



U.S. Army Corps
of Engineers
Baltimore District

Public Notice

In Reply to Application Number
CENAB-OPR-M (TOWN OF INDIAN HEAD/LIVING SHORELINE)
2018-60369

PN 18-26

Comment Period: May 10, 2018 to June 10, 2018

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM THE PUBLIC ABOUT THE WORK DESCRIBED BELOW. AT THIS TIME, NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED.

The Baltimore 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 Section 404 of the Clean Water Act (33 U.S.C. 1344)**, as described below:

APPLICANT: Town of Indian Head
Mr. Ryan Hicks, Town Manager
4195 Indian head Highway
Indian Head, Maryland 20640

WATERWAY AND LOCATION: All work is proposed in the Potomac River at the end of Riverwatch Drive in Indian Head in Charles County, Maryland.

PROPOSED WORK AND PURPOSE: The applicant proposes to create a marsh along 1,280 feet of shoreline by depositing approximately 2,000 cubic yards of clean sloped sand to be planted with *Spartina alterniflora* and *S. patens* creating approximately 20,900 square feet of low marsh and 15,675 square feet of high marsh to extend no more than 20 feet channelward of the approximate mean high water (MHW) shoreline; to construct a 15-foot wide by 1,280 foot long and 4-foot high stone sill with 15 30-foot wide vents to extend no more than 30 feet channelward of the approximate mean high water (MHW) shoreline; to construct a 12 to 18-foot wide by 1,240 foot long boardwalk with six approximate 18-foot wide by 20-foot long observation platforms parallel to the shoreline and elevated 9 feet above the proposed stone sill to extend approximately 38 feet channelward of the approximate MHW shoreline; and to install fourteen 3-pile dolphins to extend no more than 50 feet channelward of the approximate MHW shoreline. All work is to be completed in accordance with the attached plans dated February 16, 2018. If you have any questions concerning this matter, please contact Mrs. Erica Schmidt at (410) 962-6029 or Erica.Schmidt@usace.army.mil.

The proposed project is to create a continuous ADA compliant pedestrian path from Maryland Route 210 to the Potomac River increasing recreation and scenic opportunities for citizens and to mitigate shoreline erosion at the project site by creating a living shoreline enhancing existing aquatic habitat.

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. No compensatory mitigation is proposed since no wetland fill impacts are proposed.

The decision whether to issue a permit will be based on an evaluation of the probable impact 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 reasonably 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, economics, 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, 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 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: Mrs. Erica Schmidt, CENAB-OPR-M], 2 Hopkins Plaza, Baltimore, Maryland 21201 or Erica.Schmidt@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 affect Essential Fish Habitat (EFH). The project site lies in or adjacent to the Potomac River complex for EFH as described under the MSFCMA for *Scophthalmus aquosus* (windowpane flounder) juvenile and adult; *Pomatomus saltatrix* (blue fish) juvenile and adult; *Paralichthys dentatus* (summer flounder) juvenile and adult; and the eggs, larvae, juvenile, and adult stages of *Sciaenops ocellatus* (red drum), *Scomberomorus cavalla* (king mackerel), *Scomberomorus maculatus* (Spanish mackerel), and *Rachycentron canadum* (cobia), managed species under the MSFCMA.

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. No mitigative measures are recommended to minimize adverse effects on EFH at this time. This determination may be modified if additional information indicates otherwise and would change the preliminary determination. The project area is not a Habitat Area of Particular Concern (HAPC).

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 Blvd., Suite 430, Baltimore, Maryland 21230 within the comment period as specified above to receive consideration. The 401 certifying agency has a statutory limit of one year to make its decision.

COASTAL ZONE MANAGEMENT PROGRAM: 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 Program. This certification statement is available for inspection in the District Office; however, public comments relating to consistency must be received by the Tidal Wetlands Division, Maryland Department of the Environment, Montgomery Park Business Center, 1800 Washington Blvd. Suite 430, Baltimore, Maryland 21230, within the comment period as specified above. It should be noted that the MDE has a statutory limit of 6 months in which to make its consistency determination.

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

ENDANGERED SPECIES ACT: 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 because the proposed work does not extend into water depths sufficient for listed species. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

NATIONAL HISTORIC PRESERVATION ACT: 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 requested permit.

The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act. Any person who has an interest, which may be adversely affected by the issuance of this permit, may request a public hearing. The District Engineer must receive the request, which must be in writing, to the U.S. Army Corps of Engineers, Baltimore District, 2 Hopkins Plaza, Baltimore, Maryland 21201, within the comment period as specified as above to receive consideration. Also, it must clearly state the interest that may be adversely affected by this activity and the manner in which the interest may be adversely affected.

It is requested that you communicate the foregoing information concerning the proposed work to any persons known by you to be interested and not being known to this office, who did not receive a copy of this notice. If you have any questions concerning this matter, please contact Mrs. Erica Schmidt at (410) 962-6029 or Erica.Schmidt@usace.army.mil.

FOR THE DISTRICT ENGINEER:

KATHY B. ANDERSON
Chief, Maryland Section Southern

TOWN OF INDIAN HEAD

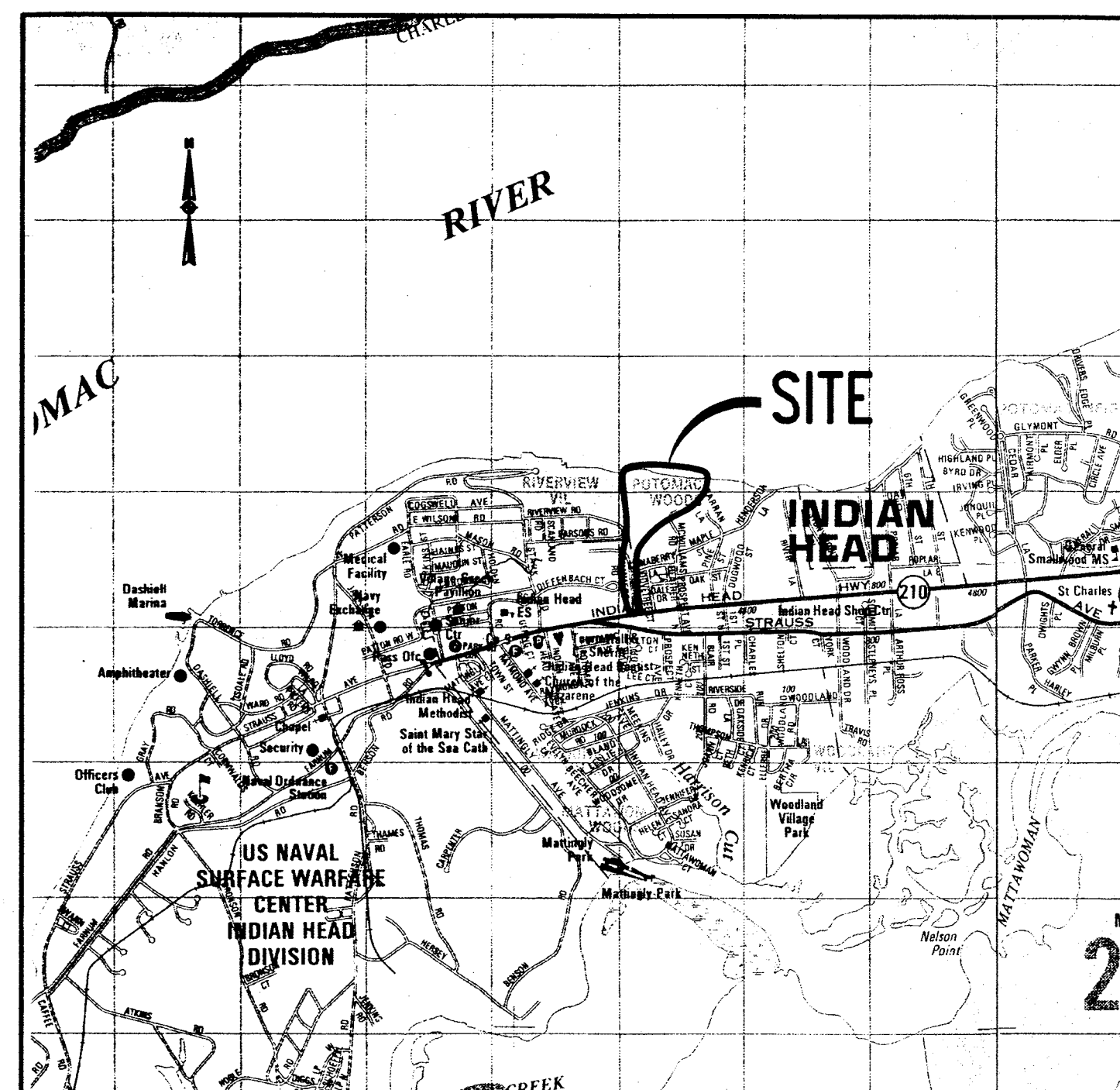
CHARLES COUNTY, MARYLAND

BOARDWALK and LIVING SHORELINE ON THE POTOMAC

JANUARY 2009
 AMENDED DECEMBER 2012
 FAP NO.: STP-3(387)E
 CONTRACT NO.: CH3685125

INDEX OF DRAWINGS

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16	RIVER BOARDWALK STRUCTURAL & SITE DETAILS
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24	RIVER BOARDWALK CROSS SECTIONS



VICINITY MAP

SCALE: 1" = 2000'

STRUCTURAL DESIGN CRITERIA BOARDWALK, STAIRS AND NATURE WALK

UNIFORM LIVE LOAD:	85 PSF (AASHTO PEDESTRIAN BRIDGE)
BASIC WIND SPEED:	120 MPH (3-SECOND GUST)
VEHICLE LOAD:	6,000 LB

WATER RESOURCES ON SITE

NON-TIDAL WETLANDS		WETLAND BUFFER		INTERMITTENT STREAM	
SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES
54,207	1.24	56,012	1.29	1,299	0.03

GENERAL NOTES

- THE EXISTANCE AND LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES ARE SHOWN IN AN APPROXIMATE WAY FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SAID STRUCTURES BEFORE COMMENCING THE WORK. CALL MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS IN ADVANCE OF WORK.
- THE CONTRACTOR SHALL COORDINATE HIS WORK SCHEDULE WITH THE TOWN OF INDIAN HEAD. THE TOWN SHALL HAVE FINAL AUTHORITY ON THE CONTRACTOR'S WORK SCHEDULE.
- EXISTING UTILITIES ARE SHOWN FROM AVAILABLE RECORDS. CONTRACTOR SHALL FIELD VERIFY, BY TEST PITS, IF NECESSARY, ALL LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ANY UTILITY DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO EXPENSE TO THE TOWN OR THE ENGINEER, AND REPAIRED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY OWNER.
- ARRO CONSULTING, INC. AND TOWN OF INDIAN HEAD ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S UTILIZATION OF WORKERS, MATERIALS, EQUIPMENT OR SAFETY MEASURES IN THE PERFORMANCE OF ANY WORK ON THIS PROJECT. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR PERFORMING THE WORK CORRECTLY AND IN CONFORMANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO ARRIVE AT AN ACCEPTABLE RESOLUTION.
- SHOULD THE CONTRACTOR WISH TO DEVIATE FROM THE APPROVED SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL FORMULATE A SEDIMENT AND EROSION CONTROL PLAN AND SUBMIT SAME TO THE TOWN AND THE CHARLES SOIL CONSERVATION DISTRICT FOR PRIOR APPROVAL. ALL SEDIMENT CONTROL WORK SHALL BE IN ACCORDANCE WITH THE "2011 MARYLAND STANDARD SPECIFICATIONS FOR SOIL EROSION CONTROL", PUBLISHED JOINTLY BY THE: 1) MARYLAND DEPARTMENT OF THE ENVIRONMENT, 2) SOIL CONSERVATION SERVICE, 3) STATE SOIL CONSERVATION COMMITTEE.
- THE CONTRACTOR SHALL RESTORE ALL DAMAGE TO ROADS, GRASS AREAS, SIDEWALKS, PAVING, CURB & GUTTER, AND GRAVEL AREAS UPON COMPLETION OF WORK AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING AND/OR REMOVING ALL DUST AND MUD ON ALL ROADS DUE TO VEHICLES ARRIVING AND LEAVING THE JOB SITE AS PART OF THIS WORK ON A DAILY BASIS.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING AND PAYING ALL APPLICABLE PERMIT FEES AND OBTAINING ANY AND ALL PERMITS FOR A TRAILER AND/OR STORAGE SITE. THE CONTRACTOR SHALL PROTECT THE TEMPORARY TRAILER AND STORAGE SITE(S) FROM EROSION BY INSTALLING SUPER SILT FENCE.
- THE GRADING LIMITS SHOWN ON THE PLANS ARE NOT TO BE EXCEEDED. ANY CHANGES IN THE GRADING, EROSION AND SEDIMENT CONTROL PLAN, STORMWATER MANAGEMENT FACILITIES OR OTHER SEGMENT OF THE WORK MUST BE REVIEWED AND APPROVED BY THE TOWN, ENGINEER, CHARLES COUNTY CONSERVATION DISTRICT, CRITICAL AREAS COMMISSION, MARYLAND DEPT. OF THE ENVIRONMENT, SHA AND OTHER APPROPRIATE REVIEW AGENCIES AS DETERMINED BY THE TOWN.
- EROSION AND SEDIMENT CONTROL DETAILS INDICATED ON THE PLAN AND APPLICABLE PROVISIONS OF ALL CONTRACT DOCUMENTS SHALL BE STRICTLY ENFORCED.
- THIS PROJECT INCLUDES THE CONSTRUCTION OF A BOARDWALK ALONG THE POTOMAC RIVER, AN ADA ACCESSIBLE BOARDWALK FOR ACCESS, AND SIDEWALK REPLACEMENT FROM RT 210 TO THE PUBLIC PARKING AREA ON RIVERWATCH DRIVE. THE PROJECT INCLUDES IMPROVEMENTS WITHIN THE 100-YEAR FLOODPLAIN OF THE POTOMAC RIVER, CRITICAL AREAS, AND EXISTING WETLANDS BUFFER.
- THE EXISTING PROJECT AREA IS WITHIN THE CHESAPEAKE BAY CRITICAL AREAS (RCA).
- FIELD SURVEY WAS PERFORMED BY SHELLY AND WITTER IN SEPTEMBER 2008. VERTICAL DATUM IS NAVD 88 AND HORIZONTAL DATUM IS NAD 83.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING ALL AREAS OF THE TEMPORARY CONSTRUCTION ACCESS ROUTE DAMAGED DURING THE COURSE OF THE PROJECT. OFF-SITE LANDWARD ACCESS WILL NOT BE AVAILABLE. THE CONTRACTOR SHALL EXAMINE THE EXISTING LIMITED LANDWARD ACCESS ROUTE PRIOR TO BIDDING AND INCLUDE IN HIS PRICE ALL COSTS FOR REPAIR, REPLACEMENT, ETC. IT IS ANTICIPATED THAT ACCESS VIA THE POTOMAC RIVER WITH THE USE OF BARGES WILL BE NECESSARY.
- THE MEAN HIGH WATER SHORELINE FOR THIS SITE IS LOCATED AT TOPOGRAPHIC ELEVATION 2.2 (3.0 IN NAVD29). THE HIGH TIDE LINE FOR THIS SITE IS LOCATED AT APPROXIMATELY ELEVATION 2.7 (3.5 IN NAVD29). SEE SHEETS C-1 AND C-2 FOR MEAN HIGH WATER SHORELINE AND HIGH TIDE LINE LOCATIONS.
- THIS PROJECT INCLUDES APPROXIMATELY 625 CUBIC YARDS OF DREDGE AND 4,000 CUBIC YARDS OF FILL CHANNELWARD OF THE MEAN HIGH WATER SHORELINE. THE DREDGE WORK IS FOR THE PROPOSED STONE SILLS. THE CONSTRUCTED WETLAND COMPRISES OF APPROXIMATELY 1200 CY OF THE FILL, WITH THE REMAINDER COMING FROM THE PROPOSED STONE SILLS.
- PILE LENGTHS MAY VARY BUT ARE EXPECTED TO BE 15'-20' BELOW GROUND ELEVATION. CONSIDERABLE PILE CUT-OFF IS EXPECTED DUE TO DIFFERING SOIL CONDITIONS.
- NO INSTREAM WORK SHALL BE PERFORMED BETWEEN FEBRUARY 15 AND JUNE 15.

CHARLES SCD SEDIMENT AND EROSION CONTROL PLAN NUMBER _____
 CHARLES SCD SMALL POND APPROVAL NUMBER N/A
 Sediment And Erosion Control Plan and Small Pond (if applicable) is hereby approved by the Charles County Conservation District.
 Signature/Date _____
 This Approval expires _____
 Written requests for Extension May be submitted to the District.
 This Plan meets the technical requirement of the U.S.D.A. Natural Resources Conservation District.

APPROVED BY:
 TOWN OF INDIAN HEAD

 RYAN L. HICKS
 TOWN MANAGER
 DATE 2/21/18

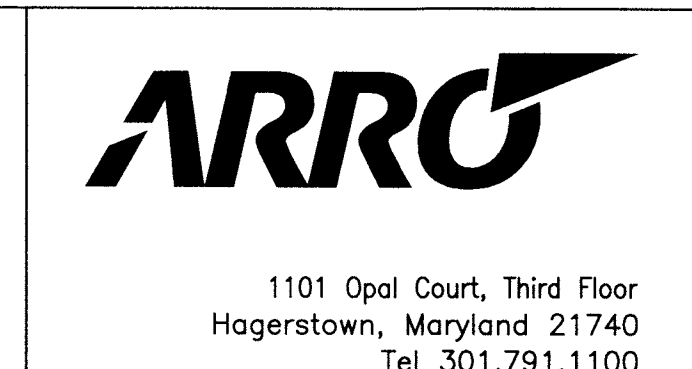
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0	ISSUED FOR BID				F	AGENCY COMMENTS	9/11/12	AM	RDP
					E	AGENCY COMMENTS	2/1/10	AM	RDP
					D	AGENCY COMMENTS	7/27/09	AM	RDP
					C	AGENCY COMMENTS	6/03/09	AM	RDP
G	AGENCY COMMENTS	4/03/13	AM	RDP	B	AGENCY COMMENTS	4/10/09	AM	RDP
F	AGENCY COMMENTS	01/03/13	AM	RDP	A	ISSUED TO CLIENT	11/20/08	AM	RDP

SCOTT F. LONGSTRETH, P.E.
 RELEASED BY
 DESIGN
 R BARRICK
 CHECKED
 DRAWN
 J MILLER
 CHECKED
 DATE
 OCTOBER 2008
 SURVEY DATE
 FIELD BOOK

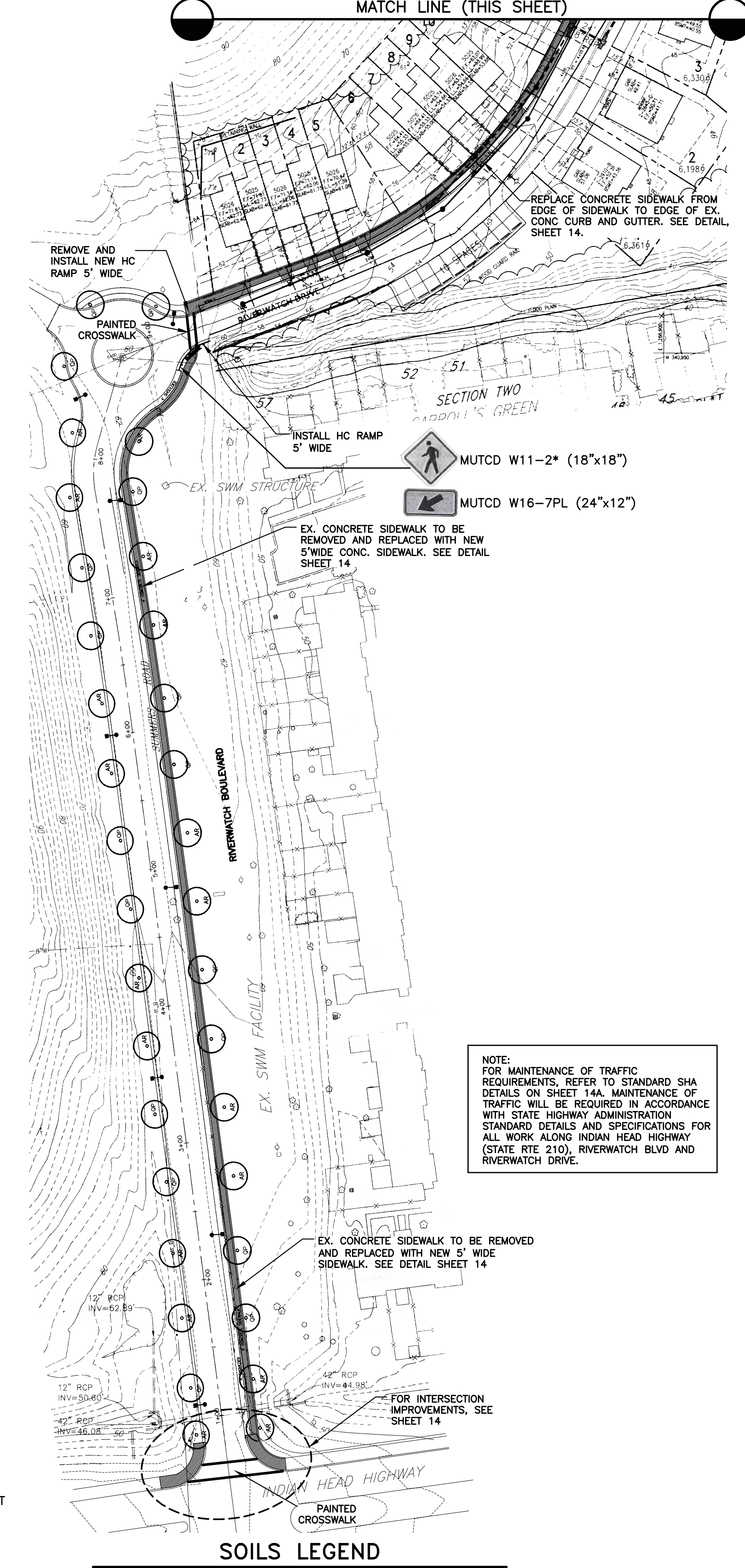
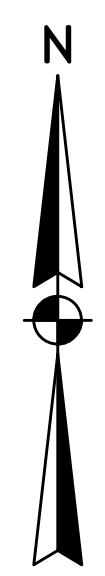
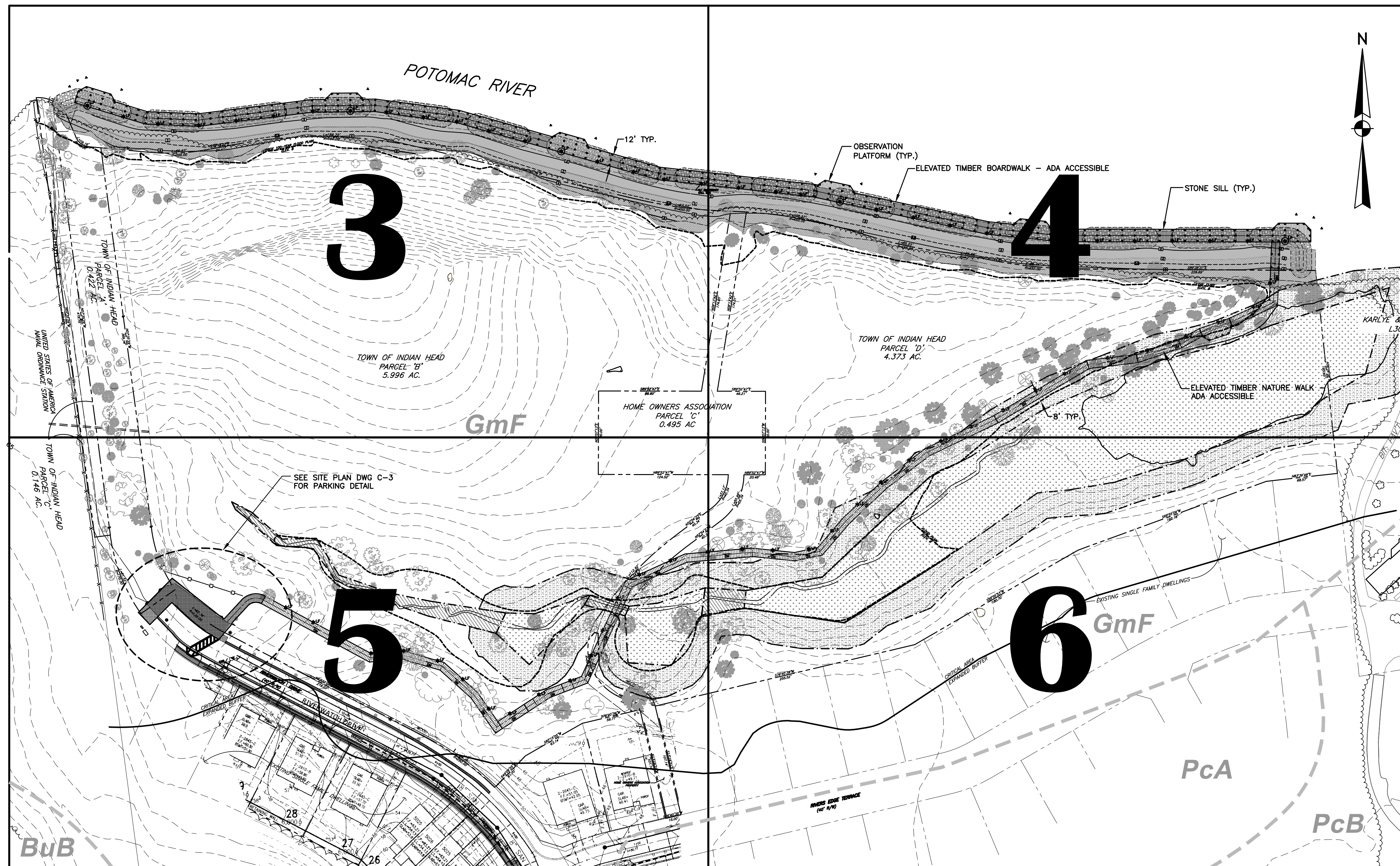


PROFESSIONAL CERTIFICATION
 I SCOTT F. LONGSTRETH, P.E. hereby certify that these documents were prepared and approved by me and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21740, expiration date 02-21-2018.

CLIENT & PROJECT
 TOWN OF INDIAN HEAD
 4195 INDIAN HEAD HIGHWAY
 INDIAN HEAD, MARYLAND 20640
 BOARDWALK and
 LIVING SHORELINE ON THE POTOMAC
 INDIAN HEAD, CHARLES COUNTY, MARYLAND



TITLE		SCALE		DWG. NO.
COVER SHEET, INDEX OF DRAWINGS		AS NOTED		G-1
PROJECT NO.	SHEET NO.	REV.		
07171.00	1 OF 24			



NOTE:
FOR MAINTENANCE OF TRAFFIC REQUIREMENTS, REFER TO STANDARD SHA DETAILS ON SHEET 14A. MAINTENANCE OF TRAFFIC WILL BE REQUIRED IN ACCORDANCE WITH STATE HIGHWAY ADMINISTRATION STANDARD DETAILS AND SPECIFICATIONS FOR ALL WORK ALONG INDIAN HEAD HIGHWAY (STATE RTE 210), RIVERWATCH BLVD AND RIVERWATCH DRIVE.

SURVEY CONTROL POINT SUMMARY				
POINT NO.	DESCRIPTION	NORTH	EAST	ELEVATION
1	MAG-NAIL SET RIVERWATCH DRIVE	341736.556	E1266516.097	60.59
3	REBAR W/ CAP	341839.908	1266454.639	66.00
4	60-P NAIL	342019.915	1266427.769	56.11
5	REBAR W/ CAP	342162.915	1266412.803	25.75
6	REBAR W/ CAP	342192.403	1266557.066	1.12
7	REBAR W/ CAP	342212.951	1266703.025	0.50
8	REBAR W/ CAP	342146.737	1266849.809	15.24
9	REBAR W/ CAP	342125.659	1267130.909	1.18
10	REBAR W/ CAP	342082.525	1267361.732	0.87
11	REBAR W/ CAP	342039.428	1267538.096	18.54
12	60-P NAIL	341971.365	1267415.680	7.87
13	60-P NAIL	341891.728	1267270.708	11.51
14	60-P NAIL	341810.269	1267138.694	26.96
15	60-P NAIL	341700.176	1266925.405	26.77
16	MAG-NAIL	341605.901	1266778.141	51.78

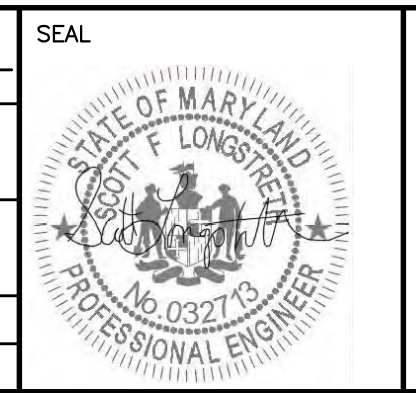
LEGEND	
EX. EXISTING	PROPOSED LOW MARSH CREATION
EX. LIGHT POLE	PROPOSED HIGH MARSH CREATION
EX. UTILITY MANHOLE	PROPOSED RIVERFRONT ELEVATED TIMBER BOARDWALK
EX. SHORELINE	PROPOSED ADA COMPLIANT ELEVATED TIMBER NATURE WALK
EX. STREAM LINE	PROPOSED CONTOUR ELEVATION
EX. 100 YEAR FLOODPLAIN & WETLANDS	PROPOSED SURVEY CONTROL POINT
EX. PROPERTY LINE	PROPOSED LIGHT POLE
EX. CONTOUR ELEVATION	SIDEWALK REMOVAL AND REPLACEMENT
EX. FENCE	EXISTING NON-TIDAL WETLAND
EX. MAPLE TREE	EXISTING WETLAND BUFFER
EX. PAW-PAW TREE	EXISTING INTERMITTENT STREAM
EX. PINE TREE	SOIL BORING LOCATION
EX. CATALPA TREE	
EX. OAK TREE	
EX. HOLLY TREE	
EX. LOCUST TREE	
EX. POPLAR TREE	
EX. SASSAFRAS TREE	
EX. SYCAMORE TREE	
EX. HICKORY TREE	
EX. CHERRY TREE	
EX. AILANTHUS TREE	
EX. BEECH TREE	
EX. GUM TREE	
EX. BIRCH TREE	

SOILS LEGEND	
BuB	Soil Boundary Line
GmF	BuB - Beltsville - Urban land complex, 0 to 5 percent slopes
PcA	GmF - grosstown - Marr - Hoghole complex, 15 to 40 percent slopes
PcB	PcA - Piccowaxen loam, 0 to 2 percent slopes
	PcB - Piccowaxen loam, 2 to 5 percent slopes

OVERALL SITE PLAN
SCALE: 1" = 60"

NO	REVISION	DATE	BY	APP.	NO	REVISION	DATE	BY	APP.
1	ISSUED FOR CONSTRUCTION				G	AGENCY COMMENTS	1/07/13	AM	RDP
0	ISSUED FOR BID				F	AGENCY COMMENTS	6/14/10	AM	RDP
J	AGENCY COMMENTS	12/27/13	AM	RDP	E	AGENCY COMMENTS	7/27/09	AM	RFB
I	AGENCY COMMENTS	4/10/13	AM	RDP	D	AGENCY COMMENTS	6/24/09	AM	RFB
H	AGENCY COMMENTS	03/01/13	AM	RDP	C	AGENCY COMMENTS	6/03/09	AM	RDP
					B	AGENCY COMMENTS	4/10/09	AM	RDP
					A	ISSUED TO CLIENT	11/20/08	AM	RDP

SCOTT F. LONGSTRETH, P.E.	RELEASED BY	CHECKED
	DESIGN	CHECKED
	DRAWN	CHECKED
	CADD	
	DATE	SURVEY DATE
	OCTOBER 2008	FIELD BOOK

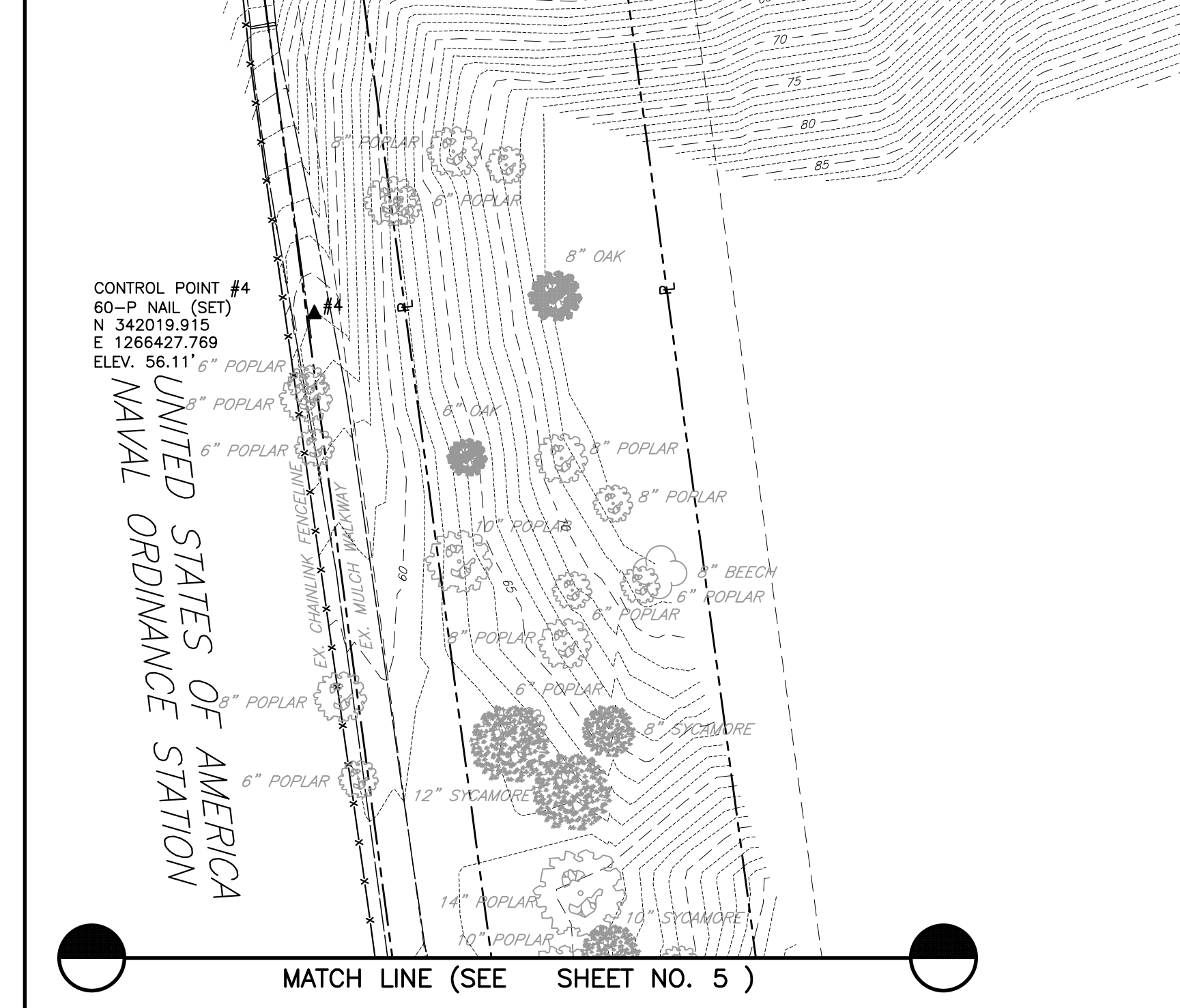
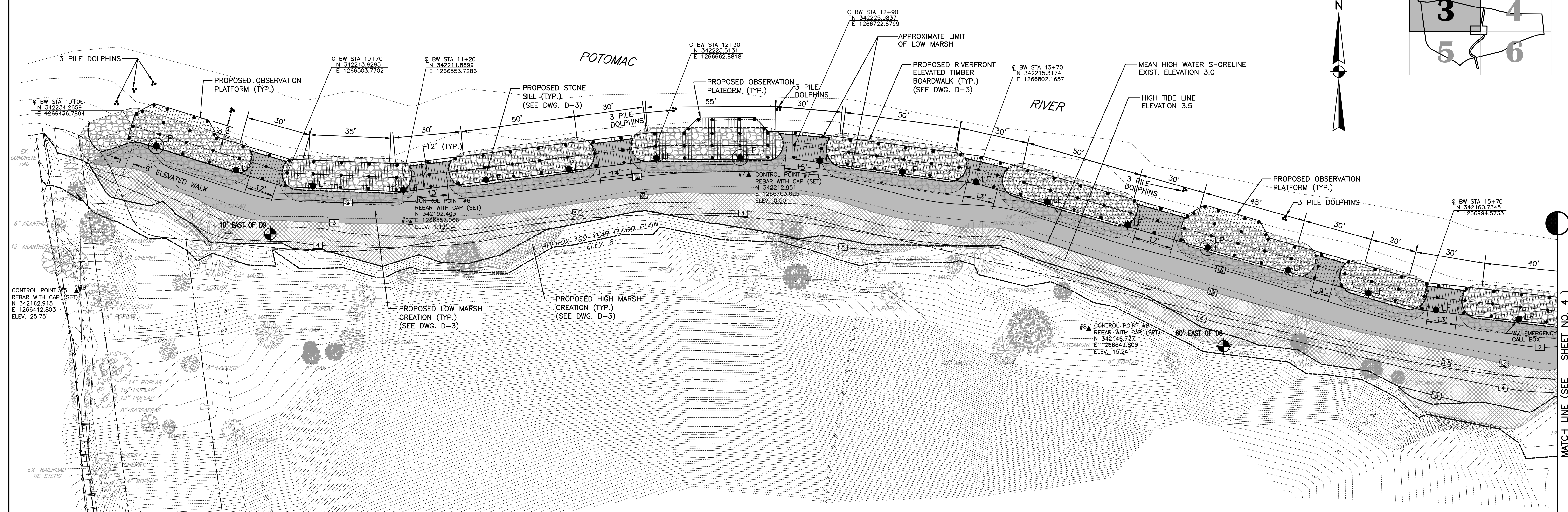
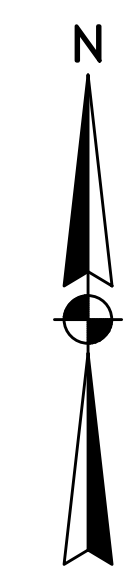
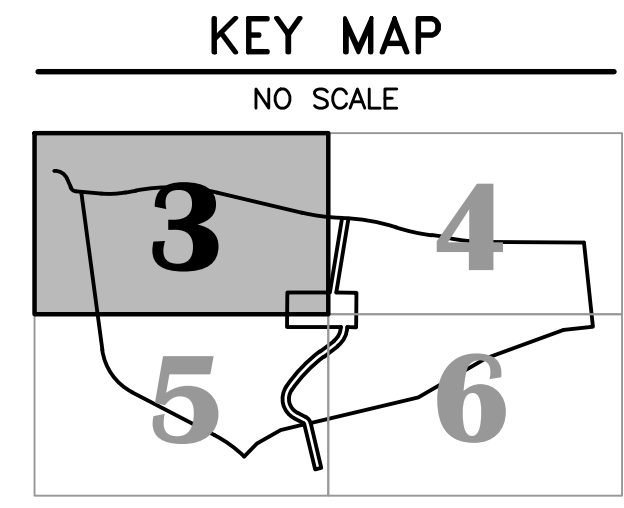


PROFESSIONAL CERTIFICATION
I, SCOTT F. LONGSTRETH, P.E., hereby certify that these documents were prepared and approved by me and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 32713, expiration date 2-21-2020.

CLIENT & PROJECT
TOWN OF INDIAN HEAD
4195 INDIAN HEAD HIGHWAY
INDIAN HEAD, MARYLAND 20640
BOARDWALK and
LIVING SHORELINE ON THE POTOMAC
INDIAN HEAD, CHARLES COUNTY, MARYLAND



TITLE GENERAL CONSTRUCTION PLAN AND SIDEWALK WIDENING ALONG RIVERWATCH BLVD AND RIVERWATCH DRIVE		
SCALE 1"=60'	DWG. NO. G-2	
PROJECT NO. 07171.00	SHEET NO. 2 OF 24	REV.



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H	AGENCY COMMENTS	1/03/12	AM	RDP	A	ISSUED TO CLIENT	11/20/08	AM	RDP
NO									

SOIL BORING LOGS

BORING "60' EAST OF D8"		BORING "10' EAST OF D9"	
N	C	N	C
8-5-7		6-3-6	
15-17-19		6-5-10	
21-11-24		22-8-6	
25-19-19	*	5-4-6	*
19-25-15		3-2-4	
15-12-100/5"		3-3-4	
100/5"-22-100/5"		8-100/5"-100/4"	

EL. 2.0 WL (0) EL. 1.18 WL (0) EL. -5.00 EL. -6.18

* SAMPLE/COMPOSITION DATA UNAVAILABLE

- BORINGS AND DIRECT CONE PENETROMETER TESTS WERE PERFORMED IN OCTOBER 2008 BY SPECIALIZED ENGINEERING.
- N = BLOWS ON A 2 INCH O.D. SAMPLING SPOON BY 140 LB WEIGHT FALLING 30 INCHES INDICATING SUCCESSIVE 6 INCH INCREMENTS OF PENETRATION IN LIEU OF BLOWS PER FOOT. PENETRATIONS LESS THAN 6 INCHES ARE INDICATED BY 100 BLOWS OVER THE NEAREST INCH. PLEASE NOTE THAT THE N VALUES WERE OBTAINED BY CONVERTING DIRECT CONE PENETROMETER DATA TO STANDARD N VALUES.
- PLEASE NOTE THAT BORINGS WERE BACKFILLED IMMEDIATELY DUE TO SAFETY CONCERNS, SO NO 24-HOUR GROUNDWATER LEVELS WERE OBTAINED.
- C = DEPTH OF 3-1/4 INCH I.D HOLLOW STEM AUGERS.
- BORINGS AND SAMPLINGS CONFORM TO AASHTO DESIGNATIONS T-206-87 AND T-251-77.
- SOIL HAS BEEN CLASSIFIED VISUALLY BY A SOILS ENGINEER.

LEGEND

Ex. EX. LIGHT POLE	PROPOSED LOW MARSH CREATION
Ex. EX. UTILITY MANHOLE	PROPOSED HIGH MARSH CREATION
Ex. EX. SHORELINE	PROPOSED RIVERFRONT ELEVATED TIMBER BOARDWALK
Ex. EX. STREAM LINE	PROPOSED ADA COMPLIANT ELEVATED TIMBER NATURE WALK
Ex. EX. 100 YEAR FLOODPLAIN & WETLANDS	PROPOSED CONTOUR ELEVATION
Ex. EX. PROPERTY LINE	SURVEY CONTROL POINT
Ex. EX. FENCE	LIGHT FIXTURE
Ex. EX. MAPLE TREE	LIGHT POLE
Ex. EX. PAW-PAW TREE	EXISTING NON-TIDAL WETLAND
Ex. EX. PINE TREE	EXISTING WETLAND BUFFER
Ex. EX. CATALPA TREE	EXISTING INTERMITTENT STREAM
Ex. EX. OAK TREE	SOIL BORING LOCATION
Ex. EX. HOLLY TREE	
Ex. EX. LOCUST TREE	
Ex. EX. POPLAR TREE	
Ex. EX. SASSAFRAS TREE	
Ex. EX. SYCAMORE TREE	
Ex. EX. HICKORY TREE	
Ex. EX. CHERRY TREE	
Ex. EX. AILANTHUS TREE	
Ex. EX. BEECH TREE	
Ex. EX. GUM TREE	
Ex. EX. BIRCH TREE	

- ### GENERAL NOTES
- THE CONTRACTOR SHALL REMOVE AND DISCARD OFFSITE, ALL LOOSE DEBRIS, DRIFTWOOD, DEAD TREES, TRASH, ETC FROM THE TOE OF THE SLOPE TO PROPOSED BOARDWALK LOCATION INCLUDING ALL AREAS DESIGNATED FOR MARSH AREA, STONE AND BOARDWALK.
 - ACCESS FOR WORK SHALL BE LIMITED TO EXISTING BITUMINOUS PAVED ROADWAY ON RIVERWATCH DRIVE. THE PROPOSED WALKWAY AND BY BARGE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGE DONE TO PRECONSTRUCTION CONDITIONS OR BETTER. CONTRACTOR SHALL PREPARE A VIDEOTAPE RECORD OF SITE AND EXISTING ACCESS ROUTE PRIOR TO THE COMMENCEMENT OF WORK.
 - PILES FOR RIVER BOARDWALK TO BE 12" DIA, CLASS "B".
 - PILES, BEAMS AND STRINGERS TO BE 2.5 CCA, DECK AND RAILINGS TO BE CA.
 - EXISTING SHORELINE AREA DESIGNATED FOR HIGH END LOW MARSH AREAS (LIVING SHORELINE) SHALL BE GRADED AND RAKED WITH ALL DEBRIS REMOVED. EXISTING LIVING TREES TO BE REMOVED WITH ROOT BALL REMAINING.
 - ALL WORK MUST BE PERFORMED BY A MARINE CONTRACTOR REGISTERED WITH THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
 - INSTREAM WORK IS PROHIBITED FROM FEBRUARY 15 TO APRIL 30.

CONTRACT #: CH3685125
F.A.P #: STP-3(387)E

	SCOTT F. LONGSTRETH, P.E. RELEASED BY: DESIGN R BARRICK CHECKED: J MILLER DATE: OCTOBER 2008 SURVEY DATE: FIELD BOOK	CLIENT & PROJECT TOWN OF INDIAN HEAD 4195 INDIAN HEAD HIGHWAY INDIAN HEAD, MARYLAND 20640 BOARDWALK and LIVING SHORELINE ON THE POTOMAC INDIAN HEAD, CHARLES COUNTY, MARYLAND		TITLE PROPOSED SITE PLAN SCALE: 1" = 20' PROJECT NO. 07171.00 SHEET NO. 3 OF 24 REV.
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