



# Maryland

## Department of the Environment

Larry Hogan, Governor  
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

February 16, 2021

Chesapeake Bay Foundation  
c/o Bayland Consultants & Designers  
7455 New Ridge Rd, Ste T  
Hanover, MD 21076

Re: Agency Interest Number: 95095  
Tracking Number: 202060978  
Tidal Authorization Number: 20-WQC-0054

Dear Chesapeake Bay Foundation:

Your project did not qualify for approval under the Maryland State Programmatic General Permit (MDSPGP); therefore a separate review and issuance of the federal permit will be required by the U.S. Army Corps of Engineers. The federal permit is not attached.

Additionally, your project required a Wetlands License to be approved and issued by the Maryland Board of Public Works (BPW). The Wetlands License will be sent to you by the BPW's Wetlands Administrator.

A project that does not qualify for approval under the MDSPGP requires an individual Water Quality Certification (WQC) to be issued by the Maryland Department of the Environment, which is attached. Please take a moment to read and review your WQC to ensure that you understand the limits of the authorized work and all of the general and special conditions.

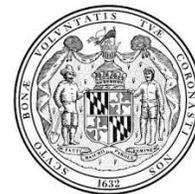
You should not begin any work until you have obtained all necessary State, local, and federal authorizations. Please contact Heather Hepburn at 410-537-3789 with any questions.

Sincerely,

Danielle Spendiff, Chief  
Western Region  
Tidal Wetlands Division



STATE OF MARYLAND  
DEPARTMENT OF THE ENVIRONMENT  
WATER AND SCIENCE ADMINISTRATION  
WATER QUALITY CERTIFICATION



**20-WQC-0054**

EFFECTIVE DATE: **February 16, 2021**  
CERTIFICATION HOLDER: **Chesapeake Bay Foundation**  
ADDRESS: **6 Herndon Avenue**  
**Annapolis, MD 21403**  
PROJECT LOCATION: **1917 Holly Beach Farm Road**  
**Annapolis, MD 21401**  
**Whitehall Creek in Anne Arundel**

**UNDER AUTHORITY OF SECTION 401 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND ITS AMENDMENTS AND IN ACCORDANCE WITH § 9-313 THROUGH § 9-323, INCLUSIVE, OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND, THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION HAS DETERMINED THAT THE REGULATED ACTIVITIES DESCRIBED IN THE REQUEST FOR CERTIFICATION FOR THE PROPOSED CHESAPEAKE BAY FOUNDATION LIVING SHORELINE AND AS DESCRIBED IN THE ATTACHED PLAN SHEETS DATED AUGUST 19, 2020 AND ANY SUBSEQUENT MODIFICATIONS APPROVED BY THE DEPARTMENT WILL NOT VIOLATE MARYLAND'S WATER QUALITY STANDARDS, IF CONDUCTED IN ACCORDANCE WITH THE CONDITIONS OF THIS CERTIFICATION.**

THIS CERTIFICATION DOES NOT RELIEVE THE APPLICANT OF RESPONSIBILITY FOR OBTAINING ANY OTHER APPROVALS, LICENSES, OR PERMITS IN ACCORDANCE WITH FEDERAL, STATE, OR LOCAL REQUIREMENTS AND DOES NOT AUTHORIZE COMMENCEMENT OF THE PROPOSED PROJECT. A COPY OF THIS REQUIRED CERTIFICATION HAS BEEN SENT TO THE CORPS OF ENGINEERS. THE CERTIFICATION HOLDER SHALL COMPLY WITH THE CONDITIONS LISTED BELOW.

## **PROJECT DESCRIPTION**

1. Construct 1,993 linear feet of segmented breakwaters extending a maximum of 70 feet channelward of the mean high water line; fill and grade with 6,075 cubic yards of sand along 2,085 feet of eroding shoreline and plant with approximately 49,972 square feet marsh vegetation; install woody debris features; and remove or bury existing shoreline structures as needed during construction.

# **GENERAL CONDITIONS**

1. This Certification does not obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.

Statement of Necessity for Condition: The condition is necessary to ensure that water quality standards are met under unique circumstances for discharges which may otherwise qualify under the certified Nationwide Permits.

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10G(3); COMAR 26.08.02.06; COMAR 26.24; COMAR 26.23.02.06

2. This Certification does not authorize any injury to private property, any invasion of rights, or any infringement of federal, state, or local laws or regulations.

Statement of Necessity for Condition: The condition is necessary to clarify the scope of this certification to ensure compliance with water quality regulations, without limiting restrictions through other requirements.

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08, COMAR 26.08.02.10E; COMAR 26.23.02.06; COMAR 26.24

3. The Certification Holder shall allow authorized representatives of the Department access to the site of authorized activities during normal business hours to conduct inspections and evaluations of the operations and records necessary to assure compliance with this Certification.

Statement of Necessity for Condition: Conditions of certification involve precise actions to comply with water quality standards. Site inspection may be necessary to ensure that limits, methods, and other requirements are met to ensure that water quality standards are met and designated uses are maintained.

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.23.02.06; COMAR 26.24;

4. This Certification is valid for the project identified herein and the associated U.S. Army Corps of Engineers authorization NAB-2020-60978 until such time that it expires or is not administratively extended.

Statement of Necessity for Condition: This condition is necessary to qualify the period of applicability of the terms and conditions of this Certification to be protective of Maryland water quality standards.

Citations: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; 40 C.F.R. 121, 15 C.F.R. 930, Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title

## **SPECIAL CONDITIONS**

1. The Certificate Holder shall construct the marsh establishment area in accordance with the following conditions:
  - a. The Certificate Holder shall use clean substrate fill material, no more than 10% of which shall pass through a standard number 100 sieve.
  - b. The marsh establishment area shall be planted within one year following completion of the filling operation.
  - c. The marsh establishment project shall be maintained as a wetland, with non-nuisance species' aerial coverage of at least 85% for three consecutive years. If 85% coverage is not attained, the reasons for failure shall be determined, corrective measures shall be taken, and the area shall be replanted.
  - d. If the fill is graded hydraulically, the Certificate Holder shall use a turbidity curtain around the perimeter of the instream work.
  - e. If the existing bank is to be cleared or graded:
    - i. The Certificate Holder shall perform all work under and in accordance with an approved Soil Erosion and Sediment Control Plan from the applicable sediment and erosion control agency; and
    - ii. The Certificate Holder shall perform all work under and in accordance with the Critical Area requirements of the local jurisdiction in the form of an approved Buffer Management Plan.

Statement of Necessity for Condition: Stabilization of the site with vegetation is required to ensure that waters continue to meet designated uses. Loss of substrate fill material and use of material exceeding limits of the condition may result in discharges which reduce water quality and interfere with designated uses, including the support of estuarine and marine aquatic life, and the protection of shellfish harvesting, shallow water submerged aquatic vegetation, and migratory fish spawning and nurseries in tidal wetlands. Additionally, the issuance of the water quality certification does not relieve the applicant of their responsibility to comply at all times with federal and State law.

Citations: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; Env. Article, Title 4, Subtitle 1; COMAR 26.08; COMAR 26.08.02.02.B.(3); COMAR 26.08.02.03-3.C.(2)d.(5); COMAR 26.08.02.03.A.(1)(b); COMAR 26.08.02.03.B.(1)-(5); COMAR 26.08.02.10.E.(2); COMAR 26.24; COMAR 26.17.01

2. The Certificate Holder shall accept the terms of the attached marsh maintenance plan by signing and returning the standard plan to the Water and Science Administration, Tidal Wetlands Division prior to commencement of any work authorized under this Certification. If the Certificate Holder wishes to propose an alternative marsh maintenance plan, the alternative plan must be submitted to and approved by the Tidal Wetlands Division, Water and Science Administration, prior to commencement of any work authorized under this Certification. Any alternative plan must provide assurances of success that are at least equivalent to those of the standard plan, in terms of the extent of native marsh plant coverage, elimination of invasive species and timeframe for plant establishment.

Statement of Necessity for Condition: Stabilization of the site with vegetation is required to ensure that waters continue to meet designated uses. Loss of substrate fill material may result in discharges which reduce water quality and interfere with designated uses, including the support of estuarine and marine aquatic life, and the protection of shellfish harvesting, shallow water submerged aquatic vegetation, and migratory fish spawning and nurseries in tidal wetlands. Loss limits will maintain the designated use.

Citations: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B.(3); COMAR 26.08.02.03-3.C.(2)d.(5); COMAR 26.24

2. The Certificate Holder shall construct at least ten vents (opening in the stone edging), to facilitate marsh flushing and shall be located along the stone edging as depicted on the attached plans.

Statement of Necessity for Condition: Requirements to structures allow for tidal flushing through marsh establishment projects which ensures that numeric standards for dissolved oxygen and temperature may be met. Failure to meet numeric standards for temperature and dissolved oxygen levels may result in conditions that do not support shallow water submerged aquatic vegetation, shellfish harvesting, fish spawning and nurseries, and fish and shellfish survival and growth.

Citations: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B.(3); COMAR 26.08.02.02-1.; COMAR 26.08.02.03-3.C.(3)(a); COMAR 26.08.02.03-3.C.(8)d.; COMAR 26.24

3. The Certificate Holder shall deploy and maintain a turbidity curtain tightly around and channelward of the project area prior to any excavation and backfilling along the shoreline through completion of any excavation and backfilling along the shoreline.

Statement of Necessity for Citation: The discharge and deposition of material within or adjacent to regulated resources may result in discharges that result in impacts to water quality criteria and designated uses, including standards for turbidity and clarity.

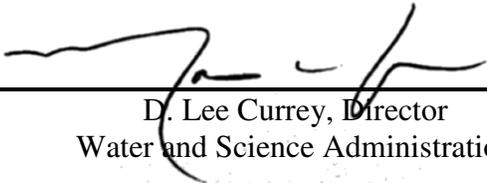
Citations: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B.(3); COMAR 26.08.02.03-3.C.(2)d.(5); COMAR 26.24

4. The Certificate Holder shall not perform any construction from November 15th through March 1st of any year to protect wintering waterfowl. The proposed project site is located in a Historic Waterfowl Concentration Area.

Statement of Necessity: A time of year restriction is necessary to allow for wintering waterfowl to move from breeding areas to seasonally use suitable winter habitat. Breeding and wintering habitat are both essential to support waterfowl populations. Breeding habitat would not sustain waterfowl during winter. Disturbance during the closure period would interfere directly or indirectly with designated uses.

Citations: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B.(3); 26.08.02.02.B.(1)(d); COMAR 26.08.02.03.B.(1)(b); COMAR 26.08.02.03.B.(2)(e); COMAR 26.24

**CERTIFICATION APPROVED**

  
\_\_\_\_\_  
D. Lee Currey, Director  
Water and Science Administration

2/16/2021  
\_\_\_\_\_  
Date

Tracking Number: 202060978  
Agency Interest Number: 95095

Effective Date: February 16, 2021

Enclosure: Plan Sheets dated August 19, 2020

cc: WSA Inspection & Compliance Program  
Army Corps of Engineers



ANNE ARUNDEL COUNTY ADC MAP COORDINATES:  
 MAP 21 GRID K-6,7

MAP COPYRIGHT ©ADC THE MAP PEOPLE, (800) 829-6277  
 PERMITTED USE NUMBER 031205BJE.

**HOLLY BEACH FARM  
 CONSERVATION EASEMENT  
 LIVING SHORELINE**

**ANNE ARUNDEL COUNTY**

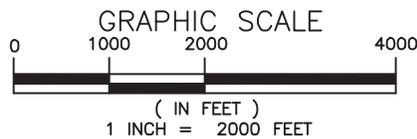
APPL. BY: THE CHESAPEAKE BAY  
 FOUNDATION

**VICINITY MAP**

DATE: REVISED AUGUST 2020 SHEET 1 OF 11

20-WQC-0054  
 202060978  
 95095  
 8/19/2020  
 1 of 11

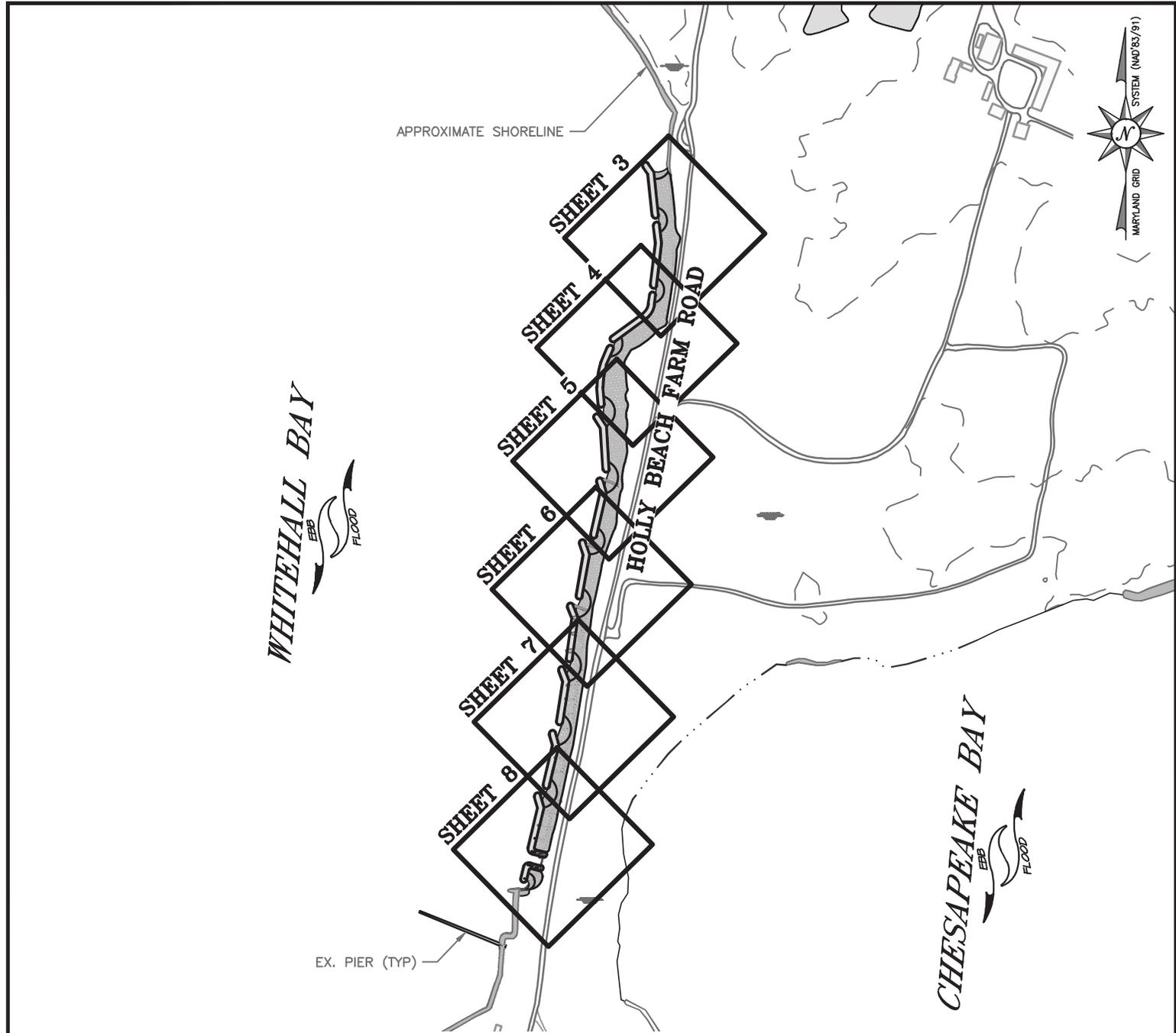
NOTE:  
 BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
 2016 PLANIMETRICS AND 2017 IMAGERY.



**Bayland**  
 Consultants & Designers, Inc.  
 "Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
 Hanover, Maryland 21076 Fax: (410) 694-9405  
 www.baylandinc.com

Z:\5\_17801\_GOOSE\_CREEK\_&\_HOLLY\_CONSERVATION\_LIS\CAD FILES\SHEET FILES\HOLLY 5\_17801\_1.PAT01.DWG



HOLLY BEACH FARM  
 CONSERVATION EASEMENT  
 LIVING SHORELINE

ANNE ARUNDEL COUNTY

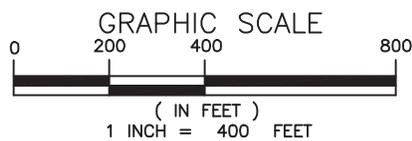
APPL. BY: THE CHESAPEAKE BAY  
 FOUNDATION

KEY SHEET

DATE: REVISED AUGUST 2020 SHEET 2 OF 11

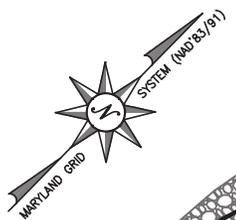
20-WQC-0054  
 202060978  
 95095  
 8/19/2020  
 2 of 11

NO BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
 2016 PLANIMETRICS AND 2017 IMAGERY.



**BayLand**  
 Consultants & Designers, Inc.  
 "Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
 Hanover, Maryland 21076 Fax: (410) 694-9405  
 www.baylandinc.com



**WHITEHALL BAY**  
 EBB FLOOD

PR. TURBIDITY CURTAIN TO BE INSTALLED IN 400' INTERVALS IN CONJUNCTION WITH THE ACTIVE CONSTRUCTION SITE, PHASED ACCORDINGLY.

PR. 159 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

PR. 183 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

EX. RIP RAP  
 (TO BE REMOVED AS NEEDED FOR CONSTRUCTION)

**HOLLY BEACH FARM ROAD**

PR. SAND FILL (TYP)  
 (87,482 SF - ENTIRE SITE)

EX. BULKHEAD  
 (TO BE REMOVED AS NEEDED FOR CONSTRUCTION)

PR. LOW MARSH PLANTINGS  
 (24,126 SF - ENTIRE SITE)

PR. HIGH MARSH PLANTINGS  
 (46,408 SF - ENTIRE SITE)  
 25,846 SF channelward of existing MHWL

**HATCH LEGEND**

	PR. SAND FILL
	PR. LOW MARSH PLANTINGS
	PR. HIGH MARSH PLANTINGS

**HOLLY BEACH FARM  
 CONSERVATION EASEMENT  
 LIVING SHORELINE**

**ANNE ARUNDEL COUNTY**

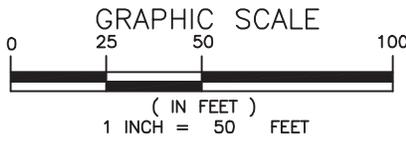
APPL. BY: THE CHESAPEAKE BAY  
 FOUNDATION

**SITE PLAN**

DATE: REVISED AUGUST 2020 SHEET 3 OF 11

20-WQC-0054  
 202060978  
 95095  
 8/19/2020  
 3 of 11

NOTE:  
 BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
 2016 PLANIMETRICS AND 2017 IMAGERY.

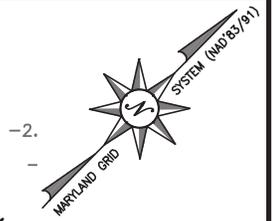


**Bay & Sand**  
 Consultants & Designers, Inc.  
 "Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
 Hanover, Maryland 21076 Fax: (410) 694-9405  
 www.baylandinc.com

Z:\5\_17801\_GOOSE\_CREEK\_&\_HOLLY\_CONSERVATION\_LIS\CAD FILES\SHEET FILES\HOLLY 5\_17801\_IPAT03.DWG

**WHITEHALL BAY**



PR. TURBIDITY CURTAIN TO BE INSTALLED IN 400' INTERVALS IN CONJUNCTION WITH THE ACTIVE CONSTRUCTION SITE, PHASED ACCORDINGLY.

PR. 187 LF STONE BREAKWATER  
TOP EL. +2.5' MLW  
(70' MAX. ENCROACHMENT FROM MHW)

±10' GAP FROM BOTTOM OF STONE

±10' GAP FROM BOTTOM OF STONE

PR. 175 LF STONE BREAKWATER  
TOP EL. +2.5' MLW  
(70' MAX. ENCROACHMENT FROM MHW)

-2.2

-1.9

-1.9

TC

PR. SAND FILL (TYP)  
(87,482 SF - ENTIRE SITE)

PR. LOW MARSH PLANTINGS  
(24,126 SF - ENTIRE SITE)

EX. MHW

EX. MLW

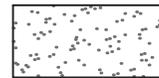
EX. BULKHEAD  
(TO BE REMOVED AS  
NEEDED FOR CONSTRUCTION)

PR. HIGH MARSH PLANTINGS  
(46,408 SF - ENTIRE SITE)

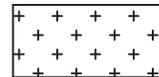
25,846 SF channelward of  
existing-MHWL

HOLLY BEACH FARM ROAD

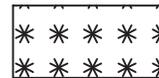
**HATCH LEGEND**



PR. SAND FILL



PR. LOW MARSH PLANTINGS



PR. HIGH MARSH PLANTINGS

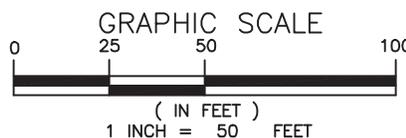
HOLLY BEACH FARM  
CONSERVATION EASEMENT  
LIVING SHORELINE

ANNE ARUNDEL COUNTY

APPL. BY: THE CHESAPEAKE BAY  
FOUNDATION

SITE PLAN

DATE: REVISED AUGUST 2020 SHEET 4 OF 11



NOTE:  
BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
2016 PLANIMETRICS AND 2017 IMAGERY.

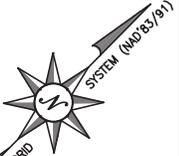
**BayLand**  
Consultants & Designers, Inc.  
"Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
Hanover, Maryland 21076 Fax: (410) 694-9405  
www.baylandinc.com

20-WQC-0054  
202060978  
95095  
8/19/2020  
4 of 11

Z:\5\_17801\_GOOSE\_CREEK\_&\_HOLLY\_CONSERVATION\_LIS\CAD\_FILES\SHEET\_FILES\HOLLY\_5\_17801\_JPAT04.DWG

**WHITEHALL BAY**  
 EBB FLOOD



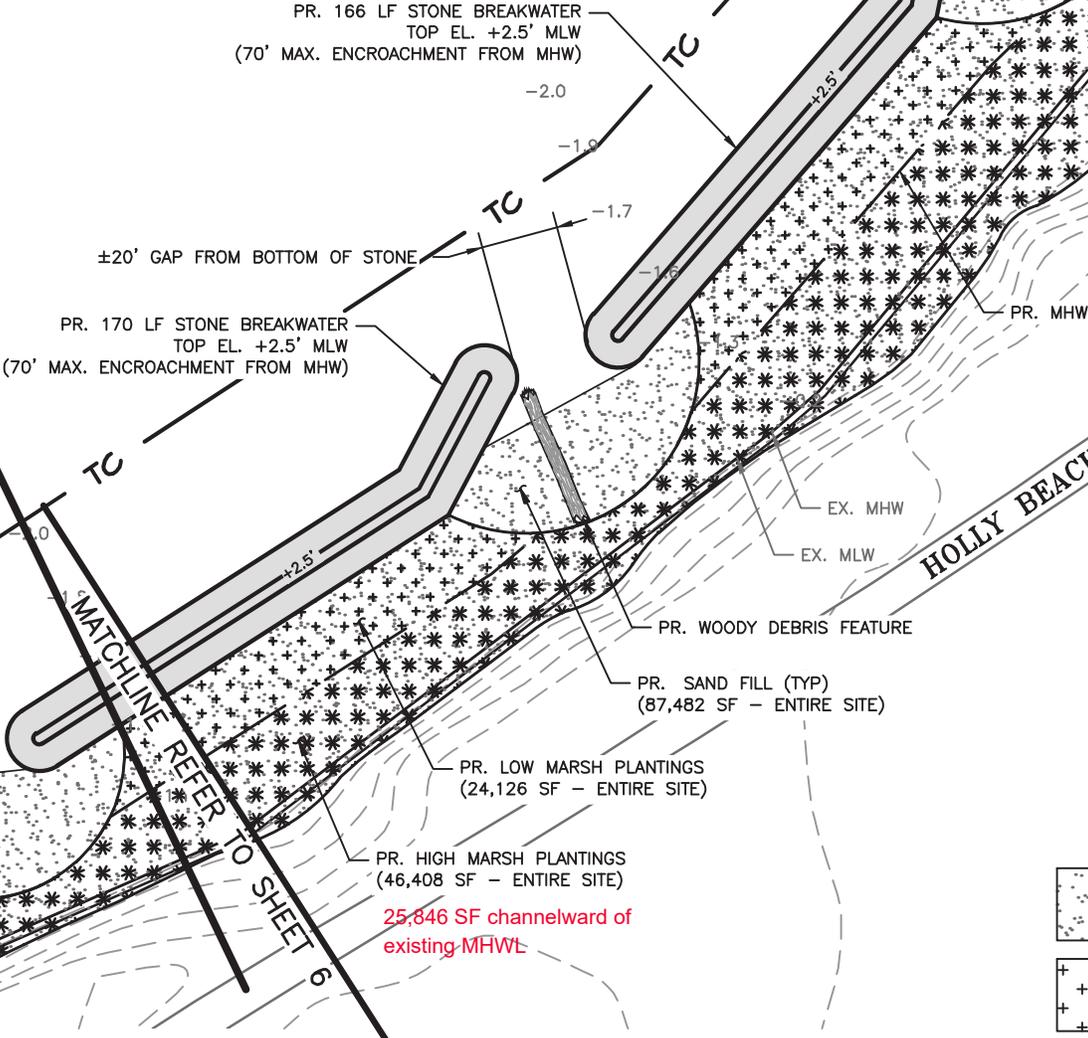
PR. TURBIDITY CURTAIN TO BE INSTALLED IN 400' INTERVALS IN CONJUNCTION WITH THE ACTIVE CONSTRUCTION SITE, PHASED ACCORDINGLY.

PR. 166 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

PR. 170 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

EX. BULKHEAD  
 (TO BE REMOVED AS NEEDED FOR CONSTRUCTION)

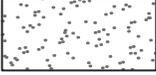
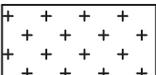
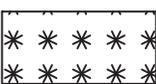
MATCHLINE REFER TO SHEET 4  
 MATCHLINE REFER TO SHEET 6



TAX ID 03-000-90005158  
 CHESAPEAKE BAY FOUNDATION INC.  
 T.M. 47 GRID 14 P. 47  
 DEED: 11638/689  
 PLAT: 243/2

25,846 SF channelward of existing MHWL

**HATCH LEGEND**

-  PR. SAND FILL
-  PR. LOW MARSH PLANTINGS
-  PR. HIGH MARSH PLANTINGS

**HOLLY BEACH FARM  
 CONSERVATION EASEMENT  
 LIVING SHORELINE**

**ANNE ARUNDEL COUNTY**

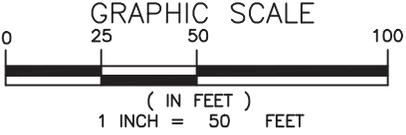
APPL. BY: THE CHESAPEAKE BAY  
 FOUNDATION

**SITE PLAN**

DATE: REVISED AUGUST 2020 SHEET 5 OF 11

20-WQC-0054  
 202060978  
 95095  
 8/19/2020  
 5 of 11

NOTE:  
 BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
 2016 PLANIMETRICS AND 2017 IMAGERY.



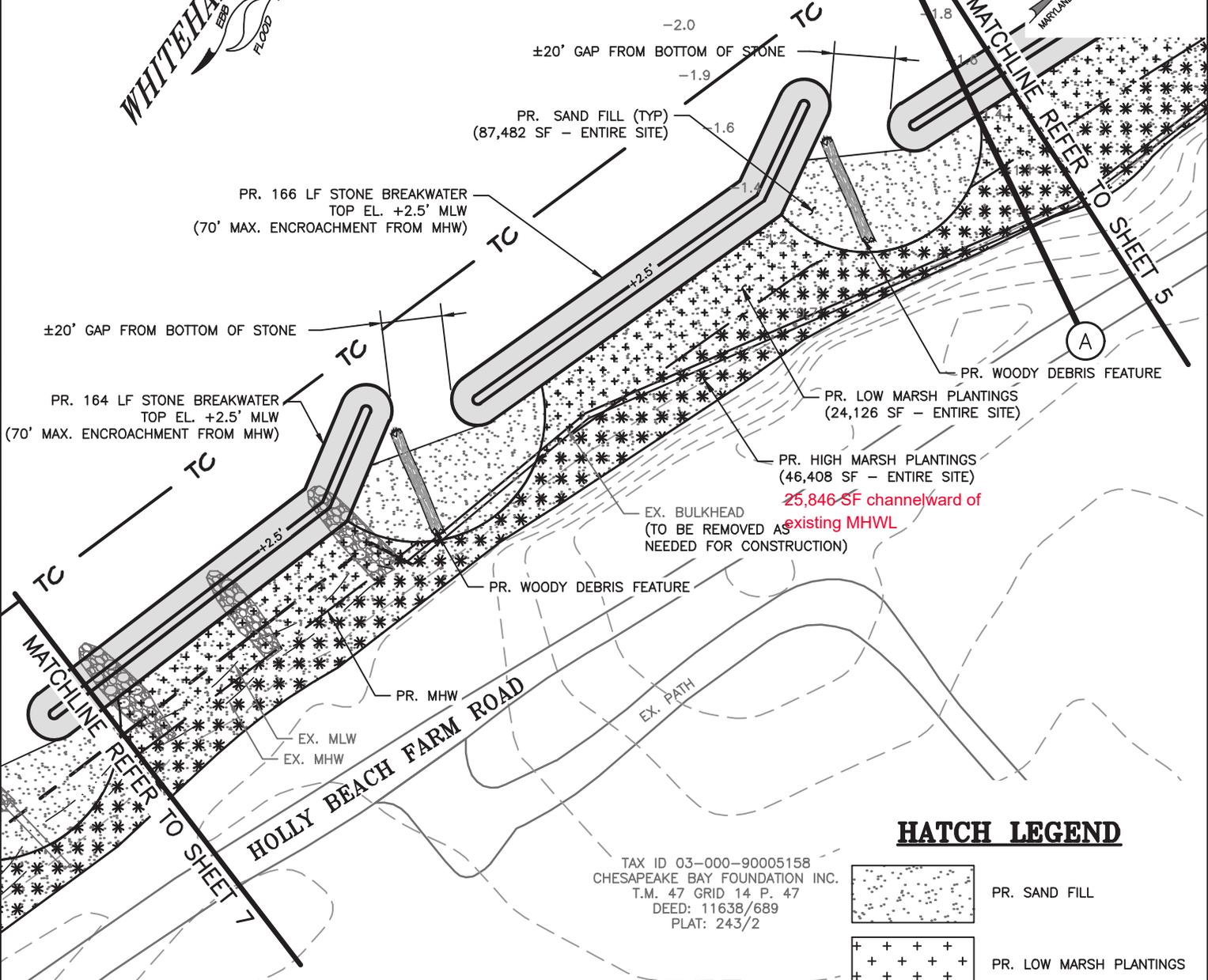
**Bayland**  
 Consultants & Designers, Inc.  
 "Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
 Hanover, Maryland 21076 Fax: (410) 694-9405  
 www.baylandinc.com

Z:\5-17801-GOOSE\_CREEK-&-HOLLY\_CONSERVATION\_LIS\CAD\_FILES\SHEET\_FILES\HOLLY\_5-17801-IPAT05.DWG

WHITEHALL BAY  


PR. TURBIDITY CURTAIN TO BE INSTALLED IN 400' INTERVALS IN CONJUNCTION WITH THE ACTIVE CONSTRUCTION SITE, PHASED ACCORDINGLY.



PR. 166 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

PR. SAND FILL (TYP)  
 (87,482 SF - ENTIRE SITE)

±20' GAP FROM BOTTOM OF STONE

PR. 164 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

PR. LOW MARSH PLANTINGS  
 (24,126 SF - ENTIRE SITE)

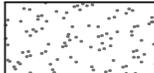
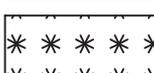
PR. HIGH MARSH PLANTINGS  
 (46,408 SF - ENTIRE SITE)

25,846-SF channelward of existing MHWL

EX. BULKHEAD  
 (TO BE REMOVED AS NEEDED FOR CONSTRUCTION)

HOLLY BEACH FARM ROAD

**HATCH LEGEND**

	PR. SAND FILL
	PR. LOW MARSH PLANTINGS
	PR. HIGH MARSH PLANTINGS

TAX ID 03-000-90005158  
 CHESAPEAKE BAY FOUNDATION INC.  
 T.M. 47 GRID 14 P. 47  
 DEED: 11638/689  
 PLAT: 243/2

HOLLY BEACH FARM  
 CONSERVATION EASEMENT  
 LIVING SHORELINE

ANNE ARUNDEL COUNTY

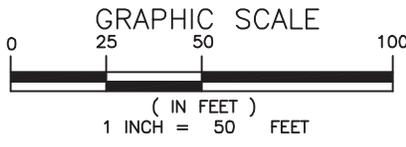
APPL. BY: THE CHESAPEAKE BAY  
 FOUNDATION

SITE PLAN

DATE: REVISED AUGUST 2020 SHEET 6 OF 11

20-WQC-0054  
 202060978  
 95095  
 8/19/2020  
 6 of 11

NOTE: BASE 2016 PLANIMETRICS AND 2017 IMAGERY.

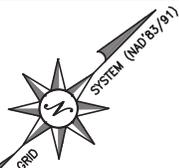


**BayLand**  
 Consultants & Designers, Inc.  
 "Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
 Hanover, Maryland 21076 Fax: (410) 694-9405  
 www.baylandinc.com

Z:\5\_17801\_GOOSE\_CREEK\_&\_HOLLY\_CONSERVATION\_LIS\CAD FILES\SHEET FILES\HOLLY 5\_17801\_IPAT06.DWG

**WHITEHALL BAY**



PR. TURBIDITY CURTAIN TO BE INSTALLED IN 400' INTERVALS IN CONJUNCTION WITH THE ACTIVE CONSTRUCTION SITE, PHASED ACCORDINGLY.

PR. 163 LF STONE BREAKWATER  
TOP EL. +2.5' MLW  
(70' MAX. ENCROACHMENT FROM MHW)

±20' GAP FROM BOTTOM OF STONE  
PR. 164 LF STONE BREAKWATER  
TOP EL. +2.5' MLW  
(70' MAX. ENCROACHMENT FROM MHW)

±20' GAP FROM BOTTOM OF STONE

MATCHLINE REFER TO SHEET 6

MATCHLINE REFER TO SHEET 8

**HOLLY BEACH FARM ROAD**

EX. TIMBER JETTY  
(TO BE REMOVED AS NEEDED FOR CONSTRUCTION)

PR. SAND FILL (TYP)  
(87,482 SF - ENTIRE SITE)

PR. HIGH MARSH PLANTINGS  
(46,408 SF - ENTIRE SITE)

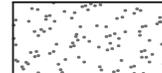
25,846 SF channelward of existing MHWL

PR. LOW MARSH PLANTINGS  
(24,126 SF - ENTIRE SITE)

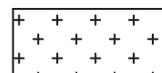
EX. MHW  
EX. MLW

TAX ID 03-000-90005158  
CHESAPEAKE BAY FOUNDATION INC.  
T.M. 47 GRID 14 P. 47  
DEED: 11638/689  
PLAT: 243/2

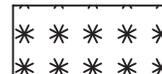
**HATCH LEGEND**



PR. SAND FILL



PR. LOW MARSH PLANTINGS



PR. HIGH MARSH PLANTINGS

**HOLLY BEACH FARM  
CONSERVATION EASEMENT  
LIVING SHORELINE**

**ANNE ARUNDEL COUNTY**

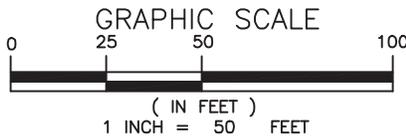
APPL. BY: THE CHESAPEAKE BAY  
FOUNDATION

**SITE PLAN**

DATE: REVISED AUGUST 2020 SHEET 7 OF 11

20-WQC-0054  
202060978  
95095  
8/19/2020  
7 of 11

NOTE:  
BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
2016 PLANIMETRICS AND 2017 IMAGERY.



7455 New Ridge Road, Suite T Phone: (410) 694-9401  
Hanover, Maryland 21076 Fax: (410) 694-9405  
www.baylandinc.com

Z:\5-17801\_GOOSE\_CREEK\_&\_HOLLY\_CONSERVATION\_LIS\CAD FILES\SHEET FILES\HOLLY\_5-17801\_JPA107.DWG

**WHITEHALL BAY**



±20' GAP FROM BOTTOM OF STONE  
 PR. SAND FILL (TYP)  
 (87,482 SF - ENTIRE SITE)

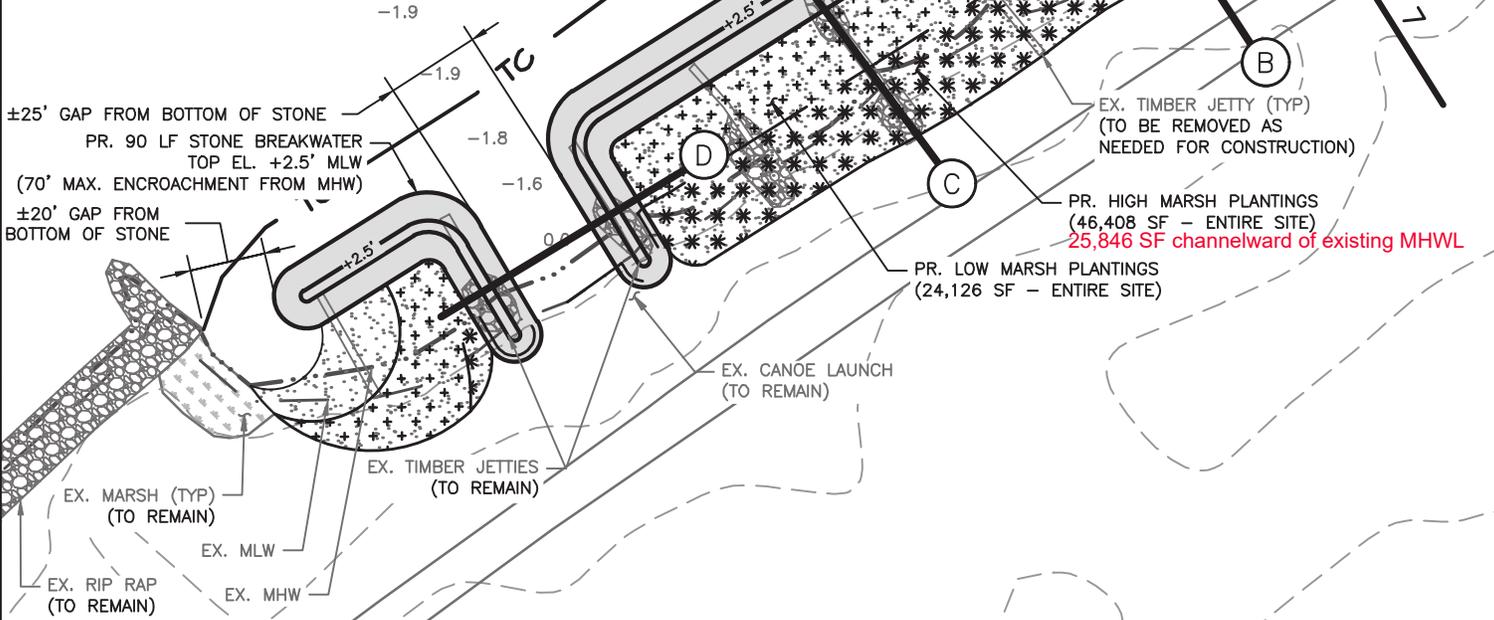
PR. 206 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

PR. TURBIDITY CURTAIN TO BE INSTALLED IN 400' INTERVALS IN CONJUNCTION WITH THE ACTIVE CONSTRUCTION SITE, PHASED ACCORDINGLY.

±25' GAP FROM BOTTOM OF STONE  
 PR. 90 LF STONE BREAKWATER  
 TOP EL. +2.5' MLW  
 (70' MAX. ENCROACHMENT FROM MHW)

±20' GAP FROM BOTTOM OF STONE

MATCHLINE REFER TO SHEET 7



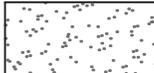
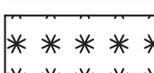
PR. HIGH MARSH PLANTINGS  
 (46,408 SF - ENTIRE SITE)  
 25,846 SF channelward of existing MHWL

PR. LOW MARSH PLANTINGS  
 (24,126 SF - ENTIRE SITE)

TAX ID 03-000-20559402  
 CHESAPEAKE BAY FOUNDATION INC.  
 T.M. 47 GRID 19 P. 45  
 DEED: 11638/689

**HOLLY BEACH FARM ROAD**

**HATCH LEGEND**

-  PR. SAND FILL
-  PR. LOW MARSH PLANTINGS
-  PR. HIGH MARSH PLANTINGS

**HOLLY BEACH FARM  
 CONSERVATION EASEMENT  
 LIVING SHORELINE**

**ANNE ARUNDEL COUNTY**

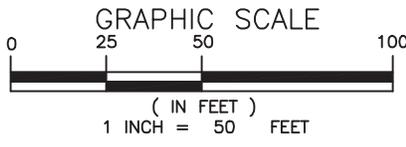
APPL. BY: THE CHESAPEAKE BAY  
 FOUNDATION

**SITE PLAN**

DATE: REVISED AUGUST 2020 SHEET 8 OF 11

20-WQC-0054  
 202060978  
 95095  
 8/19/2020  
 8 of 11

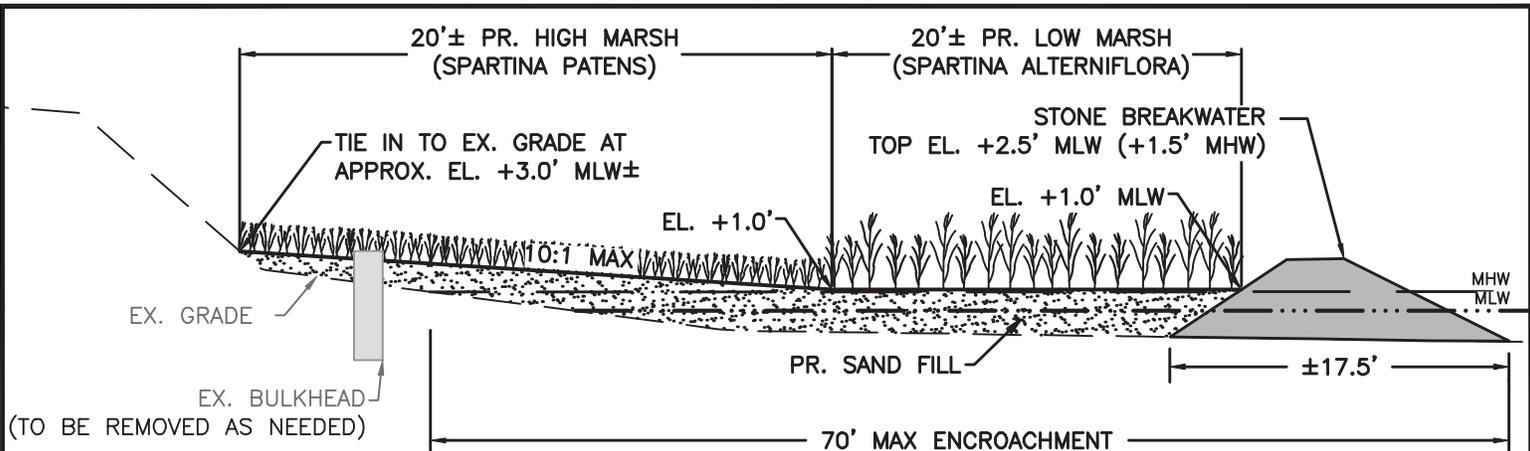
NOTE:  
 BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
 2016 PLANIMETRICS AND 2017 IMAGERY.




**BayLand**  
 Consultants & Designers, Inc.  
 "Integrating Engineering and Environment"

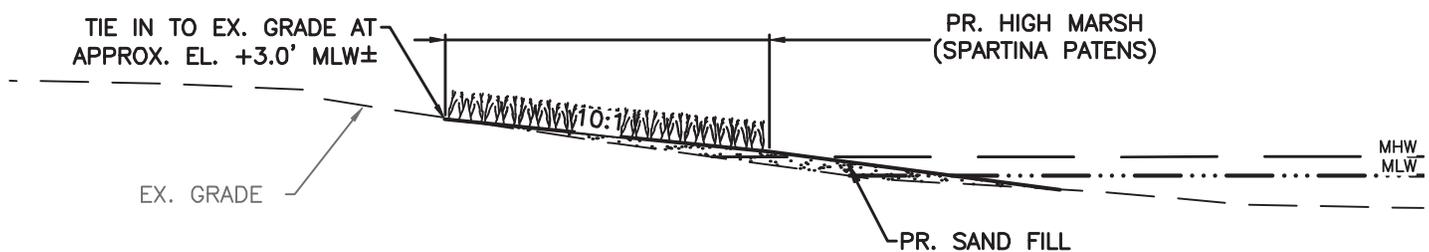
7455 New Ridge Road, Suite T Phone: (410) 694-9401  
 Hanover, Maryland 21076 Fax: (410) 694-9405  
 www.baylandinc.com

Z:\5-17801-GOOSE\_CREEK-&-HOLLY\_CONSERVATION\_LIS\CAD FILES\SHEET FILES\HOLLY\_5-17801\_JPAT08.DWG



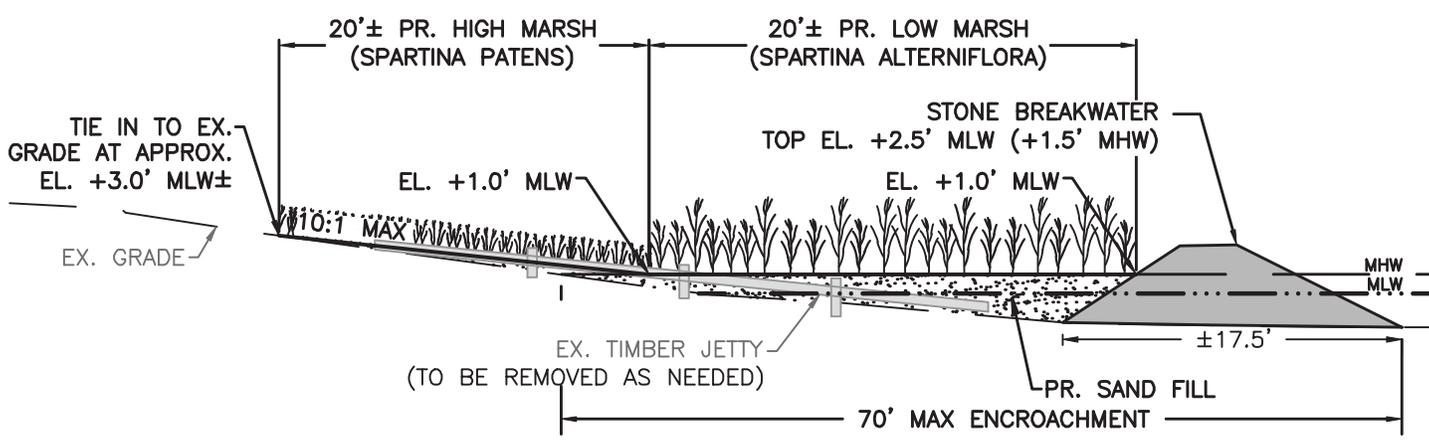
**SECTION A: STONE BREAKWATER AT EX. BULKHEAD**

SCALE: NTS



**SECTION B: BEACH HABITAT**

SCALE: NTS



**SECTION C: STONE BREAKWATER AT EX. TIMBER JETTY**

SCALE: NTS

HOLLY BEACH FARM  
CONSERVATION EASEMENT  
LIVING SHORELINE

ANNE ARUNDEL COUNTY

APPL. BY: THE CHESAPEAKE BAY  
FOUNDATION

SITE DETAILS

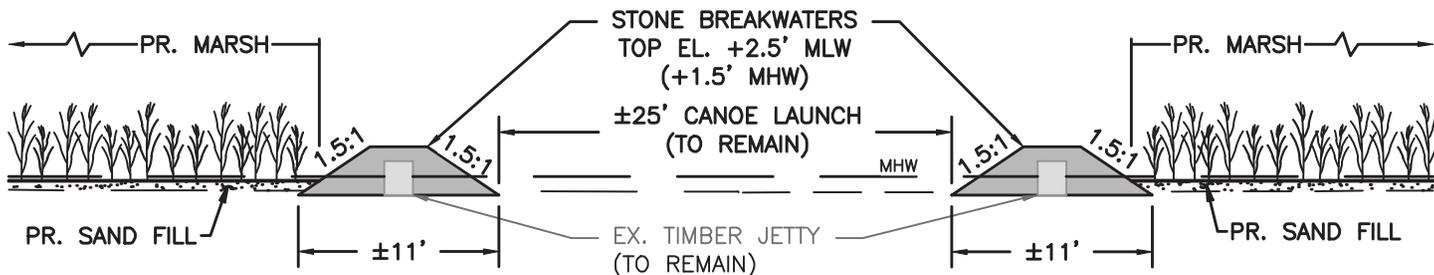
DATE: REVISED AUGUST 2020 SHEET 9 OF 11

20-WQC-0054  
202060978  
95095  
8/19/2020  
9 of 11

**Bay & Sand**  
Consultants & Designers, Inc.  
"Integrating Engineering and Environment"

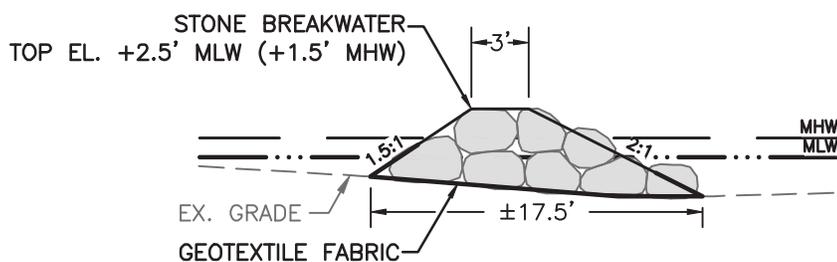
7455 New Ridge Road, Suite T Phone: (410) 694-9401  
Hanover, Maryland 21076 Fax: (410) 694-9405  
www.bayandinc.com

Z:\5-17801-GOOSE-CREEK-&-HOLLY-CONSERVATION\GIS\CAD FILES\SHEET FILES\HOLLY 5-17801-IPAT09.DWG



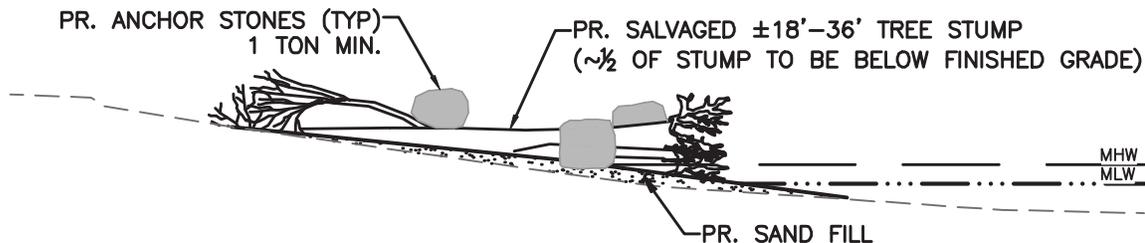
**SECTION D: STONE BREAKWATER AT CANOE LAUNCH**

SCALE: NTS



**TYPICAL STONE BREAKWATER**

SCALE: NTS



**TYPICAL WOODY DEBRIS HABITAT**

SCALE: NTS

HOLLY BEACH FARM  
CONSERVATION EASEMENT  
LIVING SHORELINE

ANNE ARUNDEL COUNTY

APPL. BY: THE CHESAPEAKE BAY  
FOUNDATION

SITE DETAILS

DATE: REVISED AUGUST 2020 SHEET 10 OF 11

20-WQC-0054  
202060978  
95095  
8/19/2020  
10 of 11

**Bay Land**  
Consultants & Designers, Inc.  
"Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401  
Hanover, Maryland 21076 Fax: (410) 694-9405  
www.baylandinc.com

Z:\5-17801-GOOSE-CREEK-&-HOLLY-CONSERVATION\GIS\CAD FILES\SHEET FILES\HOLLY 5-17801-JPA110.DWG

## PROJECT SUMMARY

### PROPOSED STRUCTURES:

#### STONE BREAKWATER

TOTAL LENGTH - 1,993 LF  
AVERAGE WIDTH - 17.5 FT  
MAX. CHANNELWARD ENCROACHMENT - 70 FT

#### MARSH PLANTINGS - 70,534 SF TOTAL

LOW MARSH - 24,126 SF  
HIGH MARSH - 46,408 SF 25,846 SF channelward of existing MHWL

#### SAND FILL - 87,482 SF (6,075 CY)

## IMPACT SUMMARY

TOTAL PROPOSED IMPACT = 120,477 SF (2.77 ACRES)  
TOTAL AREA OF IMPACT FROM MHW INTO TIDAL WATERS: 100,895 SF (2.32 ACRES)  
TOTAL AREA OF IMPACT TO PRIVATE TIDAL WETLANDS: 0 SF

## NOTES

1. BASEMAP COMPILED FROM ANNE ARUNDEL COUNTY 2016 PLANIMETRICS AND 2017 IMAGERY.
2. SOUNDINGS AND CONTOURS ARE IN FEET AND REFER TO MLW.
3. TIDAL RANGE 1.0 FEET.
4. BATHYMETRIC SURVEY WAS PERFORMED BY BAYLAND ON 11/07/2019.
5. THESE ARE PERMIT DRAWINGS ONLY AND SUBJECT TO CHANGE DURING THE PERMIT PROCESS. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.

HOLLY BEACH FARM  
CONSERVATION EASEMENT  
LIVING SHORELINE

ANNE ARUNDEL COUNTY

APPL. BY: THE CHESAPEAKE BAY  
FOUNDATION

## SITE NOTES

DATE: REVISED AUGUST 2020 SHEET 11 OF 11

20-WQC-0054  
202060978  
95095  
8/19/2020  
11 of 11

NOTE:  
BASEMAP TAKEN FROM ANNE ARUNDEL COUNTY  
2016 PLANIMETRICS AND 2017 IMAGERY.

  
Consultants & Designers, Inc.  
"Integrating Engineering and Environment"  
7455 New Ridge Road, Suite T Phone: (410) 694-9401  
Hanover, Maryland 21076 Fax: (410) 694-9405  
www.baylandinc.com



### MARSH MAINTENANCE PLAN

Agency Interest Number: 95095/202060978  
Tidal Wetlands License Number: 20 - WQC - 0054  
Licensee Name: Chesapeake Bay Foundation  
License Effective Date: February 17, 2021  
Address: 1917 Holly Beach Farm Road  
Annapolis, MD 21401  
Anne Arundel County

**\*Please sign and date this Marsh Maintenance Plan and return to the address below no later than**  
April 18, 2021.\*

**Preparation:** All areas that are to be planted shall be cleaned of rough grass, weeds, and debris and the ground surface filled and graded to the elevations specified on the plans.

**Planting:** The living shoreline will be planted during the planting season for wetland sprigging which is between April 1 and June 30 or between September 1 and October 30. The mean high water (MHW) lines will be marked on the ground and the plantings shall be made in rows parallel to the MHW line extending to the limits on the construction plans. Rows shall be 18 inches apart and plants 18 inches apart. Plantings shall be made by hand with dibble, spade or shovel by opening a hole at the planting site, placing the fertilizer and then the plant in the hole, closing the hole and firming the soil around the plant so that the surface soil level is .5 to 1 inch above the top of the planting pot root mass. If the soil at the planting site is not wet or damp, the plants shall be sufficiently watered within 4 hours after planting.

**Protection:** Immediately upon completion of the planting operation, the planting area shall be protected against wildlife and human traffic by erecting goose exclusion fencing and Blaze Orange Fence (BOF) at the top of the slope and along the sides of the planted area.

**Plant Establishment:** A healthy stand of wetland vegetation is defined as 85% aerial coverage of the original planted area by native wetland vegetation (e.g., planted species and volunteer native species). A healthy stand of wetland vegetation shall be established within 1 year of planting and shall be maintained for at least 3 consecutive years thereafter. The licensee is responsible for making sure the planted area is maintained by eradicating non-native nuisance species (e.g., Phragmites), and protecting areas from human traffic and wildlife predators. If a healthy stand of wetland vegetation is not established within one year after planting, the limiting factors will be identified and addressed and the area will be replanted as necessary.

**Marsh Monitoring Reports:** Brief, annual Marsh Monitoring Reports will be submitted to the address below for 5 years by the dates below, *regardless of the whether or not the project is completed or a healthy stand of wetland vegetation is obtained.* The Marsh Monitoring Report may be brief and should include the following information, at a minimum:

- State Agency Interest number, Tidal Wetlands License number, and site address (listed above)
- Date of inspections
- Project completion date. If the project has not yet been completed, please indicate the current status of the project and disregard the remaining requirements.
- Estimation of percent plant coverage by the dominant species.  
*This should show the percent coverage of native and non-native wetland plant species. If 85% coverage by native species is not obtained, please indicate the limiting factors to plant growth, and what steps will be taken to meet the 85% coverage requirement.*
- Identification of factors limiting establishment or maintenance of a healthy stand of wetland vegetation and identify the maintenance activities necessary to mitigate the resulting stress. *For example, if non-native, invasive species (such as Phragmites) have emerged and begun to crowd out the planted or volunteer native species, the invasive species should be physically removed or chemically controlled. If geese are predating the plants, goose exclusion fence should be erected.*
- Photographs showing the current condition of the project

This 5-year monitoring period may be extended at MDE's discretion in the event replacement plantings are required.

**The annual Marsh Monitoring Report should be submitted to the address below on or before the following dates:**

1-Year Report: February 17, 2022  
2-Year Report: February 18, 2023  
3-Year Report: February 18, 2024  
4-Year Report: February 17, 2025  
5-Year Report: February 17, 2026

### ACCEPTANCE OF MARSH MAINTENANCE PLAN

The applicant acknowledges that he/she has read and understands this Marsh Maintenance Plan and agrees to submit annual Marsh Monitoring Reports on or before the above due dates.

---

**Signature of Licensee**

---

**Date**

PLEASE SIGN, DATE AND RETURN THIS COPY OF THE MARSH MAINTENANCE PLAN TO:

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
WATER AND SCIENCE ADMINISTRATION  
WETLANDS AND WATERWAYS PROGRAM  
**TIDAL WETLANDS DIVISION**  
(Signed Marsh Maintenance Plan) C/O Heather Hepburn  
(Annual Marsh Monitoring Reports) C/O Tidal Wetlands Division  
1800 WASHINGTON BLVD.  
BALTIMORE, MD 21230-1708  
(or via e-mail to [TidalMMP.mde@maryland.gov](mailto:TidalMMP.mde@maryland.gov))