN STATION 2+80 AND 3+35.
  - WHERE PLACING IMPORTED SANDY SUBSTRATE ON MARSH SIDE OF MARSH SILL, BURY RIP-RAP AS NEEDED TO ACHIEVE PROPOSED GRADE OF +0.5 ALONG MARSH SILL.

**MARSH SILL**  
PROFILE

NOT TO SCALE

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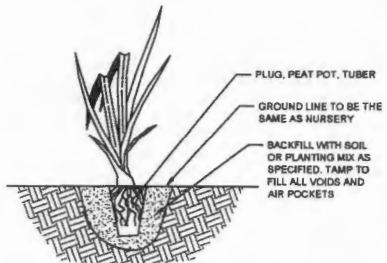


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fx: 410.554.0168 / www.biohabitats.com

Restoring the Planet with Ecological Groundwork

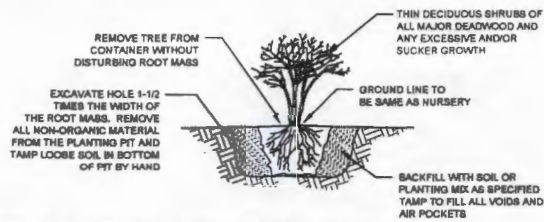
REVISION		APPROVED	DATE	APPROVED	DATE	SCALE	HYD	ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS	
DATE	BY	DATE	BY	DATE	BY	DATE	BY	PROJECT NO.	PROJECT NAME
								13812P	BREWER'S POND SHORELINE PROTECTION
								13812P	DETAILS

REVISED



**HERBACEOUS PLANTING - PLUGS**

NOT TO SCALE



**SHRUB PLANTING - CONTAINER GROWN**

NOT TO SCALE



O.M.S- AN OVERALL MINIMUM SPACING DISTANCE 'O.M.S.' IS ASSIGNED TO THE PLANTING CONFIGURATION 'SEE PLANT SCHEDULE'  
 I.M.S- AN INDIVIDUAL MINIMUM SPACING DISTANCES 'I.M.S.' IS ASSIGNED TO EACH INDIVIDUAL SPECIES 'SEE PLANT SCHEDULE'

**PLANT SPACING - RANDOM**

NOTE: EACH SYMBOL INDICATES A DIFFERENT SPECIES

**PLAN VIEW**

NOT TO SCALE

**PLANTING NOTES:**

1. PRIOR TO PLANTING, CONTRACTOR SHALL ADJUST GRADING AS NEEDED, TO MEET GRADES SHOWN ON THE GRADING PLAN. CONTRACTOR SHALL CONFIRM PLANTING ZONES WITH ENGINEER PRIOR TO PLANTING.
2. PLANTING OF SPECIES CAN BE MIXED ALONG PLANTING ZONE BOUNDARIES. MIX PLUGS OF LOW MARSH AND HIGH MARSH SPECIES FOR 2-3 ROWS WHERE PLANTING ZONES MEET.
3. ACCESS SHALL BE FROM THE WATER USING A SHALLOW-WATER BARGE OR SIMILAR VESSEL THAT WILL AVOID / MINIMIZE IMPACT TO ADJACENT SUBMERGED AQUATIC VEGETATION. NO STOCKPILING SHALL OCCUR ON LAND.

**Phrase of Documents**

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 Restore the Future with Innovative Environmental Solutions

**PLANT COMPOSITION SCHEDULE**  
**ZONE 1 - HIGH MARSH** Size (acres): 0.14

Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
1.5	1890			NATIVE PLUG					
	30	782	782	Spartina patens	saltmarsh reed	PLUG	Clump	2'	3
	5	132	782	Distichlis spicata	saltpine	PLUG	Clump	2'	3
	5	132	132	Sagittaria arifolia	water spade	CON	Clump	Quart	7
	5	132	132	Ablachia macrostachya	swamp rose mallow	CON	Clump	Quart	7
	10	264	264	Saururus cymocarpus	big cordgrass	PLUG	Clump	2'	5
	5	132	132	Iva frutescens	high-tide bush	CON	Clump	Duffin	7
	15	396	396	Sagittaria arifolia	saltmarsh arrowhead	PLUG	Clump	2'	4
	100	3600	3600	= total					

**PLANT COMPOSITION SCHEDULE**  
**ZONE 2 - LOW MARSH** Size (acres): 0.28

Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
1	4300			NATIVE PLUG					
	80	782	782	Spartina alterniflora	cordgrass	PLUG	Clump	2'	1
	40	480	480	Sagittaria arifolia	arrowhead	PLUG	Clump	2'	2
	100	1280	1280	= total					

**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

REVISED	DATE	BY	APPROVED	DATE	BY	PROJECT NUMBER	BREWER'S POND SHORELINE PROTECTION

**PLANTING DETAILS AND SCHEDULE**

REVISION