



Maryland
Department of
the Environment

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

Horacio Tablada, Secretary
Suzanne E. Dorsey, Deputy Secretary

July 27, 2022

Department of the Army
Baltimore District, Corps of Engineers
Attn: Danielle Szimanski
2 Hopkins Place
Baltimore, Maryland 21203-1715
Kevin.M.Brennan@usace.army.mil

Re: Agency Interest Number: 127561
Tracking Number: 202260382
Tidal Authorization Number: 22-WQC-0014

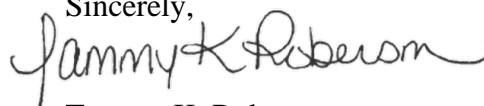
Dear Mr. Brennan:

This project did not qualify as a type of project that is covered by the Maryland State Programmatic General Permit (MDSPGP) and its associated 401 Water Quality Certification (WQC). The project is an U.S. Army Corps of Engineers (USACE) navigation project and will not require a separate federal authorization through the Corps' Regulatory Division.

The dredge material placement site and the Route 363 conduit placement portions of this project will require a Wetlands License. These applications are currently under review and a Report and Recommendation for each application will be forwarded to the Maryland Board of Public Works (BPW) for review.

The individual Water Quality Certification (WQC) for this project issued by the Maryland Department of the Environment is attached. Please review this WQC to ensure that you understand the limits of the authorized work and all of the general and special conditions.

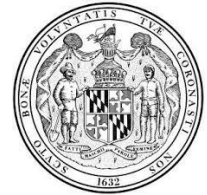
You should not begin any work until you have obtained all necessary State, local, and federal authorizations. Please contact Mary Phipps-Dickerson at mary.phipps-dickerson@maryland.gov or 410-901-4033 with any questions.

Sincerely,


Tammy K. Roberson
Chief
Tidal Wetlands Division



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



22-WQC-0014

EFFECTIVE DATE: **July 27, 2022**
CERTIFICATION HOLDER: **Army Corps of Engineers**
ADDRESS: **Attn: Danielle Szimanski**
2 Hopkins Plaza
Baltimore, MD 21201
PROJECT LOCATION: **Dredging: Wicomico River, Monie Bay,**
Placement site: Deal Island Wildlife
Management Area off Riley Roberts Road
Deal Island, MD 21853 in the Manokin River
Watershed

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 LOWER WICOMICO RIVER DREDGING AND AS DESCRIBED IN THE ATTACHED PLAN SHEETS DATED JUNE 16, 2022 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. THE CERTIFICATION HOLDER SHALL COMPLY WITH THE CONDITIONS LISTED BELOW.

PROJECT DESCRIPTION

1. Maintenance dredging by hydraulic method a 10-mile Lower Wicomico River segment of the Federal Channel at 150 feet wide to a depth of 16 feet below the mean low water line (14 feet deep at MLW plus 2 feet of overdredge).
2. Remove approximately 140,000 cubic yards of sediment from the channel and pump through a 16-inch to 24-inch diameter weighted pipeline up to 6.7 miles from the dredged area where the pipelines will emerge on land near Messick Road at Fannys Gut. The pipeline will be placed adjacent to Messick Road for 0.2 miles and will cross below Md. Route 363 through a conduit to be authorized under 21-WL-0934 and continue approximately 6 miles from Rt.363 through the Deal Island Wildlife Refuge along the impoundment berm to the placement site.

3. Spray the dredged material onto two areas totaling 72.5 acres. The area will be staked with a maximum fill elevation of 3.5 feet at MLLW, resulting in a 0.58 foot to 1.2 foot increase in elevation.
4. Emplace straw bales which will be staked in place to a height of 3 feet above the existing elevation along the perimeter of the two areas and allowed to deteriorate naturally over time.
5. Install 19 tidal ditch plugs will be permanently installed and will allow water to exit the placement site, but not enter.
6. Enhance 64.3 acres of high marsh and 3.7 acres of low marsh.
7. Convert 4.6 acres of open water to low marsh.
8. Plant *Spartina alterniflora* and *Spartina cynosuroides* plugs near the perimeter and aerially disperse Barnyard grass to stabilize the area while it settles during the first year post-placement,
9. Plant *Spartina patens* and *Distichlis spicata* in during the second year post placement..

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.
2. All additional authorizations or approvals, including self-certifying General Permits issued by the Department, shall be obtained and all conditions shall be completed in compliance with such authorizations.
3. The proposed project shall be constructed in accordance with the approved final plan by the Department, or, if Department approval is not required, the plan approved by the U.S. Army Corps of Engineers, and its approved revisions.
4. All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of this State.
5. 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.
6. Authorized representatives of the Department shall be provided 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.
7. Authorized work under this Certification shall be performed in accordance with the required Soil Erosion and Sediment Control Plan as approved by the Maryland Department of the Environment.
8. No stockpiles of any material shall be placed in Waters of the U.S. or state or private tidal wetlands.
9. Temporary construction trailers or structures, staging areas and stockpiles shall not be located within tidal wetlands, nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.

10. This Certification is valid for the project identified herein and the associated U.S. Army Corps of Engineers Lower Wicomico navigation.

SPECIAL CONDITIONS

1. All water quality-related performance standards and conditions required by the Department in any state issued authorization for activities in tidal wetlands, nontidal waterways, their 100-year floodplains, nontidal wetland buffers, or nontidal wetland expanded buffers to ensure that any discharges will not result in a failure to comply with water quality standards in COMAR 26.08.02. or other water quality requirements of state law or regulation shall be met.
2. All Critical Area requirements shall be followed and all necessary authorizations from the Critical Area Commission (“Commission”) shall be obtained. This Certificate does not constitute authorization for disturbance in the 100-foot Critical Area Buffer. “Disturbance” in the Buffer means clearing, grading, construction activities, or removal of any size of tree or vegetation. Any anticipated Buffer disturbance requires prior written approval, before commencement of land disturbing activity, from the Commission in the form of a Buffer Management Plan.
3. All work performed under this Water Quality Certificate shall be conducted by a marine contractor licensed by the Marine Contractors Licensing Board (MCLB) in accordance with Title 17 of the Environment Article of Annotated Code of Maryland. Licensing by MCLB shall occur prior to the beginning of construction activities. A list of licensed marine contractors may be obtained by contacting the MCLB at 410-537- 3249, by e-mail at MDE.MCLB@maryland.gov or by accessing the Maryland Department of the Environment, Environmental Boards webpage.
4. A detailed plan for monitoring water quality parameters associated with construction and operation of the restoration site shall be submitted to the Maryland Department of the Environment, Tidal Wetlands Division, prior to project commencement. Written approval of the monitoring plan from the Tidal Wetlands Division shall be received prior to project commencement.
5. Monitoring required by any Department authorization shall be conducted in compliance with the approved monitoring plan to ensure that water quality standards and water quality requirements for waters of this State are met.
6. Monitoring of the suspended solids content in the discharge from the hydraulically dredged material placement areas shall be conducted. The suspended solids shall not exceed a monthly average of four hundred parts per million with a daily maximum of 800 parts per million.
7. Monitoring of the turbidity in the surface water resulting from any discharge or fill placement shall be conducted. Levels may not exceed 150 Nephelometer Turbidity Units (NTU) at any time or 50 NTU as a monthly average outside the “mixing zone” as established in the monitoring plan. A turbidity curtain shall be deployed in the event that turbidity readings exceed the identified thresholds.
8. An inadvertent breach response plan to outline actions to be taken in the event of a breach shall be developed. The plan shall be provided to the Maryland Department of the Environment and approved prior to commencement of any dredged material placement activities authorized by this Certification.
9. Prior to the start of work a copy of the final, approved Erosion and Sediment Control Plans shall be provided to the Wetlands and Waterways Program, Tidal Wetlands Division.

10. As-built plans will be provided to MDE Water and Science Division within 90 days of completion of the placement of dredge material.
11. The dredged material shall be sampled in accordance with the February 1998 EPA "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual: Inland Testing Manual". Results of these samples shall be provided to MDE. Dredged material that does not meet the criteria of the Inland Testing Manual shall not be placed on Deal Island.
12. When unloading dredged material, the dredger shall have a person at the discharge point of the DMP in constant radio communication. If a problem is incurred, the placement of dredged material shall be immediately shut down until the reason for the problem can be ascertained and rectified.
13. Inspections shall be conducted of the permitted area after the first earth disturbance occurs on the site, and thenceforth during the entire period of Certification coverage whether the site is active or inactive. The person(s) inspecting the site may be a person on the Certificate Holder staff or a third party hired or arranged to conduct inspections. The person conducting the inspection must hold a valid certificate of attendance at a training program for responsible personnel as required by Section 4-104(b) of the Environment Article, unless the erosion and sediment control plan approval authority has waived the requirement for a Certificate of Training in accordance with Section 4-104(c) of the Environment Article. During times that work is being conducted at the site, inspections shall be conducted at the following intervals: a. Once each calendar week (Sunday to Saturday), except as in c; b. The next day after a rainfall event resulting in runoff, except as in c; c. For areas meeting stabilization requirements of COMAR 26.17.01.07.B.6 (f) and the erosion and sediment control plan, once per month. (If construction activity resumes in such a portion of the site at a later date, the inspection frequency immediately increases to that required in a and b. The beginning and ending dates of the period of stabilization shall be documented in its inspection records).
14. Written reports of all inspections conducted under Special Condition #13 of this Certification shall be kept on file and be made available to WSA within one business day of a request for the records. The report shall include: (1) the date and time of the inspection; (2) the name(s) of the individual(s) who performed the inspection; (3) an assessment of the condition of erosion and sediment controls and how any deficiencies were or are being addressed; (4) a description and date of any erosion and sediment control implementation and maintenance performed, including identification of any controls that have not been installed as required; and (5) a description of the site's present phase of construction.
15. Dredged material pipelines and pump stations shall be installed, marked and maintained in accordance with all U.S. Coast Guard requirements for navigational safety. Dredge material pipelines and associated equipment shall be removed as soon as practicable, upon completion of activities authorized under this License.
16. Activities involved in the restoration of the Deal Island Restoration Site shall follow enforceable state policies and related to fish passage, protection and management of submerged aquatic vegetation, protection of oyster bars, protection of shellfish aquaculture leases, prohibition of genetically modified organisms, and control of nonnative aquatic organisms.
17. Adherence to the construction time of year restrictions, unless waived or amended by the Department.
18. The Certificate Holder shall not dredge or place dredge material at the placement site from February 15 through October 15 of any year to reduce impacts to spawning anadromous fish, oysters, waterfowl, and submerged aquatic vegetation.

19. The Certificate Holder shall not perform any dredging within natural oyster bar NOB 29-1 from December 16 through March 14 of any year.
20. The Certificate Holder shall coordinate with the Department of Natural Resources to determine whether proposed work will impact active oyster leases and notify any identified leaseholder(s) at least 30 days prior to commencement of work so that aquaculture gear and product may be relocated by the leaseholder as they determine necessary to avoid oyster loss or damage during construction. Natural Resources Article §4-11A-16 establishes that a person, other than the leaseholder, may not willfully and without authority catch, willfully destroy, remove, alter or transfer any marker, shellfish, equipment, or structures on any aquaculture or submerged land lease area. The current locations of leases are shown on Attachment A. Since these leases and leaseholders will change over time, the Aquaculture Siting Tool at <http://dnrweb.dnr.state.md.us/fisheries/aquatool/aquatool.asp> shall be utilized to obtain updated information regarding leaseholders and locations.

For additional information on shellfish aquaculture leasing, please contact Rebecca Thur, MD DNR Leasing and Permitting Coordinator, at rebecca.thur@maryland.gov or at 410 260-8252.

21. The Certificate Holder shall take care not to disturb the Oyster Lease's corner markers when maneuvering any equipment in the area.
22. The Certificate Holder shall coordinate with DNR to obtain all required Memorandums of Understanding and Use Agreements for work in and adjacent to the Deal Island Wildlife Management Area.
23. A marsh maintenance plan shall be submitted to and approved by the Tidal Wetlands Division, Water and Science Administration, and any alternative plan must be submitted to and approved by the Tidal Wetlands Division, Water and Science Administration, prior to commencement of any wetland restoration or planting activities. 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.
24. Authorized work under this Certification shall be constructed in the marsh enhancement or establishment area in accordance with the following conditions:
 - a) The marsh establishment area shall be planted within one year following completion of the dredge placement operations.
 - b) The marsh establishment project shall be maintained as a wetland, with non-nuisance species' areal coverage of at least 85% of the planted areas 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 revegetated in accordance with an approved plan.
 - c) If the existing bank is to be cleared or graded:
 - i) Any person or entity performing authorized work under this Certification 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) Work authorized under this Certification shall perform all work under and in accordance with the Critical Area requirements of the Critical Area Commission in the form of an approved Buffer Management Plan.
 - d) Monitoring reports shall be submitted annually. The reports shall include the information listed in the Wicomico River/Deal Island Project: Monitoring Plan Details including the extent of native marsh plant coverage, elimination of invasive species

and timeframe for plant establishment, and include photographs for the first five growing seasons in order to document the success of the project in terms of the extent of native marsh plant coverage. Photographs shall be taken from at least two directions, as necessary to fully depict the wetlands.

CITATIONS AND STATEMENTS OF NECESSITY

CITATIONS AND STATEMENTS OF NECESSITY

1) General Authorities; Need for Other Permits and Authorizations

a) General Conditions 1,2, 10; Special Conditions 2, 9, 22

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 and to maintain designated uses of waters.

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 26.23.02.06; COMAR 26.17.01; COMAR 26.23; COMAR 26.24

b) General Condition 3

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 terms of the federal authorization and to maintain designated uses of waters. The Corps of Engineers authorization and plans include details about amount and location of discharges, as well as other conditions for reducing adverse effects to water quality, which ultimately supports maintaining designated uses. The Certification conditions and decision are based upon based on the details of the Corps of Engineers authorization and plans.

Citation: COMAR 26.08.02.01E(2)

c) General Condition 5

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 26.17.04; COMAR 26.23; COMAR 26.24

2) Unauthorized or Incidental Discharges - General Conditions 4, 8, 9, Special Condition 8

Statement of Necessity for Condition: Fill or construction material within or adjacent to regulated resources may cause discharges resulting in turbidity in excess of water quality standards and interfere with designated uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance.

Citation: 26.08.02.03B(1)-B(2); COMAR 26.23; COMAR 26.24; COMAR 26.17.04

3) Inspections and Compliance - General Condition 6, Special Conditions 10, 12, 13, 14

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. These conditions are necessary to ensure that the activity was conducted and project completed according to terms of the authorization/certification, while allowing for review of in-field modifications which may have resulted in discharges to ensure that water quality standards were met. Designated uses include support of estuarine and marine aquatic life and shellfish harvesting and for growth and propagation of fish, other aquatic life, and wildlife

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 26.08.02.03B(1)(b); COMAR 26.08.02.03B(2); COMAR 26.23.02.06; COMAR 26.23; COMAR 26.24; COMAR 26.17.04

4) Erosion and Sediment Control – General Conditions 1, 2, 7; Special Conditions 8, 9

Statement of Necessity for Condition: Erosion and sediment control plans are necessary to ensure that sediment discharges from construction activities will not enter waters of the United States. Sediment discharges from earth disturbance or discharges at erosive rates within or adjacent to regulated resources may cause discharges resulting in turbidity in excess of water quality standards and interfere with designated uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance

Citation: Env. Article, Title 4, Subtitle 1 COMAR 26.17.01; 26.08.02.03B(1)-B(2)

5) Performance Standards for Water Quality - Special Condition 1

Statement of Necessity for Condition: This condition is necessary to ensure that discharges will be conducted in a manner which does not violate water quality criteria nor interfere with designated uses.

Citation: COMAR 26.08.02.03B(1)(b); 26.08.02.03B(2);

6) Licensed Marine Contractor - Special Condition 3

Statement of Necessity: Expertise for conducting certain activities is required to ensure that there is no violation of water quality standards nor interference with designated uses.

This condition is necessary to ensure that discharges will be conducted in a manner which does not violate water quality criteria nor interfere with designated uses.

Citation: COMAR 26.08.02.02B(2)- B(4); COMAR 26.08.02.03B(2)(d) – (e); COMAR 26.08.02.03B(1)(b); 26.08.02.03B(2); COMAR 23.02.04.04

7) Monitoring - Special Conditions 4-7, 11

Statement of Necessity: Activities which result or may result in a discharge to regulated waters, including replacement of wetland/water resources as an offset/mitigation may require monitoring to ensure that water quality standards are met and designated uses are maintained, and to determine if remedial measures are needed to restore compliance with water quality standards if they are not met as a result of the discharge. The condition is necessary to ensure that dredged material does not increase turbidity in violation of general and numeric water quality standards and interfere with designated uses and to ensure that offsets to regulated waters are successfully implemented.

Citation: COMAR 26.08.02.03-3A(5); COMAR 26.08.02.03-3(C(5); COMAR 26.08.02.01B(2); COMAR 26.08.02.02B(1) COMAR 26.08.02.02B(3); COMAR 26.08.02.03B; COMAR 26.08.02.02B(1);

26.08.02.03B(1)(b); 26.08.02.03B(2)(e); 26.08.02; 26.08.01.02A; 26.08.02.09A; 26.08.02.02B(1)(d); COMAR 26.24; 26.08.02.03-3C(9)(a); COMAR 26.08.02.03B(2); COMAR 26.08.02.02B(1)(d);

8) Inadvertent discharges - Special Conditions 8, 12

Unauthorized discharges may enter regulated waters as result of activity or structural failure. A plan to address inadvertent discharges will prevent or address further violations of water quality standards and failure of water to meet designated uses, including uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance.

Citation COMAR 26.08.02.02B(1)d; COMAR 26.08.02.02B(3); COMAR 26.08.02.03B(1) and B(2); 26.08.02.01B(2); 26.08.02.02B(1)

9) Prevention of Toxic Discharges - Special Conditions 11

Statement of Necessity for Condition: This condition is necessary to prevent contaminated sediments with toxic material in excess of numeric limits to enter regulated waters. Limits or prohibitions are necessary to protect all designated uses.

Citation: COMAR 26.08.02.03-1; COMAR 26.08.02.02

10) Navigational Safety - Special Condition 15

Statement of Necessity for Condition: The condition is necessary to ensure that the discharge does not interfere with designated uses for water contact recreation and fishing nor create a nuisance.

Citation: COMAR 26.08.02.01B(1) and B(2); COMAR 26.08.02.03B(1)(a); COMAR 26.08.02.03B(2)(d)

- 11) Nuisance and Non-Native Species; SAV, Fish passage; Protection of Oyster Bars and Shellfish Leases – Special Conditions 16, 19, 20, 21

Statement of Necessity for Condition: Nuisance or non-native species may spread and disrupt and dislodge native species from their habitat, leading to declines in distribution, density, growth and propagation. SAV are a critical habitat for many aquatic species. Limitations on loss will sustain habitat for a variety of aquatic species, including anadromous fish and threatened or endangered species. Water quality regulations state minimum thresholds for SAV in tidal waterways. In addition to direct loss, turbidity created by construction or ongoing operation must be limited for support of aquatic life and meet water quality standards.

Oyster bar creation supports/expands designated use for growth and propagation of oyster bars in Support of designated uses for growth and propagation of fish, other aquatic life, and wildlife and the designated use for support of estuarine and marine aquatic life and shellfish harvesting.

The conditions are necessary to allow for continued oyster harvesting and propagation; and maintain and not interfere the designated use- support of estuarine and marine aquatic life and shellfish harvesting.

The conditions ensure that discharges will not result in failure to support designated uses for marine and estuarine aquatic life and submerged aquatic vegetation; and growth, propagation of fish, other aquatic life, and wildlife, and shellfish harvesting.

Citation: COMAR 26.08.02.02-1; COMAR 26.08.02.02B(1)(d); COMAR 26.08.02.03B; COMAR 26.08.02.03-3C; COMAR 26.08.02.02B(2)-B(4); COMAR 26.08.02.03B(2)(d) – (e); COMAR 26.08.02.03-3C; COMAR 26.08.02.02-1

- 12) Time of Year Restriction for Conducting Activities – Special Conditions 17, 18, 19

Statement of Necessity for Condition: The time of year restriction is necessary to maintain the designated use- support of estuarine and marine aquatic life and shellfish harvesting.

Citation: COMAR: 26.08.02.02B(1)(d); 26.08.02.02B(3); COMAR 26.08.02.02-1

- 13) Submerged Aquatic Vegetation – Special Condition 18

Statement of Necessity: SAV are a critical habitat for many aquatic species. Limitations on loss will sustain habitat for a variety of aquatic species, including anadromous fish and threatened or endangered species. Water quality regulations state minimum thresholds for SAV in tidal waterways. In addition to direct loss, turbidity created by construction or ongoing operation must be limited for support of aquatic life and meet water quality standards. Unmitigated loss of SAV may result in failure to meet SAV extents which are part of water quality standards, as well as designated use class for support of estuarine and marine aquatic life and shellfish harvesting.

Citations: COMAR 26.08.02.03-3C(9); COMAR 26.08.02.03B(1)(b); 26.08.02.03B(2)

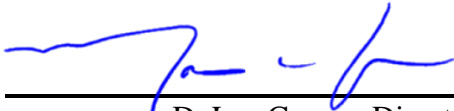
- 14) Marsh Establishment, Maintenance, and Mitigation - Special Conditions 23, 24,

Statement of Necessity for Condition: Tidal wetlands provide essential habitat, water quality, food, and movement corridors for wildlife, and support of estuarine and marine aquatic life and shellfish harvesting. Successful establishment is necessary to prevent discharges which interfere with designated uses, including growth and propagation of fish, other aquatic life, and wildlife through

loss of stream channel habitat and wetlands. Required establishment, re-establishment, or enhancement and loss limits will maintain the designated use.

Citations: COMAR 26.08.02.02B(3); COMAR 26.08.02.03B(3) and B(4); COMAR 26.24.

CERTIFICATION APPROVED



D. Lee Currey, Director
Water and Science Administration

7/29/2022

Date

Tracking Number: 202260382
Agency Interest Number: 127561

Effective Date: **July 27, 2022**

Enclosure: Plan Sheets dated June 16, 2022

cc: WSA Inspection & Compliance Program
Army Corps of Engineers

22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 3 of 14

TIDAL BENCH MARK

TIDAL BENCH MARK IS BENCH MARK WEB 3. BENCH MARK IS A STANDARD DISK STAMPED "WEB 3 1975". FROM MD. RTE. 362 AT U.S. HWY 15, AT THE TOWN OF PRINCESS ANNE, SOMERSET COUNTY, MD., GO WESTERLY ON MD. RTE. 362, 4.9 MILES, BEAR LEFT, STILL RTE. 362 FOR 1.5 MILES TO A FORK IN RD., BEAR LEFT 1.8 MILES TO GORSEY RD., TURN RIGHT, GO 0.2 MILES, TURN LEFT INTO PARKING AREA, GO DIAGONALLY STOPPING NEAR THE CORNER OF THE BULKHEAD. MONUMENT "WEB 3" IS LEFT, 2.75 FT. N FROM A UTILITY POLE NO. 1540188985, 45.45 FT. SW FROM CORNER OF BULKHEAD AND 138.25 FT. FROM ANOTHER CORNER OF SAID BULKHEAD.

BENCH MARK ELEV. IS 6.10' ABOVE MLW FOR THE '83-'01 TIDAL EPOCH, COMPUTED USING GEDD18.

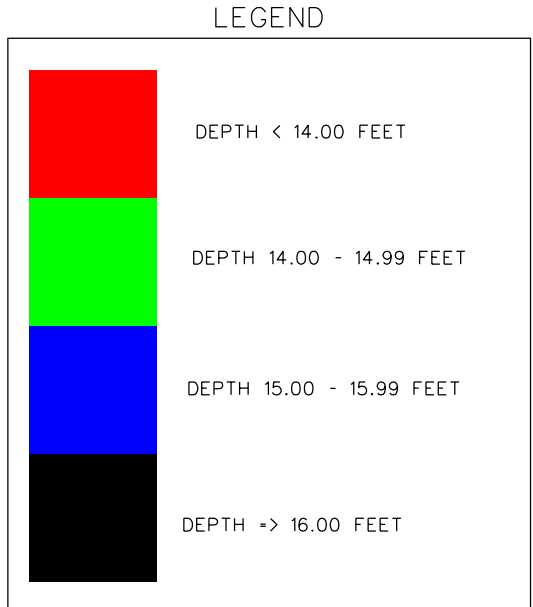
BENCHMARK MLLW
 WEB 3 6.10'
 042 WCC 01 4.01'
 042 WCC 02 4.16'

VERTICAL DATUM
 MHW = 2.37
 MLLW = 0.13
 MLW = 0.00 ft

CONTRACTOR NOTE
 THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

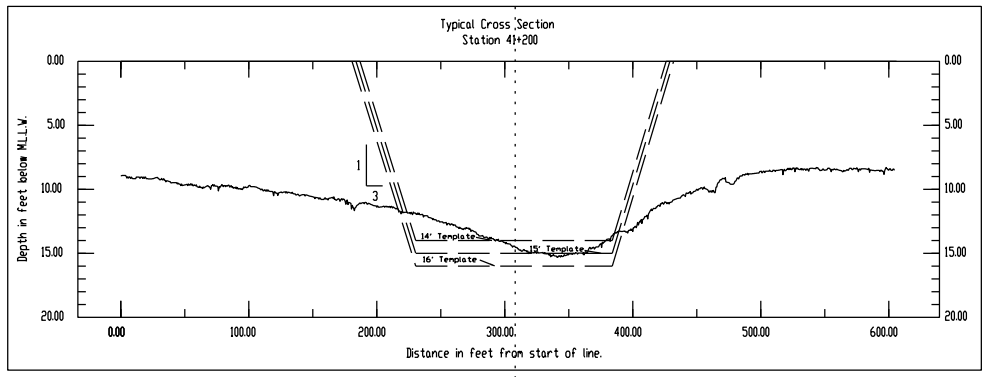
NOTES:
 1. STATIONS ARE AT 1000' INTERVALS.
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 4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE (1900) COORDINATE SYSTEM.
 5. SOUNDINGS WERE OBTAINED USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODDM DEPTH SOUNDER.
 6. PROJECT DEPTH: 14 FEET.
 7. CHANNEL WIDTH: 15 FEET.
 8. SURVEYED 23, 28, 29, & 30 JULY AND 11, 12, 13, 18, 19, 20 & 25 AUGUST 2020.

AREA TO BE DREDGED TO 14 FEET MLLW WITH A 1 FOOT ALLOWABLE OVERDEPTH.



DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
A1	1635516.29	202157.64
A2	1636376.40	203633.50
A3	1636339.80	201310.40
A4	1636476.60	207822.10
A5	1636825.90	208370.30
A6	1637150.20	208685.30
A7	1640417.31	210637.82
A8	1640340.38	210766.55
A9	1636843.40	208676.70
A10	1636176.80	201620.80
A11	1636222.40	203952.30
A12	1636085.20	203431.90
A13	1635386.65	202233.19



US Army Corps of Engineers
 Baltimore District

WICOMICO COUNTY
 MARYLAND
 MAINTENANCE DREDGING
 WICOMICO RIVER
 STATION 39+800 TO 42+700

Sheet reference number:
V-103
 Sheet 3 of

22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 4 of 14

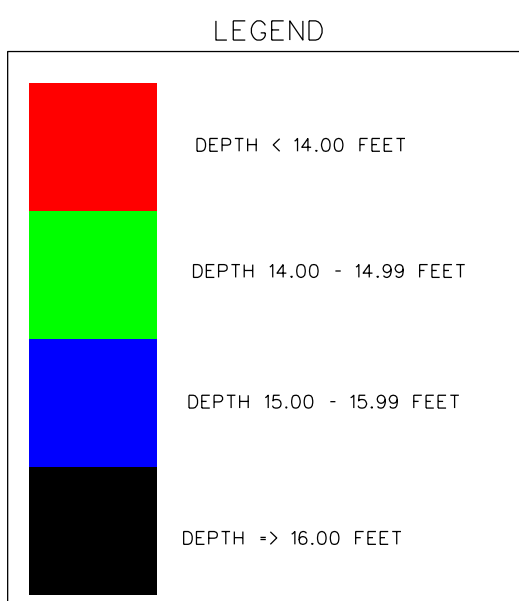
CONTRACTOR NOTE
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 6. PROJECT DEPTH: 14 FEET.
 7. CHANNEL WIDTH: 150 FEET.
 8. SURVEYED 23, 28, 29, & 30 JULY AND 11, 12, 13, 18, 19, 20 & 25 AUGUST 2020.



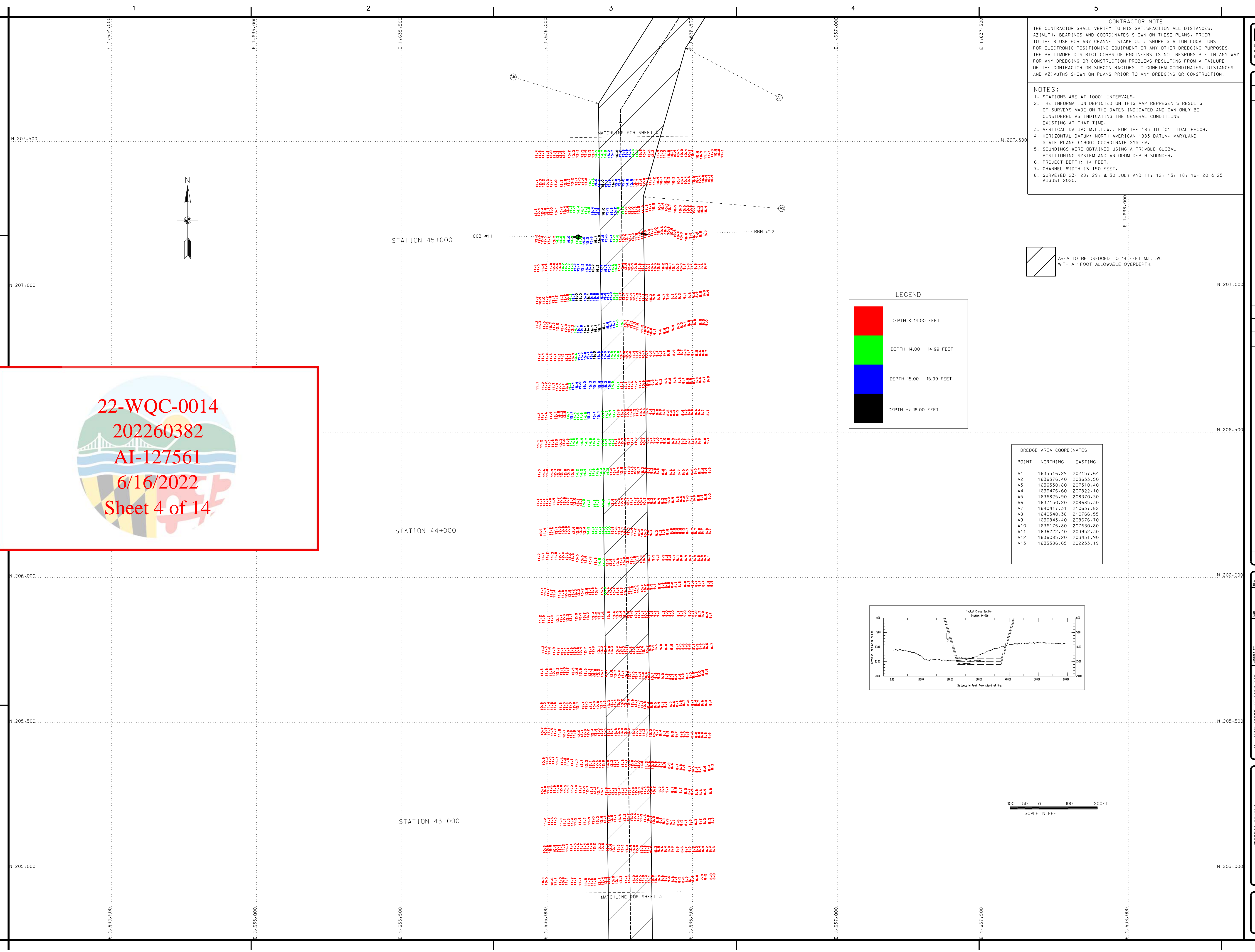
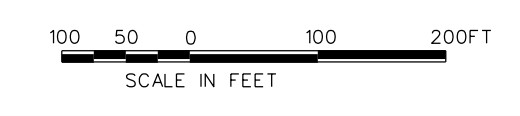
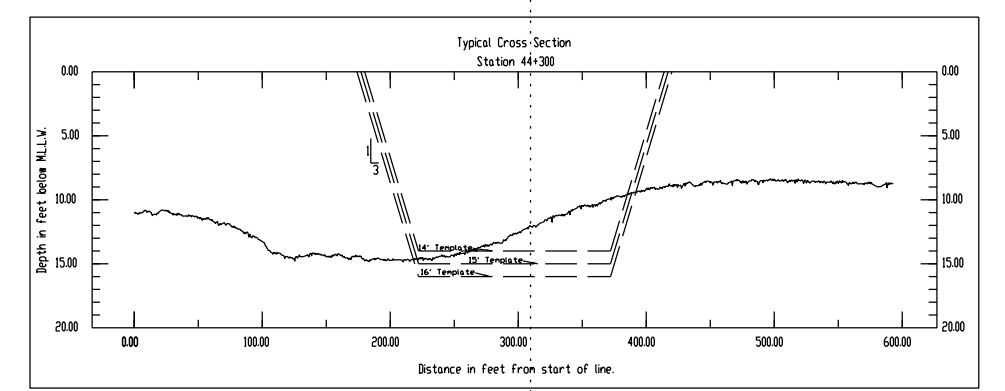
NO.	DATE	DESCRIPTION	BY	CHECKED

AREA TO BE DREDGED TO 14 FEET M.L.L.W. WITH A 1 FOOT ALLOWABLE OVERDEPTH.



DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
A1	1635516.29	202157.64
A2	1636376.40	203633.50
A3	1636330.80	207310.40
A4	1636476.60	207922.10
A5	1636825.90	208370.30
A6	1637150.20	208685.30
A7	1640417.31	210637.82
A8	1640340.38	210766.55
A9	1636843.40	208676.70
A10	1636176.80	207630.80
A11	1636222.40	203952.30
A12	1636085.20	204431.90
A13	1635386.65	202233.19



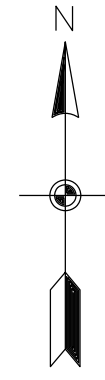
U.S. ARMY CORPS OF ENGINEERS
 BALTIMORE DISTRICT

WICOMCO COUNTY
 MARYLAND
 MAINTENANCE DREDGING
 WICOMCO RIVER
 STATION 42+800 TO 45+300

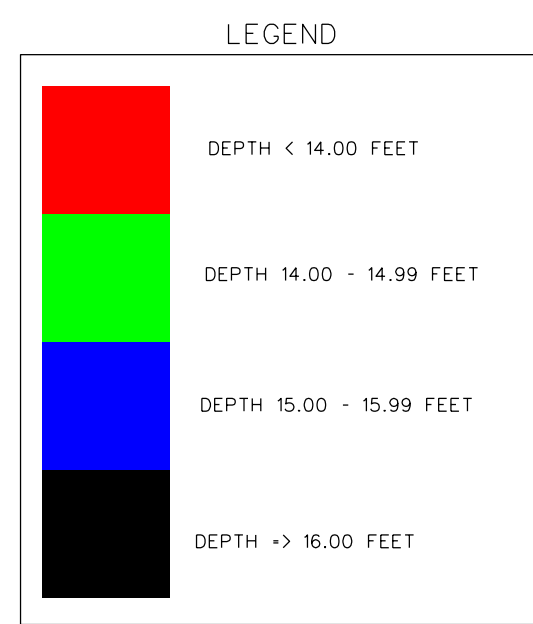
Sheet reference number:
V-104
 Sheet 4 of

CONTRACTOR NOTE
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 7. CHANNEL WIDTH IS 150 FEET.
 8. SURVEYED 23, 28, 29, & 30 JULY AND 11, 12, 13, 18, 19, 20 & 25 AUGUST 2020.



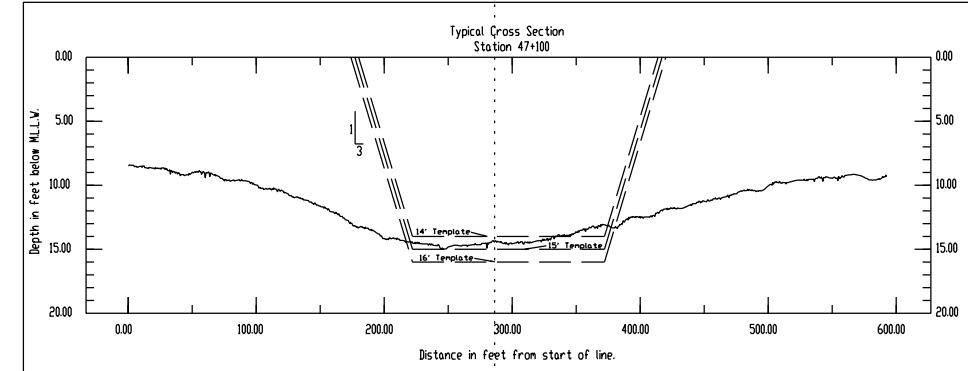
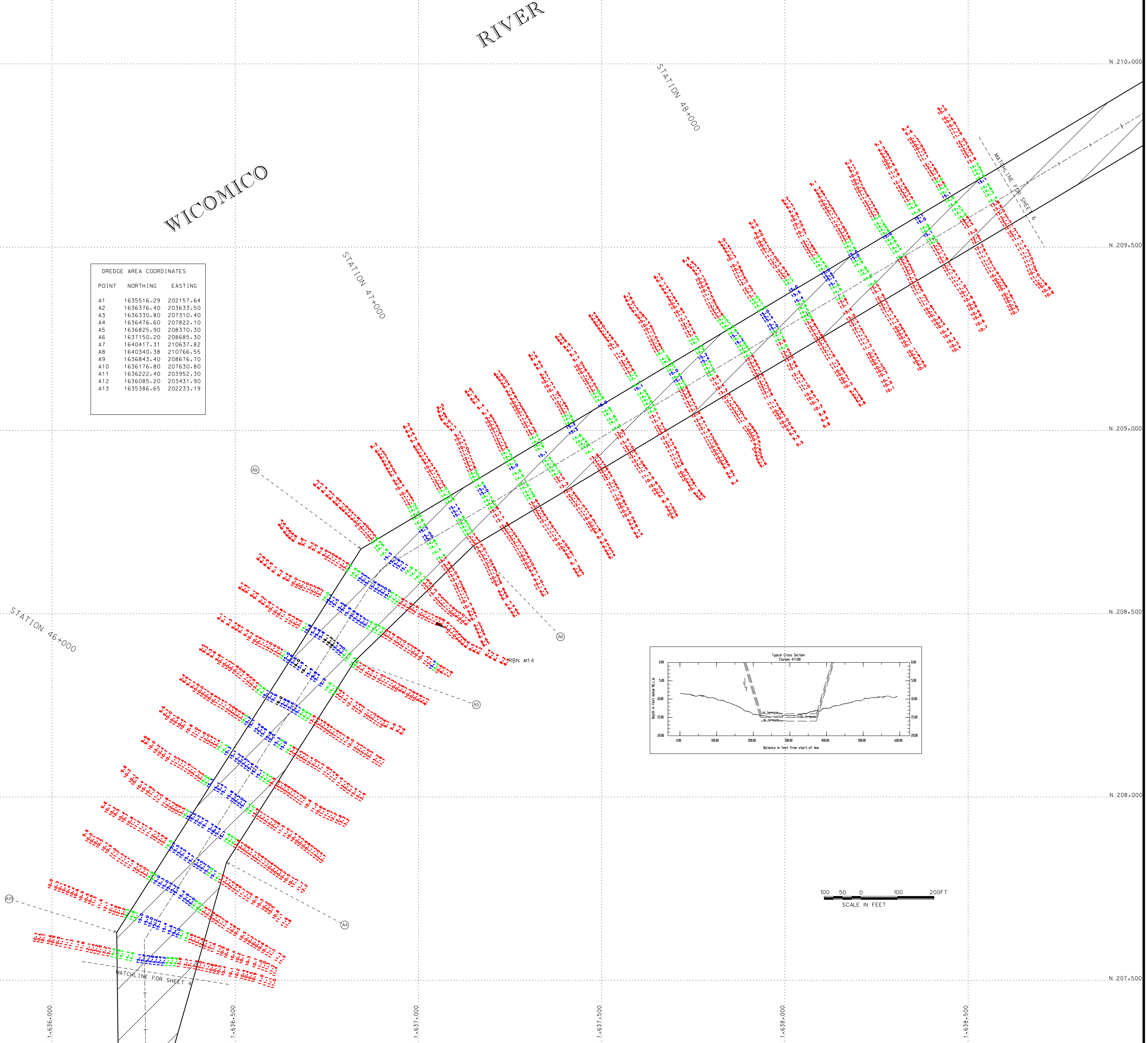
AREA TO BE DREDGED TO 14 FEET M.L.L.W WITH A 1 FOOT ALLOWABLE OVERDEPTH.



DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
A1	1635516.29	202157.64
A2	1636376.40	203633.50
A3	1636330.80	207310.40
A4	1636476.60	207822.10
A5	1636825.90	208370.30
A6	1637150.20	208685.30
A7	1640417.31	210637.82
A8	1640340.38	210766.55
A9	1636843.40	208676.70
A10	1636176.80	207630.80
A11	1636222.40	203892.30
A12	1636085.20	203431.90
A13	1635386.65	202233.19

22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 5 of 14



U.S. ARMY CORPS OF ENGINEERS
 BALTIMORE DISTRICT

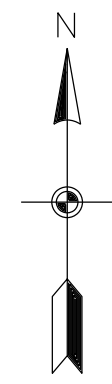
<p>Project No. 22-WQC-0014 File No. 202260382 Drawing No. AI-127561 Date: 6/16/2022 Scale: As Shown</p>	<p>Checked by: [Signature] Approved by: [Signature] Title: [Title]</p>
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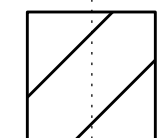
WICOMICO COUNTY
 MARYLAND
 MAINTENANCE DREDGING
 WICOMICO RIVER
 STATION 45+000 TO 49+000

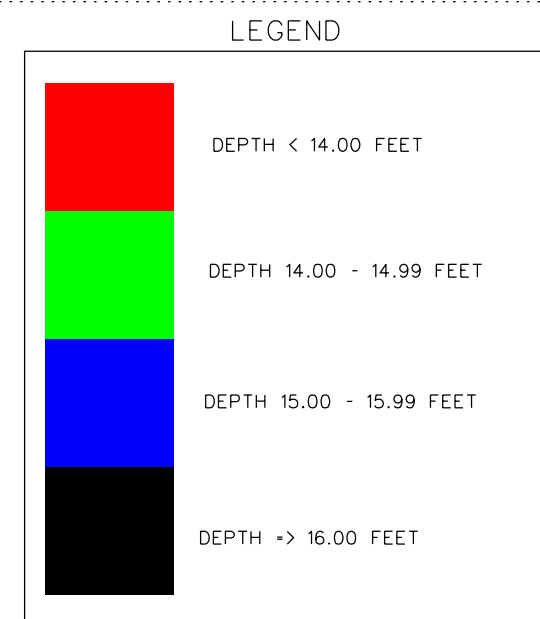
Sheet reference number:
V-105
 Sheet 5 of

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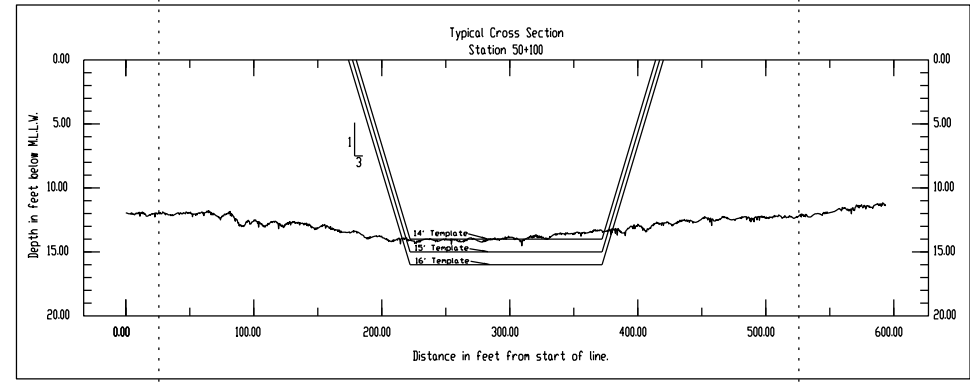
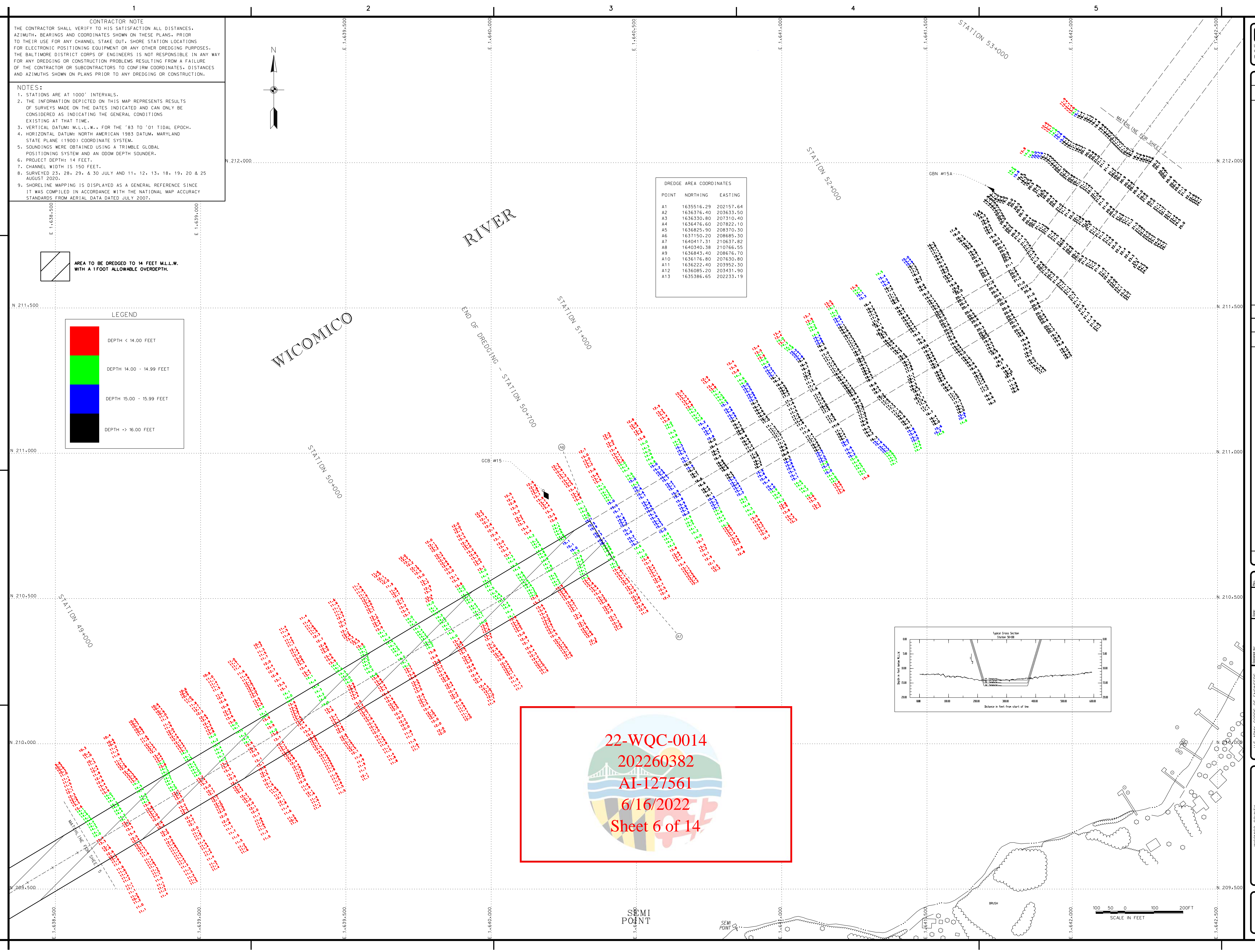


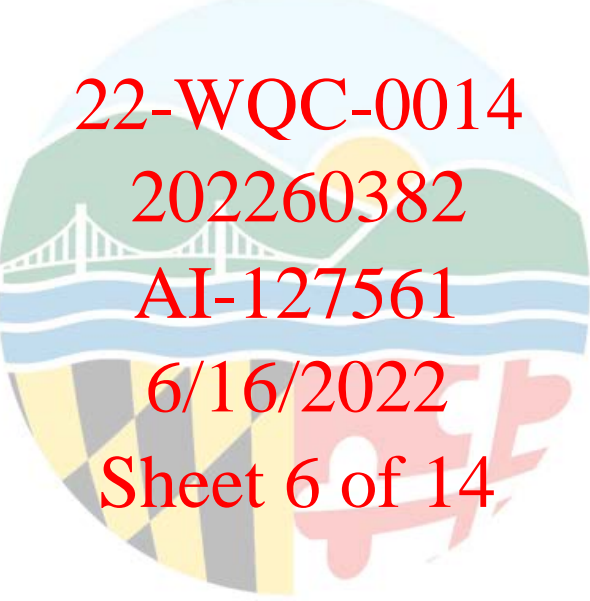
 AREA TO BE DREDGED TO 14 FEET M.L.L.W. WITH A 1 FOOT ALLOWABLE OVERDEPTH.



DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
A1	163516.29	202151.64
A2	1636376.40	203633.50
A3	1636330.80	207310.40
A4	1636476.60	207822.10
A5	1636925.90	208370.30
A6	1637150.20	208695.30
A7	1640417.31	210637.82
A8	1640340.38	210766.95
A9	1636843.40	208976.70
A10	1636176.80	207830.80
A11	1636222.40	203952.30
A12	1636085.20	203431.90
A13	1635386.65	202235.19




 22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 6 of 14

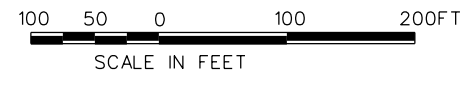


DATE	APRIL 22	BY	FILES
PROJECT	22-WQC-0014	DESIGNED BY	FILES
CHECKED BY	FILES	DATE	APR 22 2022
APPROVED BY	FILES	DATE	APR 22 2022
PROJECT NO.	22-WQC-0014	PROJECT NAME	22-WQC-0014
PROJECT TITLE	22-WQC-0014	PROJECT LOCATION	22-WQC-0014
PROJECT DESCRIPTION	22-WQC-0014	PROJECT STATUS	22-WQC-0014
PROJECT OWNER	22-WQC-0014	PROJECT CONTACT	22-WQC-0014
PROJECT ADDRESS	22-WQC-0014	PROJECT PHONE	22-WQC-0014
PROJECT FAX	22-WQC-0014	PROJECT EMAIL	22-WQC-0014
PROJECT WEBSITE	22-WQC-0014	PROJECT URL	22-WQC-0014

U.S. ARMY CORPS OF ENGINEERS
 BALTIMORE DISTRICT
 PROJECT NO. 22-WQC-0014
 PROJECT TITLE 22-WQC-0014
 PROJECT LOCATION 22-WQC-0014
 PROJECT STATUS 22-WQC-0014
 PROJECT OWNER 22-WQC-0014
 PROJECT ADDRESS 22-WQC-0014
 PROJECT FAX 22-WQC-0014
 PROJECT WEBSITE 22-WQC-0014

WICOMICO COUNTY
 MARYLAND
 MAINTENANCE DREDGING
 WICOMICO RIVER
 STATION 48+700 TO 53+000

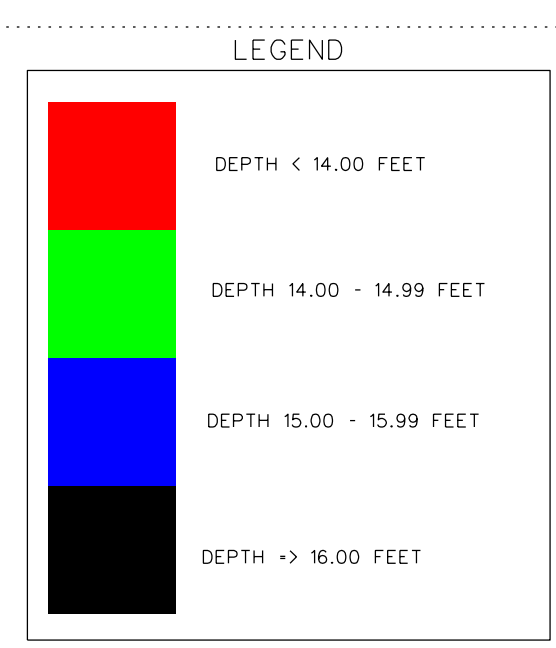
Sheet reference number:
V-106
 Sheet 6 of



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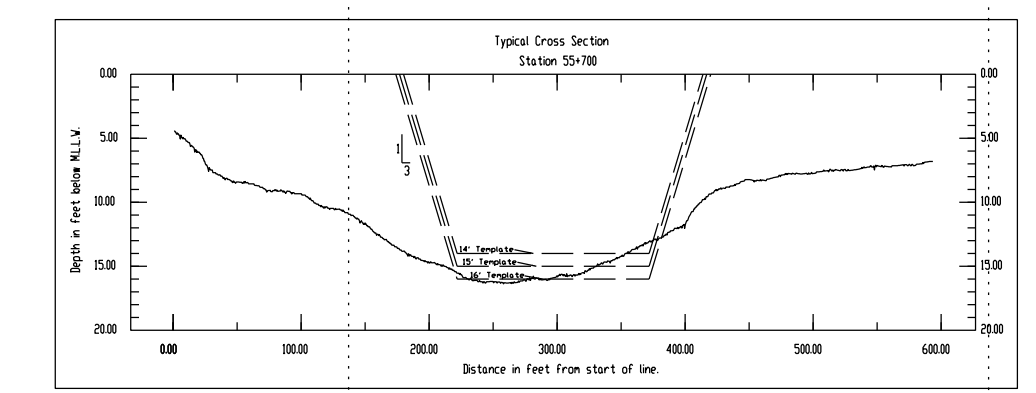
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AREA TO BE DREDGED TO M.L.L.W. WITH A 1 FOOT ALLOWABLE OVERDEPTH.



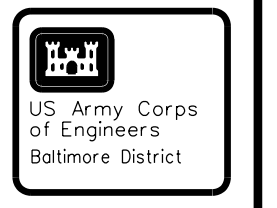
DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
B1	1643377.14	214346.11
B2	1643675.00	215188.40
B3	1644053.60	215675.80
B4	1645335.90	216534.20
B5	1645712.88	216660.58
B6	1645702.37	216847.44
B7	1645518.30	216837.10
B8	1643658.60	215591.90
B9	1643235.73	214396.12



WICOMICO RIVER

22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 7 of 14



NO.	DATE	DESCRIPTION	BY	CHKD.

DATE	JUNE 22, 2022
SCALE	AS SHOWN
PROJECT	WICOMICO RIVER MAINTENANCE DREDGING
DISTRICT	BALTIMORE DISTRICT
OFFICE	625 N. EIGHTH STREET, BALTIMORE, MD 21202
DESIGNED BY	
CHECKED BY	
DATE	

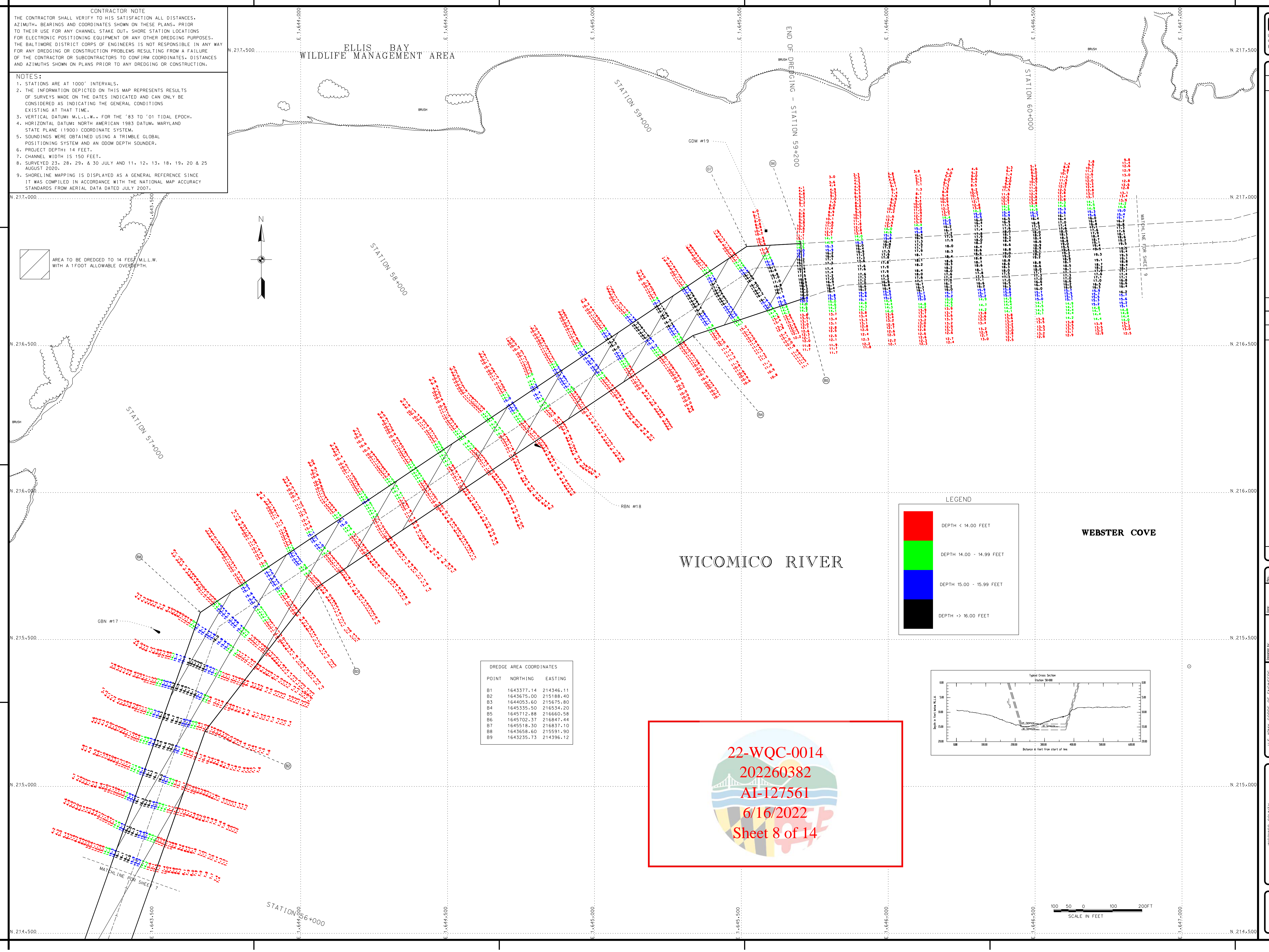
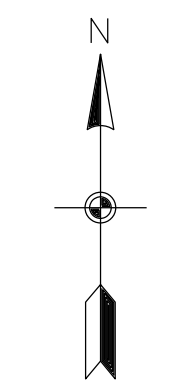
WICOMICO COUNTY, MARYLAND
 MAINTENANCE DREDGING
 WICOMICO RIVER
 STATION 53+00 TO 55+00

Sheet reference number:
 V-107
 Sheet 7 of

CONTRACTOR NOTE
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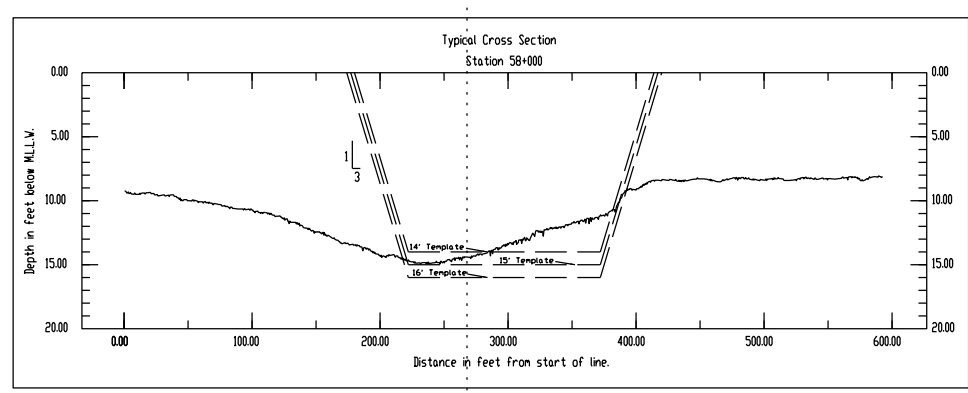


DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
B1	1643377.14	214346.11
B2	1643675.00	215188.40
B3	1644053.60	215675.80
B4	1645335.50	216534.20
B5	1645712.88	216660.58
B6	1645702.37	216847.44
B7	1645518.30	216837.10
B8	1643656.60	215391.50
B9	1643235.73	214396.12

LEGEND

	DEPTH < 14.00 FEET
	DEPTH 14.00 - 14.99 FEET
	DEPTH 15.00 - 15.99 FEET
	DEPTH > 16.00 FEET



22-WQC-0014
202260382
AI-127561
6/16/2022
Sheet 8 of 14

SCALE IN FEET
 100 50 0 100 200FT



DATE	DRAWN BY	CHECKED BY	DATE	DRAWN BY
JUNE 22, 2022	JAH	JAH		
FILE NO.	MAP NO.	PROJECT NO.	SCALE	SHEET NO.
22-WQC-0014	AI-127561	202260382	AS SHOWN	8 OF 14
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT WICOMICO COUNTY MARYLAND MAINTENANCE DREDGING WICOMICO RIVER STATION 56+000 TO 60+300				

Sheet reference number:
V-108
 Sheet 8 of

CONTRACTOR NOTE
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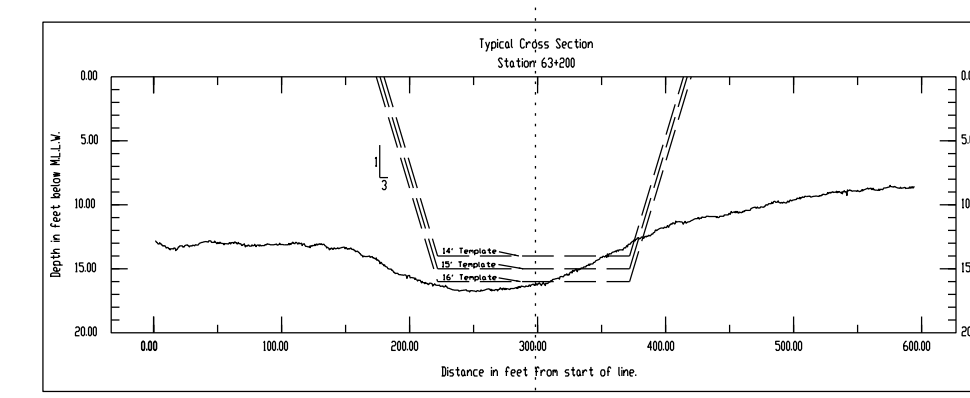
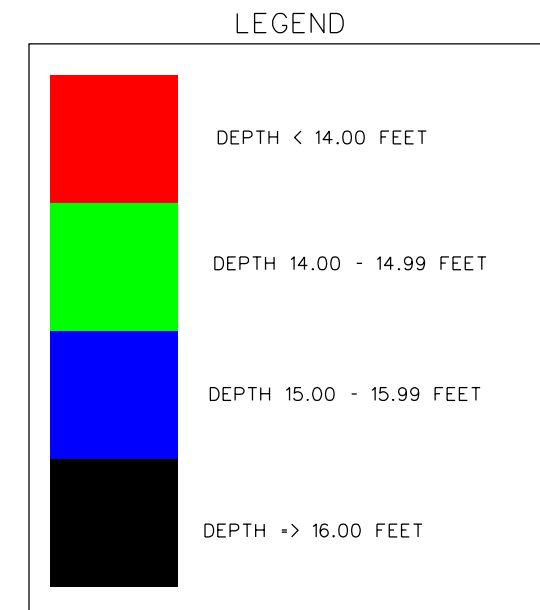
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**ELLIS BAY
 WILDLIFE MANAGEMENT AREA**

AREA TO BE DREDGED TO 14 FEET M.L.L.W. WITH A 1FOOT ALLOWABLE OVERDEPTH.

DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
C1	1649535.41	217325.93
C2	1650096.00	217340.40
C3	1650462.50	217289.10
C4	1651645.30	216919.29
C5	1651690.07	217062.47
C6	1650304.50	217495.70
C7	1649531.62	217476.19



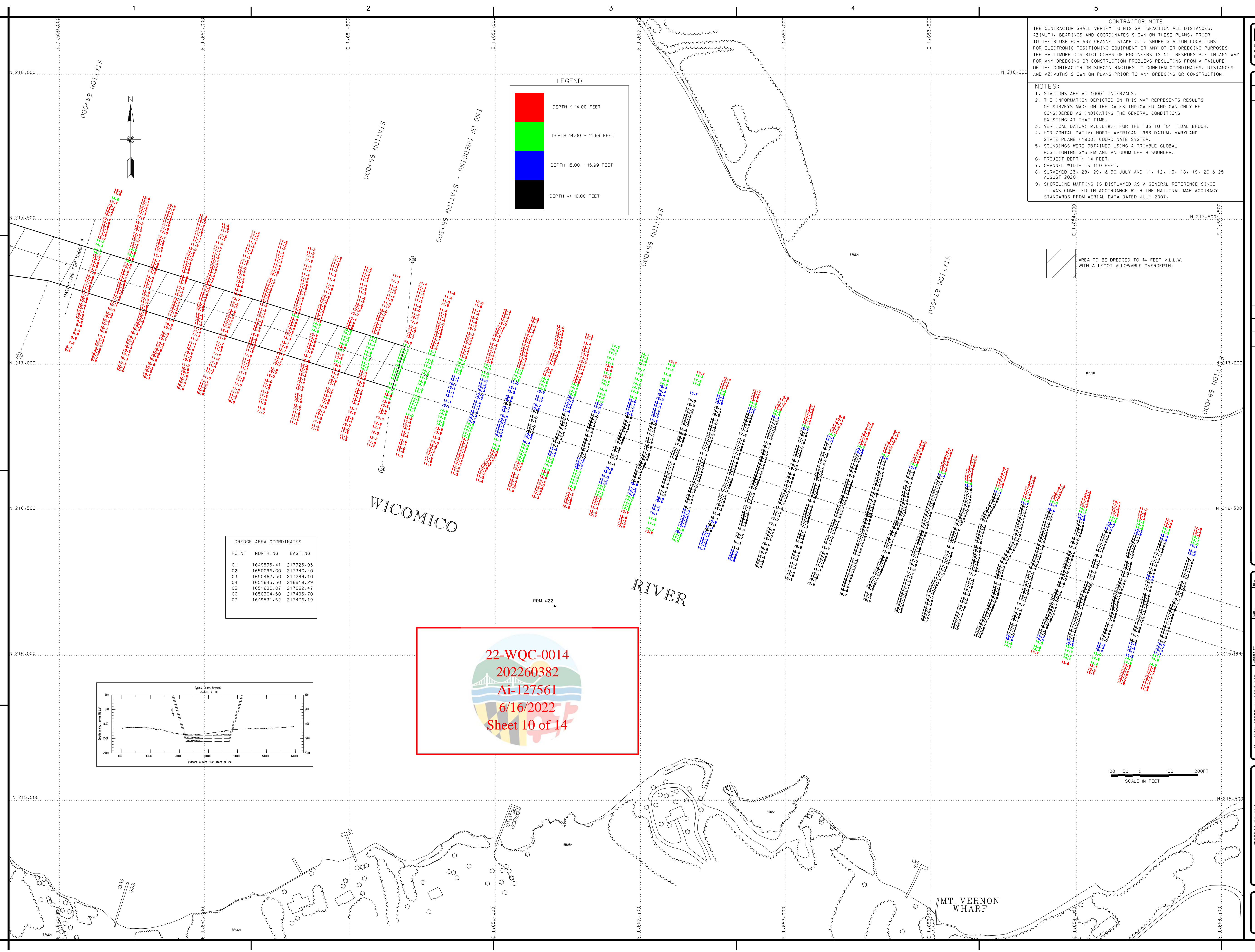
22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 9 of 14

**U.S. Army Corps of Engineers
 Baltimore District**

NO.	DATE	BY	DESCRIPTION
1	06/16/22	JAH	ISSUED FOR CONSTRUCTION
2	06/16/22	JAH	ISSUED FOR CONSTRUCTION
3	06/16/22	JAH	ISSUED FOR CONSTRUCTION
4	06/16/22	JAH	ISSUED FOR CONSTRUCTION
5	06/16/22	JAH	ISSUED FOR CONSTRUCTION
6	06/16/22	JAH	ISSUED FOR CONSTRUCTION
7	06/16/22	JAH	ISSUED FOR CONSTRUCTION
8	06/16/22	JAH	ISSUED FOR CONSTRUCTION
9	06/16/22	JAH	ISSUED FOR CONSTRUCTION
10	06/16/22	JAH	ISSUED FOR CONSTRUCTION

WICOMICO COUNTY
 MARYLAND
 MAINTENANCE DREDGING
 WICOMICO RIVER
 WEBSTERS COVE
 STATION 60+00 TO 64+00

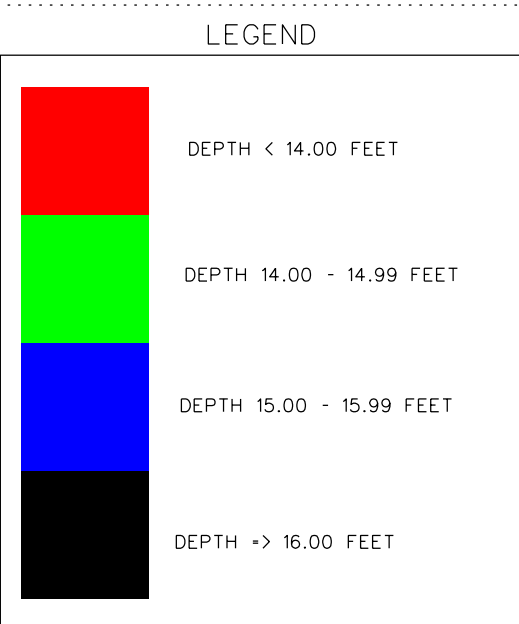
Sheet reference number:
V-109
 Sheet 9 of



CONTRACTOR NOTE
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NOTES:

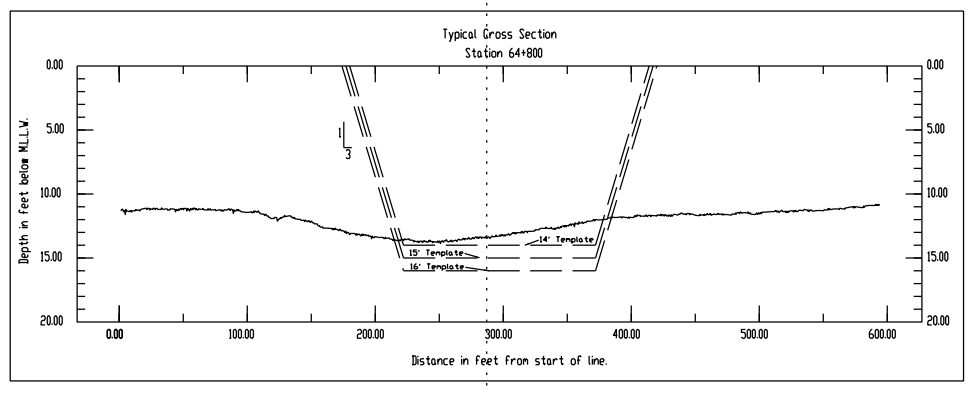
1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE (1900) COORDINATE SYSTEM.
5. SOUNDINGS WERE OBTAINED USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 14 FEET.
7. CHANNEL WIDTH IS 150 FEET.
8. SURVEYED 23, 28, 29, & 30 JULY AND 11, 12, 13, 18, 19, 20 & 25 AUGUST 2020.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FROM AERIAL DATA DATED JULY 2007.



AREA TO BE DREDGED TO 14 FEET M.L.L.W. WITH A 1 FOOT ALLOWABLE OVERDEPTH.

DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
C1	1649535.41	217325.93
C2	1650096.00	217340.40
C3	1650462.50	217289.10
C4	1651645.30	216919.29
C5	1651690.07	217062.47
C6	1650304.50	217495.70
C7	1649531.62	217476.19



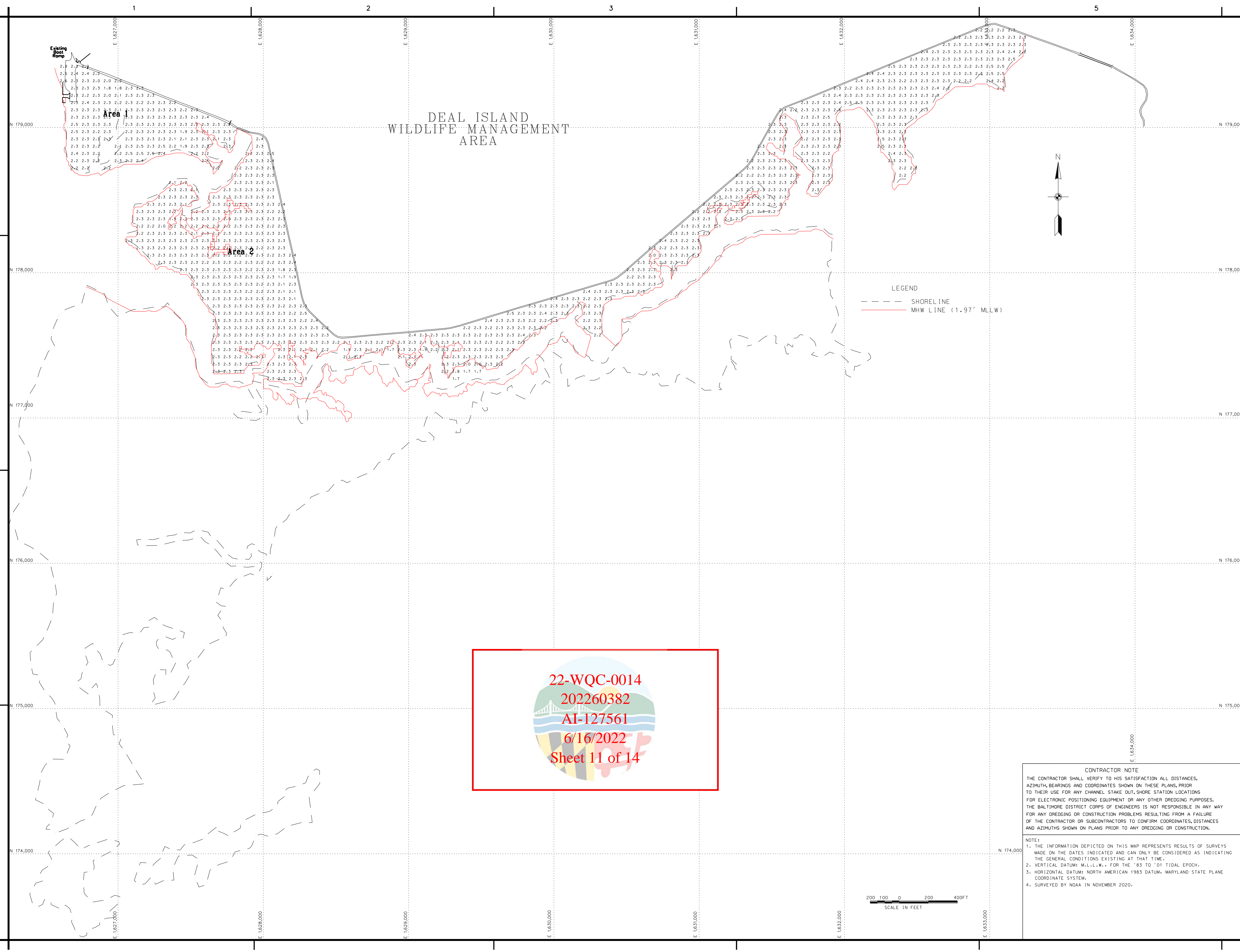
22-WQC-0014
 202260382
 Ai-127561
 6/16/2022
 Sheet 10 of 14

US Army Corps of Engineers
Baltimore District

DATE	DRAWN BY	CHECKED BY	DATE
APRIL 22	[Signature]	[Signature]	2022
FILE NO.	MAP NO.	PROJECT NO.	SHEET NO.
22-WQC-0014	202260382	22-0014	10

PROJECT: WICOMICO COUNTY, MARYLAND, BALTIMORE DISTRICT
 MAINTENANCE DREDGING WICOMICO RIVER
 STATION 64+200 TO 68+100

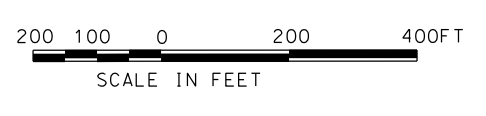
SHEET REFERENCE: V-110
 SHEET 10 OF 14



DEAL ISLAND
WILDLIFE MANAGEMENT
AREA

LEGEND
 - - - SHORELINE
 — MHW LINE (1.97' MLLW)

22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 11 of 14

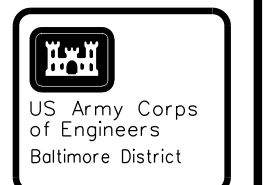


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3. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE COORDINATE SYSTEM.
4. SURVEYED BY NOAA IN NOVEMBER 2020.



NO.	DATE	BY	REVISION

U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	Date: _____ Drawn by: _____ Checked by: _____ In charge: _____ Title: _____
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MIDDLE RIVER
MARYLAND
CONDITION SURVEY
DEAL ISLAND PLACEMENT SITE

Sheet reference number:
 V-111
 Sheet 11 of



U.S. Army Corps of Engineers
Baltimore District

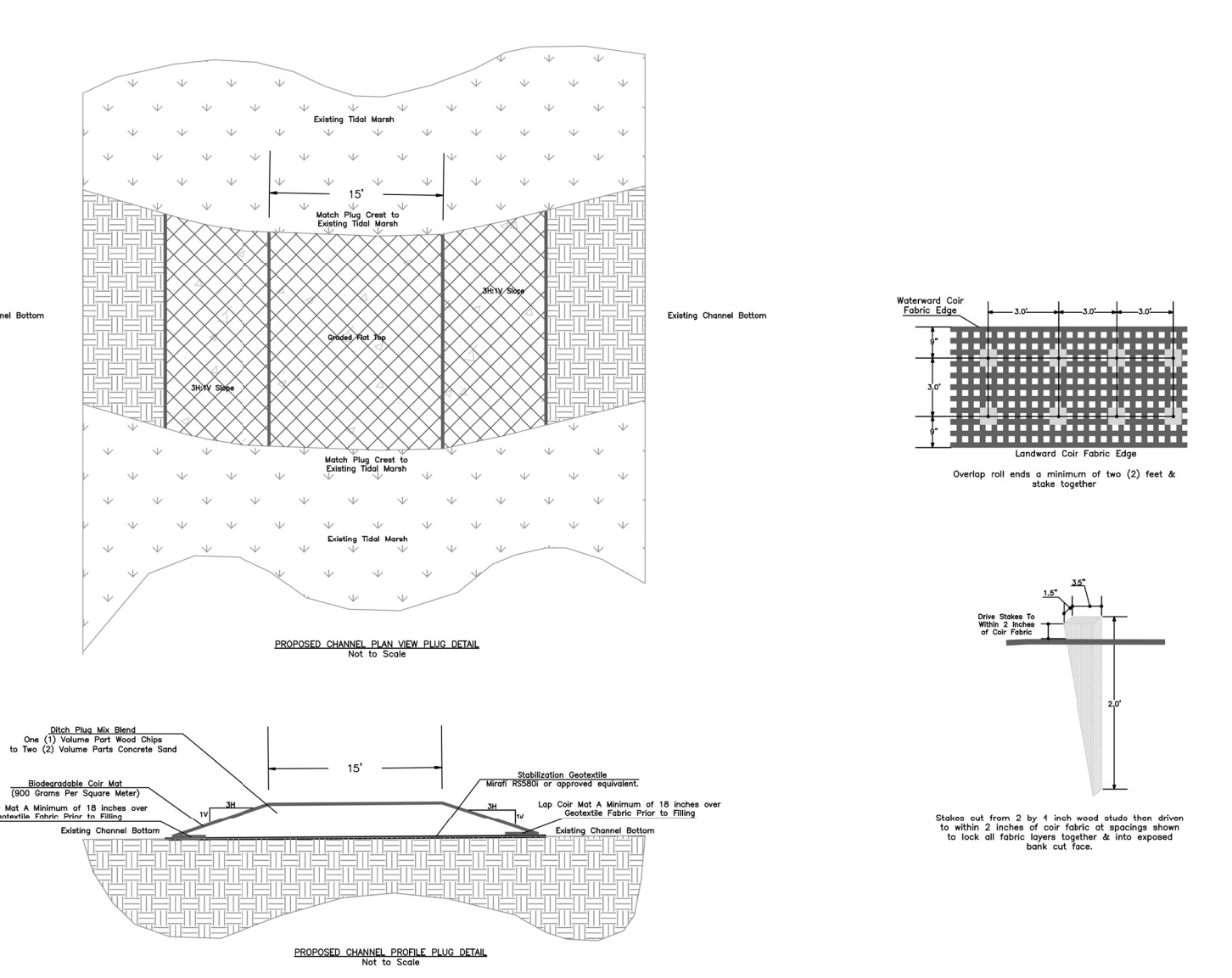
DEAL ISLAND
WILDLIFE MANAGEMENT AREA
DAMES QUARTER, MD 21821
38° 8' 57.92" N
75° 53' 49.41" W
HUC #: 021302080657
MONIE BAY WATERSHED

AREA 1
PERIMETER 1,896.61 FT
AREA 112.04 ACRES

AREA 2
PERIMETER 11,348.41 FT
AREA 60.50 ACRES

POINT	LENGTH	NORTHING	EASTING
A	29.08'	1626868.92	178759.25
B	98.60'	1626846.41	178698.70
C	49.34'	1627742.11	178809.50
D	12.68'	1627814.71	178998.00
E	110.02'	1627589.05	178586.55
F	2.62'	1627315.89	178066.87
G	77.32'	1627902.75	177316.61
H	73.99'	1625304.56	177510.28
I	45.10'	1628519.63	177424.80
J	99.06'	1628875.92	177448.64
K	51.45'	1628967.76	177407.85
L	38.14'	1629118.16	177447.27
M	58.69'	1629216.42	177423.11
N	66.95'	1630113.96	177696.60
O	72.95'	1630783.57	177959.91
P	76.63'	1631116.10	178342.51
Q	129.46'	1631684.85	178551.09
R	83.54'	1632959.50	179331.40
S	113.67'	1633285.06	179567.73

TIDAL DITCH PLUG DESIGN

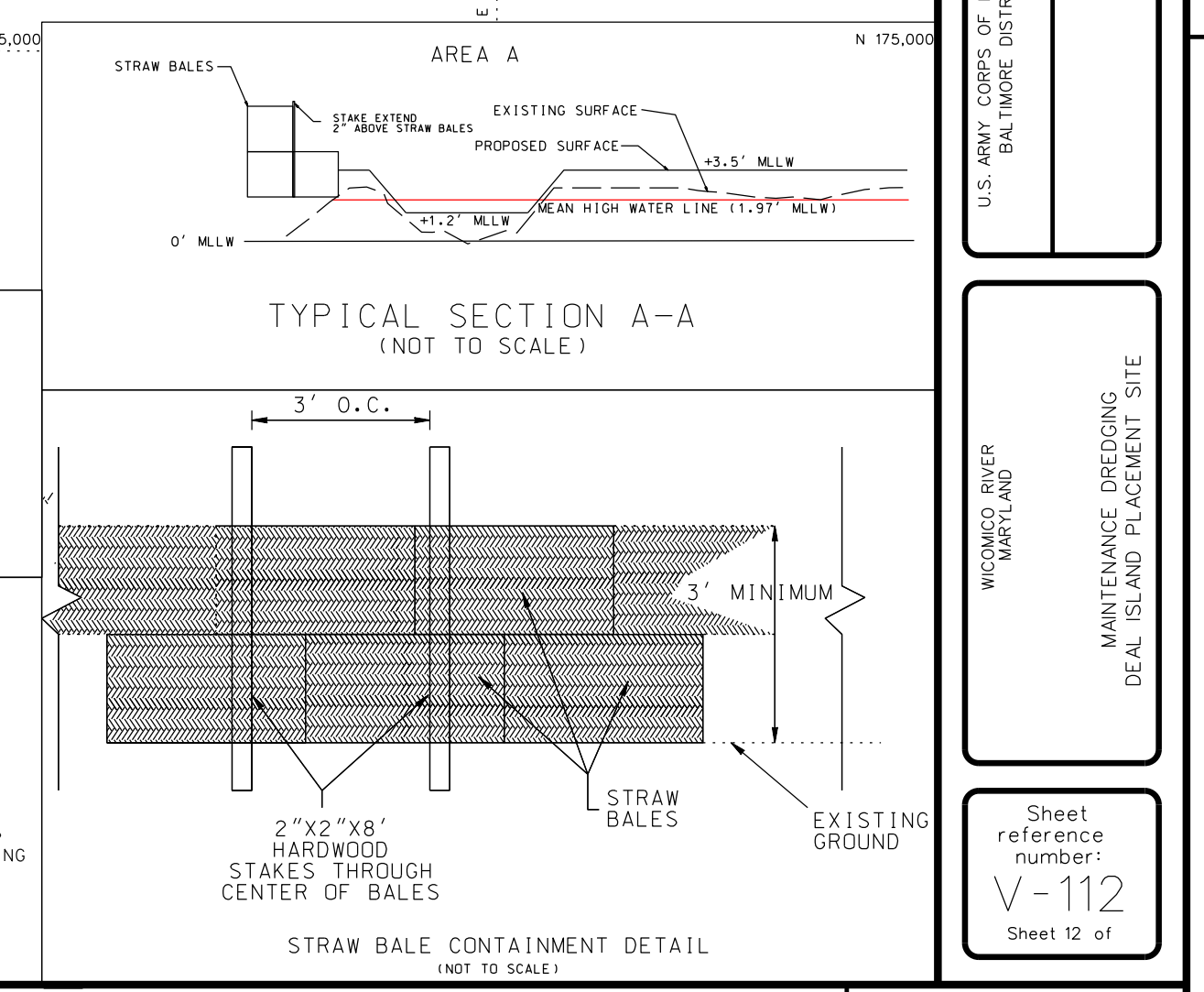


CONSTRUCTION NOTES:
1. Plug plug the material...
2. Material...
3. Construction...
4. ...
5. ...
6. ...

22-WQC-0014
202260382
AI-127561
6/16/2022
Sheet 12 of 14

CONTRACTOR NOTE
THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

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4. SURVEYED BY NOAA IN NOVEMBER 2020.
5. PULL STABILIZATION GEOTEXTILE TAFT AND STAKE AS SHOWN IN PLACE BOTH UP AND DOWNSTREAM OF THE COIR MAT ON THE GRADED SHOULDER PLUG SLOPE. PLACE NEXT COIR MAT WITH A MINIMUM OF EIGHTEEN (18) IN OVERLAP AT THE LOWER INSTALLED COIR MAT AND STAKE AS SHOWN. CONTINUE COVERING THE DITCH WITH COIR MAT FABRIC UNTIL THE DITCH PLUG IS ENTIRELY CONTAINED AND STAKED IN PLACE.
6. ANY DISCHARGE WILL BE SEEPAGE FROM THE STRAWBALES AND EACH OF THE DITCH PLUGS. SEDIMENT IS TO REMAIN AT THE SITE TO BUILD UP ELEVATION.



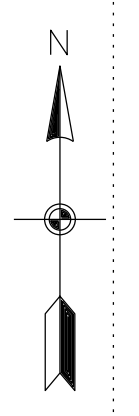
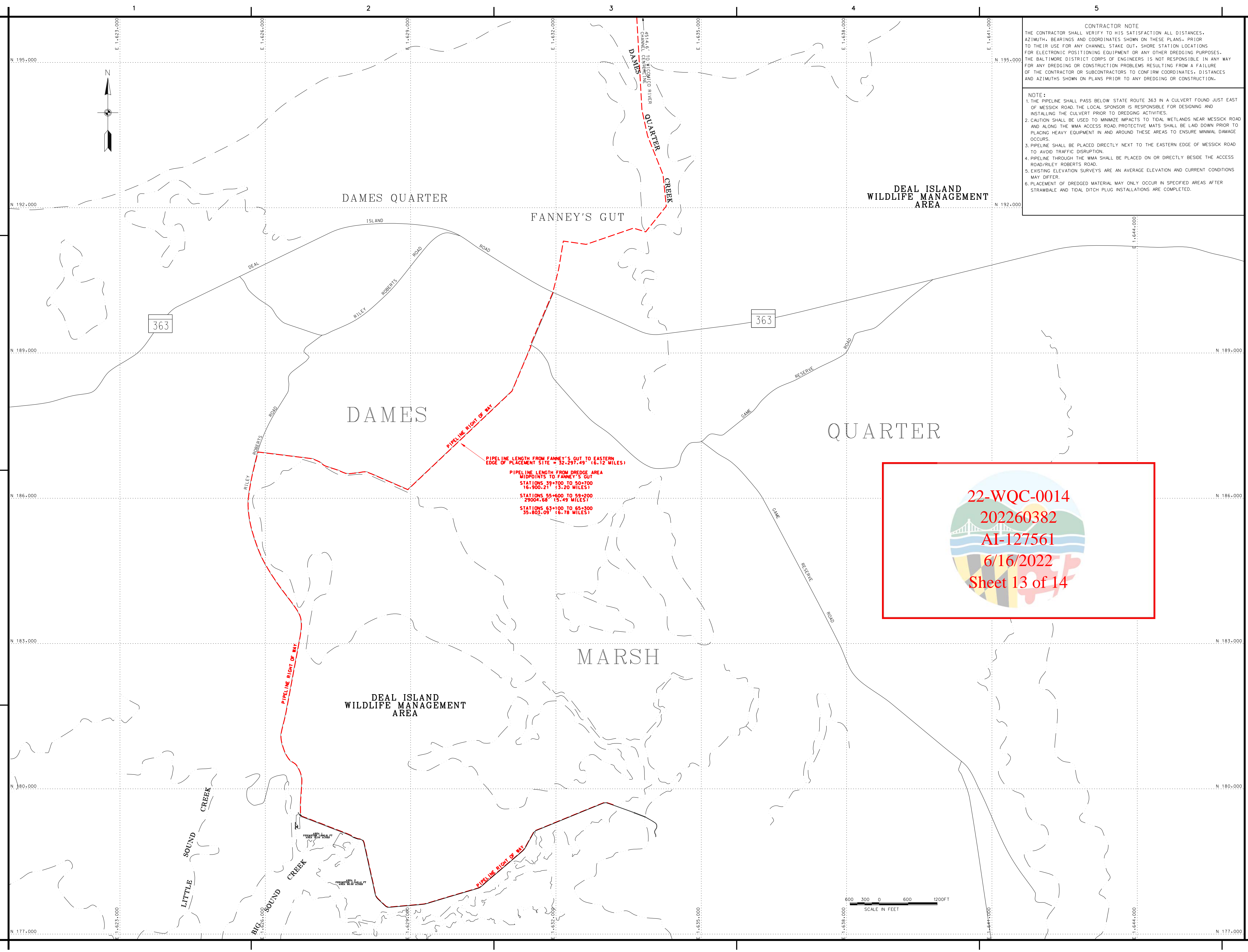
NO.	DATE	REVISION
1
2
3
4
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6
7
8
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10

DATE: APRIL '22
PROJECT: AI-127561
DRAWING NO.: 21-012
DESIGNED BY: ...
CHECKED BY: ...

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

WICKMATER ENTER
MARYLAND
MAINTENANCE DREDGING
DEAL ISLAND PLACEMENT SITE

Sheet reference number:
V-112
Sheet 12 of



DEAL ISLAND
WILDLIFE MANAGEMENT
AREA

363

363

QUARTER

MARSH

DEAL ISLAND
WILDLIFE MANAGEMENT
AREA

PIPELINE LENGTH FROM FANNEY'S GUT TO EASTERN
EDGE OF PLACEMENT SITE = 32,297.49' (6.12 MILES)

PIPELINE LENGTH FROM DREDGE AREA
MIDPOINTS TO FANNEY'S GUT
STATIONS 39+700 TO 50+700
16+000.21' (3.70 MILES)

STATIONS 55+600 TO 59+200
3,600.66' (0.68 MILES)

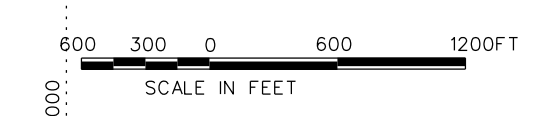
STATIONS 63+100 TO 65+300
2,200.00' (0.41 MILES)


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- NOTE:
1. THE PIPELINE SHALL PASS BELOW STATE ROUTE 363 IN A CULVERT FOUND JUST EAST OF MESSICK ROAD. THE LOCAL SPONSOR IS RESPONSIBLE FOR DESIGNING AND INSTALLING THE CULVERT PRIOR TO DREDGING ACTIVITIES.
 2. CAUTION SHALL BE USED TO MINIMIZE IMPACTS TO TIDAL WETLANDS NEAR MESSICK ROAD AND ALONG THE WMA ACCESS ROAD. PROTECTIVE MATS SHALL BE LAD DOWN PRIOR TO PLACING HEAVY EQUIPMENT IN AND AROUND THESE AREAS TO ENSURE MINIMAL DAMAGE OCCURS.
 3. PIPELINE SHALL BE PLACED DIRECTLY NEXT TO THE EASTERN EDGE OF MESSICK ROAD TO AVOID TRAFFIC DISRUPTION.
 4. PIPELINE THROUGH THE WMA SHALL BE PLACED ON OR DIRECTLY BESIDE THE ACCESS ROAD/RILEY ROBERTS ROAD.
 5. EXISTING ELEVATION SURVEYS ARE AN AVERAGE ELEVATION AND CURRENT CONDITIONS MAY DIFFER.
 6. PLACEMENT OF DREDGED MATERIAL MAY ONLY OCCUR IN SPECIFIED AREAS AFTER STRAWBALE AND TIDAL DITCH PLUG INSTALLATIONS ARE COMPLETED.

22-WQC-0014
202260382
AI-127561
6/16/2022
Sheet 13 of 14





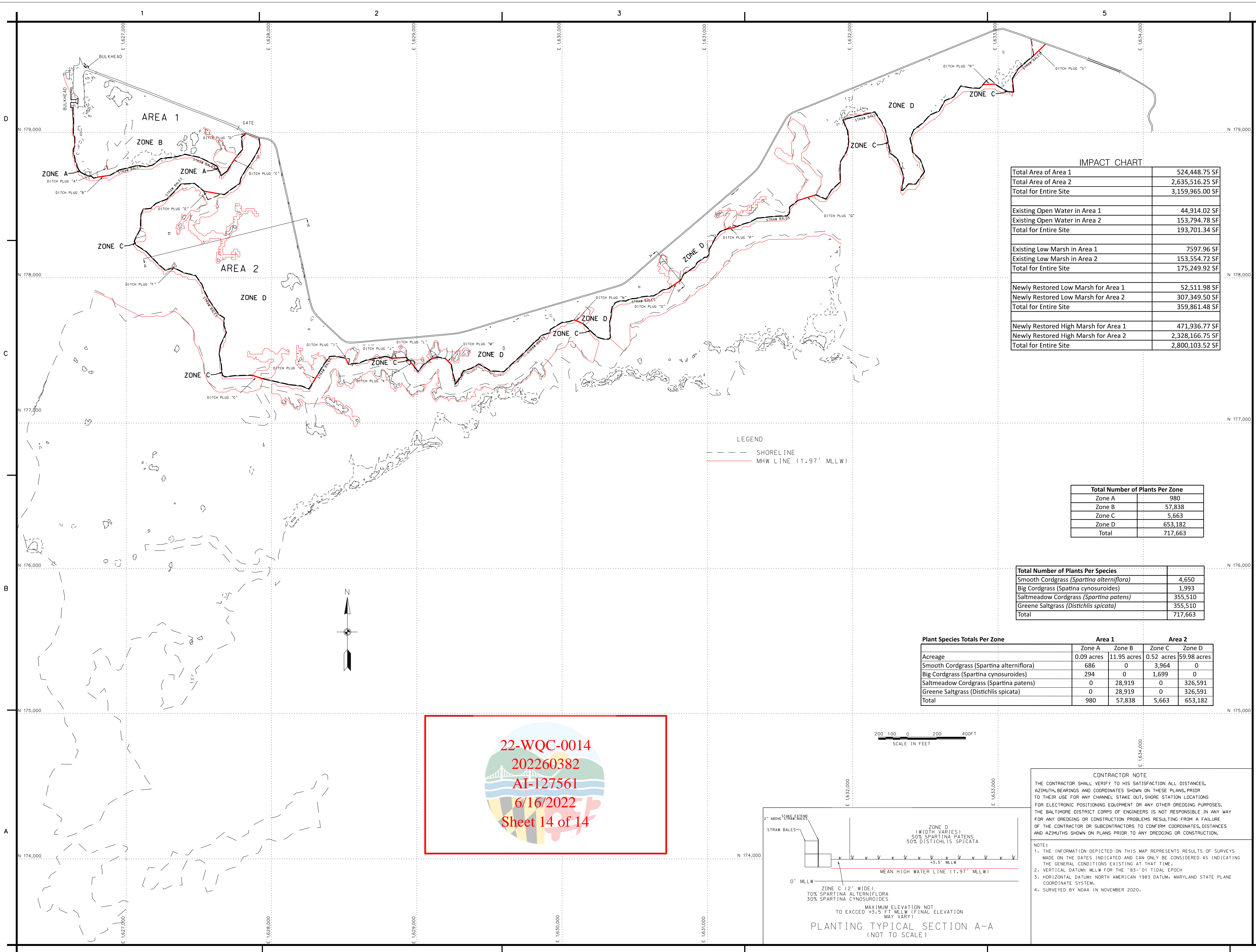
NO.	DATE	BY	REV.	DESC.

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Drawn by: JRM
Checked by: JRM
Title: 22-WQC-0014
Date: 6/16/2022
Project: AI-127561
Sheet: 13 of 14

WICOMCO COUNTY
MARYLAND
MAINTENANCE DREDGING
WICOMCO RIVER
PIPELINE RIGHT OF WAY
DEAL ISLAND PLACEMENT SITE

Sheet reference number:
V-113
Sheet 13 of



IMPACT CHART

Total Area of Area 1	524,448.75 SF
Total Area of Area 2	2,635,516.25 SF
Total for Entire Site	3,159,965.00 SF
Existing Open Water in Area 1	44,914.02 SF
Existing Open Water in Area 2	153,794.78 SF
Total for Entire Site	198,708.80 SF
Existing Low Marsh in Area 1	7,597.96 SF
Existing Low Marsh in Area 2	153,554.72 SF
Total for Entire Site	161,152.68 SF
Newly Restored Low Marsh for Area 1	52,511.98 SF
Newly Restored Low Marsh for Area 2	307,349.50 SF
Total for Entire Site	359,861.48 SF
Newly Restored High Marsh for Area 1	471,936.77 SF
Newly Restored High Marsh for Area 2	2,328,166.75 SF
Total for Entire Site	2,800,103.52 SF

LEGEND

- - - - -	SHORE LINE
— — — — —	MHW LINE (1.97' MLLW)

Total Number of Plants Per Zone

Zone A	980
Zone B	57,838
Zone C	5,663
Zone D	653,182
Total	717,663

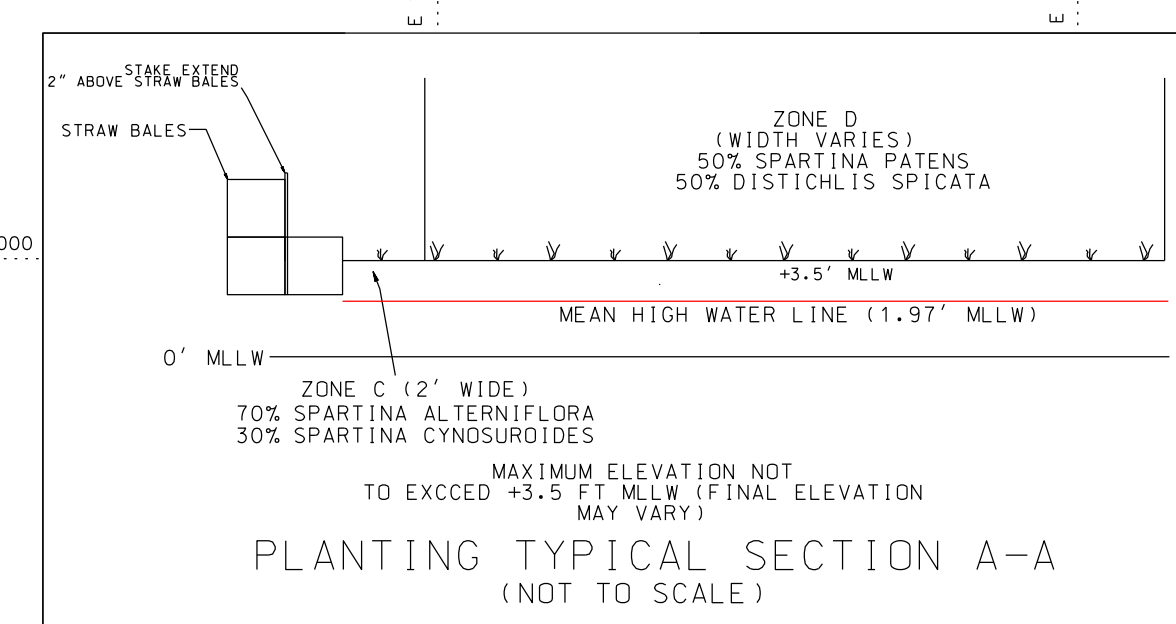
Total Number of Plants Per Species

Smooth Cordgrass (<i>Spartina alterniflora</i>)	4,650
Big Cordgrass (<i>Spartina cynosuroides</i>)	1,993
Saltmeadow Cordgrass (<i>Spartina patens</i>)	355,510
Greene Saltgrass (<i>Distichlis spicata</i>)	355,510
Total	717,663

Plant Species Totals Per Zone

	Area 1		Area 2	
	Zone A	Zone B	Zone C	Zone D
Acreeage	0.09 acres	11.95 acres	0.52 acres	59.98 acres
Smooth Cordgrass (<i>Spartina alterniflora</i>)	686	0	3,964	0
Big Cordgrass (<i>Spartina cynosuroides</i>)	294	0	1,699	0
Saltmeadow Cordgrass (<i>Spartina patens</i>)	0	28,919	0	326,591
Greene Saltgrass (<i>Distichlis spicata</i>)	0	28,919	0	326,591
Total	980	57,838	5,663	653,182

22-WQC-0014
 202260382
 AI-127561
 6/16/2022
 Sheet 14 of 14



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4. SURVEYED BY NOAA IN NOVEMBER 2020.

DATE	APRIL 22	BY	
DRAWN BY	JULY	CHECKED BY	
DESIGNED BY		IN CHARGE	
PROJECT NO.	22-WQC-0014	SHEET NO.	14
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT			

SCHEMATIC QUALITY
MARYLAND
DEAL ISLAND PLACEMENT SITE
PLANTING PLAN

Sheet reference number:
V-114
Sheet 14 of