

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, South Carolina 29403-5107
and
THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Office of Ocean and Coastal Resource Management
1362 McMillan Avenue, Suite 400
North Charleston, South Carolina 29405

REGULATORY DIVISION
Refer to: P/N SAC-2019-01664

November 5, 2019

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et seq.), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

Applicant:
Mr. William Dean
US Air Force/Joint Base Charleston
210 W. Stewart Ave, Bldg 721
Joint Base Charleston, South Carolina 29404

Agent:
Mr. Alan Shirey
US Army Corps of Engineers
Planning & Environmental Branch
69A Hagood Avenue
Charleston, South Carolina 29403

for a permit to dredge up to two million cubic yards (cy) of material from the Joint Base Charleston (JBC) channels and associated berthing areas in the

COOPER RIVER AND THE MOUTH OF GOOSE CREEK

including the locations described as the TC dock, Pier X South, the Pier C security boat dock, the Goose Creek boathouse/pier, Wharf A (Shoal 5), and Pier B (Shoal 3) in Berkeley County, South Carolina (beginning at Latitude: 32.911953 °, Longitude: -79.953043 ° and ending at Latitude: 32.911953 °, Longitude: -79.953043 °), North Charleston Quad Sheet.

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

15 Days from the Date of this Notice,

and **SCDHEC** will receive written statements regarding the proposed work until

30 Days from the Date of this Notice

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of dredging up to two million cubic yards (cy.) of material from the JBC channels and associated berthing areas on a rotational basis of every 15 to 20 months for a period of 10 years. The JBC channels include the Cooper River and the mouth of Goose Creek. The berthing areas are associated with the TC dock, Pier X South, the Pier C security boat dock, the Goose Creek boathouse/pier, Wharf A (Shoal 5), and Pier B (Shoal 3), as shown on the attached project drawings. The total area that would be dredged is approximately 545 acres over approximately 4.8 miles of the Cooper River and 1200 linear feet of the Goose Creek channel. Channel dredging widths vary depending on the location, and range from approximately 375 feet to 1300 feet.

The project area within the Cooper River and the riverside/outside berthing area of Pier X South would be dredged to a depth of 40' Mean Lower Low Water (MLLW) plus 2' allowable over depth. Allowable over depth refers to the depth allowed outside the required depth to account for physical conditions and inaccuracies in the dredging process and to allow for efficient dredging practices. Two shoaling areas (Shoals 4 and 4a) in the Cooper River and the TC dock would be dredged to a depth of 40' MLLW plus 2' of allowable over depth and would require an additional 4' of advance maintenance dredging due to high accumulation of sediments in these areas. Advance maintenance is dredging to a specified depth beyond the required depth plus over depth, in order to avoid frequent re-dredging in critical and fast shoaling areas. The dredging depth within the Goose Creek channel would be 25' MLLW plus 2' allowable over depth. The dredging depth within the inside/shoreside berthing area of Pier X South would be 20' MLLW plus 2' allowable over depth. The dredging depth for the Pier C security dock would be 10' MLLW plus 2' allowable over depth. To maintain required depths for safe navigation, all areas with the exception of the TC dock, are proposed to be dredged on a 15 to 20 month rotation. The TC dock is proposed for dredging on a nine month rotation, as needed. All areas have been impacted by past dredging with the exception of the Pier C security boat dock.

Table 1: Dredging Units and Impacts

Dredging Unit	Historical Information (All 1:4 side slopes)	Proposed Depth (All 1:4 side slopes)	Change from Previous Permit	Total Impact
JBC Channel Shoal 1	Previously permitted and dredged to max 42' MLLW)	40' MLLW required depth + 2' allowable overdepth; 1:4 side slopes	No change	Max 42' depth MLLW
JBC Channel Shoal 2				
JBC Channel Shoal 2A				
JBC Channel Shoal 3				
JBC Channel Shoal 3A				
JBC Channel Shoal 5				
JBC Channel Shoal 6				

JBC Channel Shoal 4 JBC Channel Shoal 4A	Previously permitted and dredged to max - 42' MLLW	40' MLLW required depth + 4' advanced maintenance + 2' allowable over depth;	Dredge 4 ft deeper (advanced maintenance)	Max 46' depth MLLW
TC Dock	Previously permitted and dredged to max 42' MLLW	40' MLLW required depth + 4' advanced maintenance + 2' allowable overdepth;	Dredge 4 ft deeper (advanced maintenance)	Max 46' depth MLLW
Pier X South, 1.06 acre area riverside/outside berth	Previously permitted and dredged to max 36' MLLW	40' MLLW required depth + 2' allowable overdepth	Dredge 6 ft deeper than previously permitted	Max 42' depth MLLW
Pier X South, 2.2 acre area barge shoreside/inside berths	Partially dredged once in 1991 during pier construction; not part of current maintenance dredging permit but was evaluated under a Final Supplemental EA in 2018.	20' MLLW required depth + 2' allowable over depth	New maintenance dredging area	Max 22' depth MLLW
Pier C Security Boat Dock	None	10' MLLW required depth + 2' allowable over depth	New maintenance dredging area	Max 12' depth MLLW
Goose Creek Channel	Previously permitted and dredged to max 27' MLLW	25' MLLW required depth + 2' allowable over depth	No change	Max 27' depth MLLW

Proposed dredging would be conducted using a cutter suction dredge (CSD), and the dredged material would be placed into one or more existing upland placement areas. The existing, confined, upland placement areas that would be used include the Clouter Creek, Joint Base Charleston, and Yellow House Creek Placement Areas. The Clouter Creek Placement Area is currently used for material from the TC Dock dredging unit.

The applicant has not proposed to mitigate for impacts to wetlands and/or waters of the United States. However, the applicant stated that JBC will implement South Carolina Department of Natural Resources recommendations regarding placement of a turbidity curtain around the Pier X South shoreside dredge area to the maximum extent practicable. Further, the applicant has agreed to mixing or covering of contaminated dredged material with clean dredged material. JBC will also implement the US Fish and Wildlife Service standard protection guidelines for manatees, and will control night time lighting for protection of migratory birds. The applicant stated that the project purpose is to provide and sustain sufficient depth for safe navigation and berthing of military vessels to support JBC missions.

NOTE: This public notice and associated plans are available on the Corps' website at: <http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .

The District Engineer has concluded that the discharges associated with this project, both

direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions of the Coastal Zone Management Program (15 CFR 930). This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 545 acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination is that the proposed action would have an adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project area, examined all information provided by the applicant, and the District Engineer has determined, based on the most recently available information that Federally *endangered or threatened* species may be present in the vicinity of the project. However, it has been determined that the project will have no effect on Bachman's warbler (*Vermivora bachmanii*), Finback whale (*Balaenoptera physalus*), Humpback whale (*Megaptera novaeangliae*), Right whale (*Eubalaena glacialis*), and Seabeach amaranth (*Amaranthus pumilus*). The proposed project will not result in the destruction or adverse modification of designated or proposed critical habitat.

Further, the District Engineer has determined that the project is not likely to adversely affect American wood stork (*Mycteria americana*), Piping plover (*Charadrius melodus*), West Indian manatee (*Trichechus manatus*), Green sea turtle (*Chelonia mydas*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), Leatherback sea turtle (*Dermochelys coriacea*), Atlantic sturgeon (*Acipenser oxyrinchus*), Shortnose sturgeon (*Acipenser brevirostrum*), and Loggerhead sea turtle (*Caretta caretta*).

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with Section 106 of the NHPA, the District Engineer has consulted South Carolina ArchSite (GIS), for the presence or absence of historic properties (as defined in 36 C.F.R. 800.16)(1)(1)), and has initially determined that no historic properties are present; therefore, there will be no effect on historic properties. To ensure that other historic properties that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office and any other interested parties to provide any information they may have with regard to historic properties. This public notice serves as a

request for concurrence within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

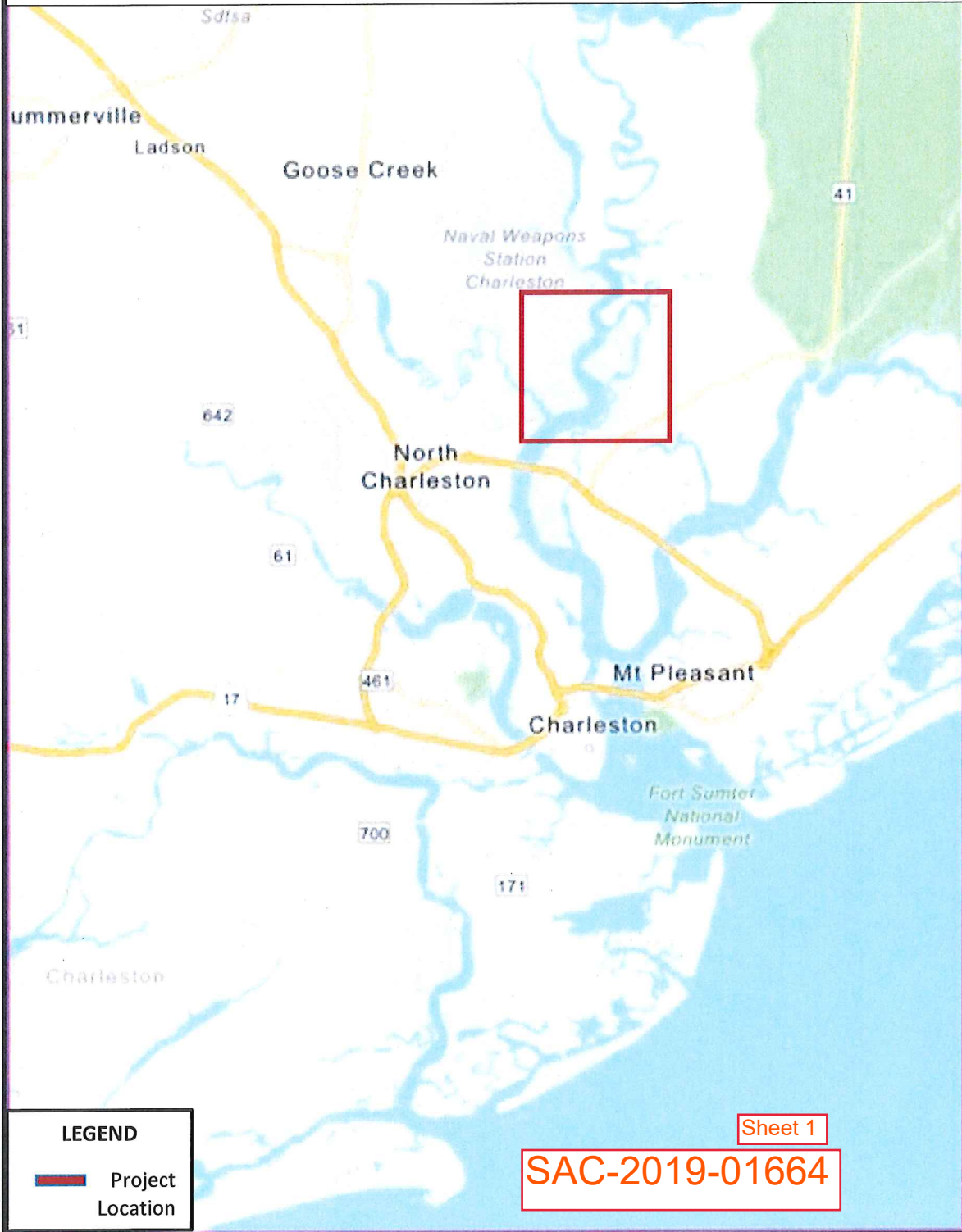
The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. 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 project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, 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. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps cannot undertake to adjudicate rival claims.

The Corps 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 activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this project. 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 activity. **Please submit comments in writing, identifying the project of interest by public notice number, to the following address:**

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, South Carolina 29403-5107**

If there are any questions concerning this public notice, please contact Courtney M. Stevens, Project Manager, at (843) 329-8027, toll free at 1-866-329-8187, or by email at Courtney.M.Stevens@usace.army.mil.

Joint Base Charleston Maintenance Dredging Location Map

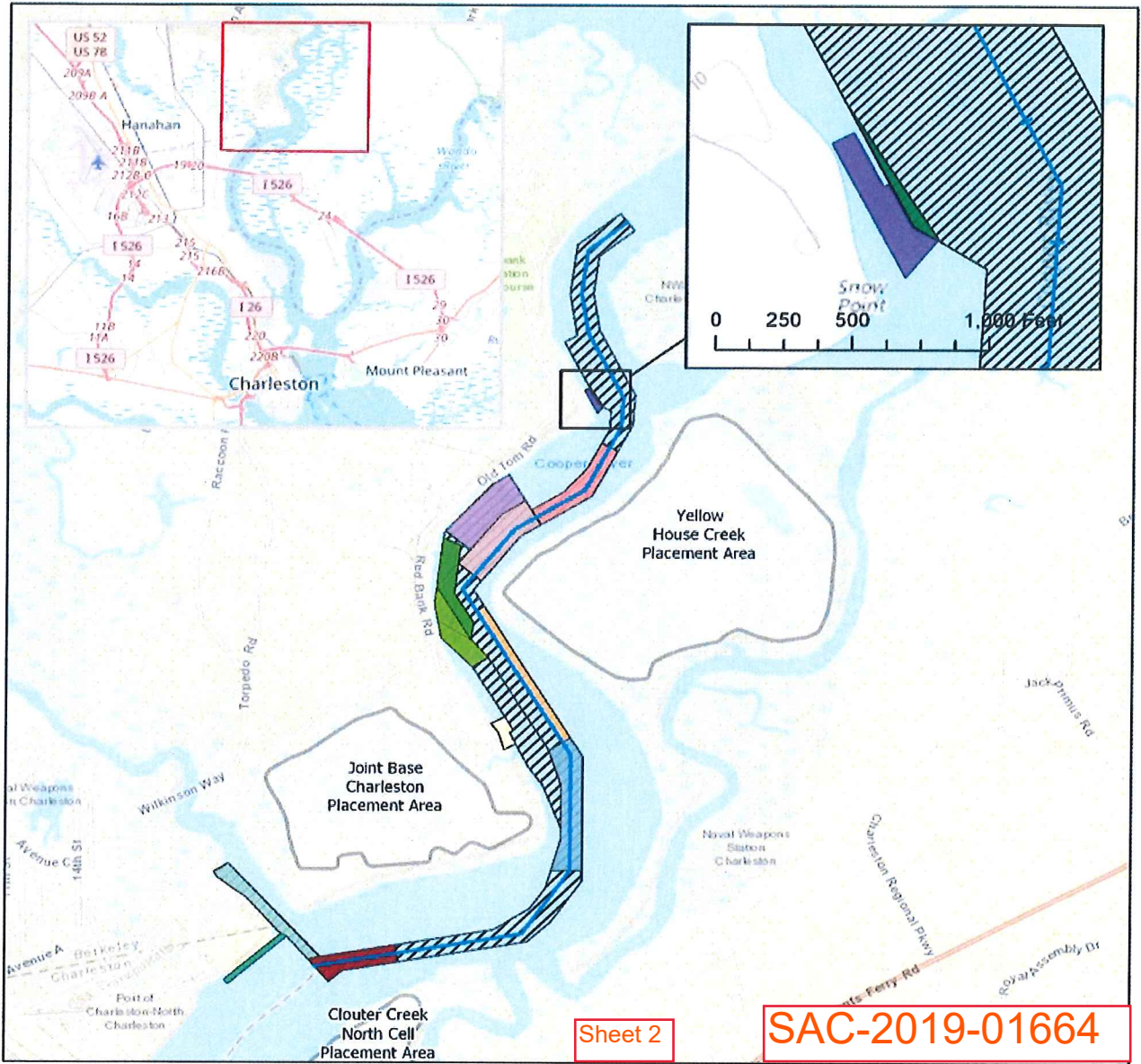


LEGEND

 Project Location

Sheet 1

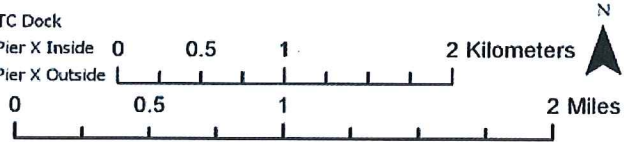
SAC-2019-01664



US Army Corps of Engineers

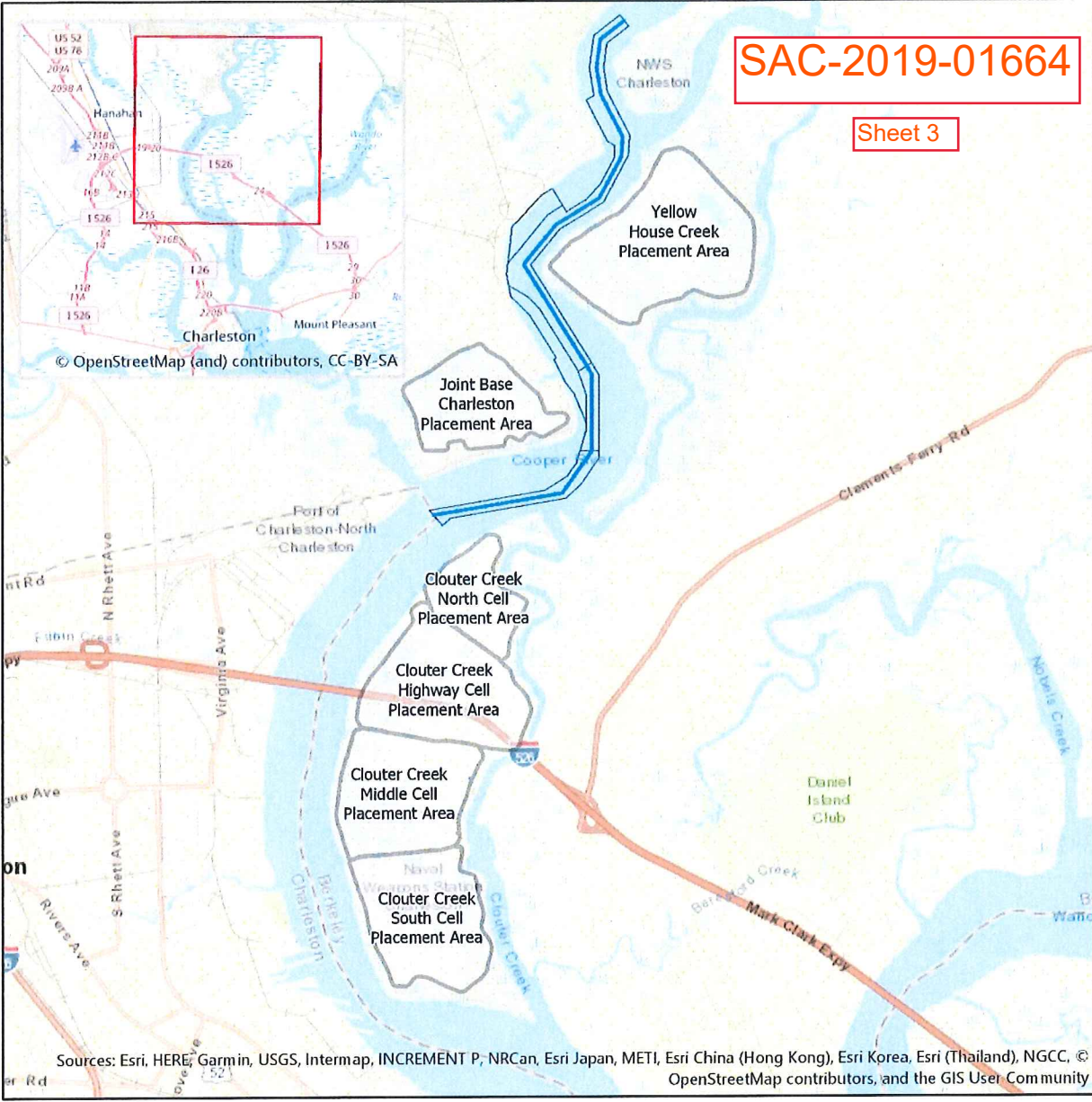
JBC Navigation Channel Dredging Area

- JBC Channel Limits
- JBC Channel Centerline
- ▨ JBC Dredge Area
- Placement Areas
- Goose Creek Channel
- Pier C
- Shoal 1
- Shoal 2
- Shoal 2A
- Shoal 3
- Shoal 3A
- Shoal 4
- Shoal 4A
- Shoal 5
- TC Dock
- Pier X Inside
- Pier X Outside



SAC-2019-01664

Sheet 3



US Army Corps of Engineers

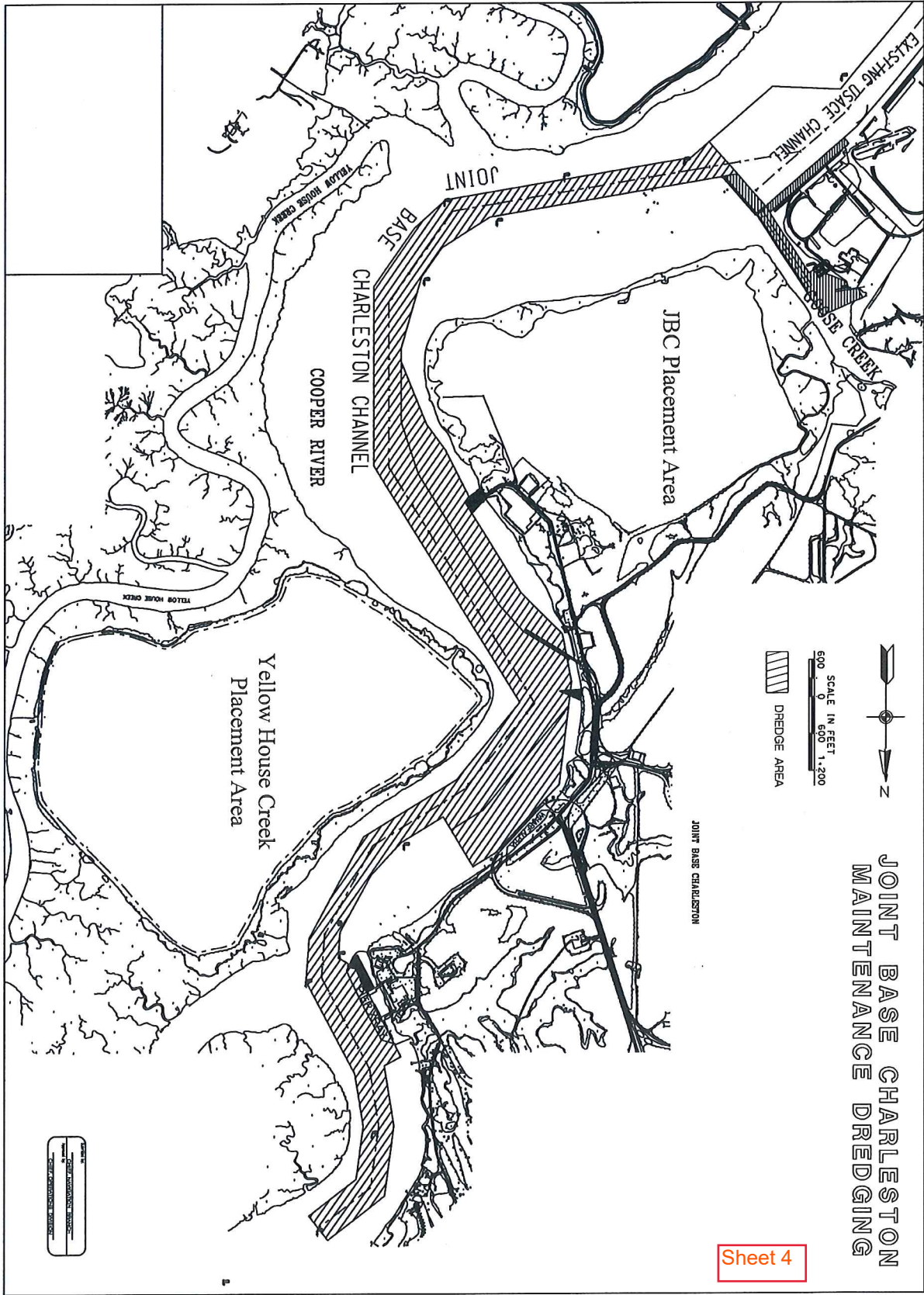
JBC Navigation Channel Placement Areas

- JBC Channel Limits
- JBC Channel Centerline
- Placement Areas

0 0.5 1 2 Kilometers

0 0.5 1 2 Miles





Sheet 4

JOINT BASE CHARLESTON
MAINTENANCE DREDGING

DATE: 03 MAR 2019
SCALE: 1" = 600'
PROJECT: JOINT BASE CHARLESTON MAINTENANCE DREDGING

PERMIT PLANS
C-01
SHEET 1 OF 14

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

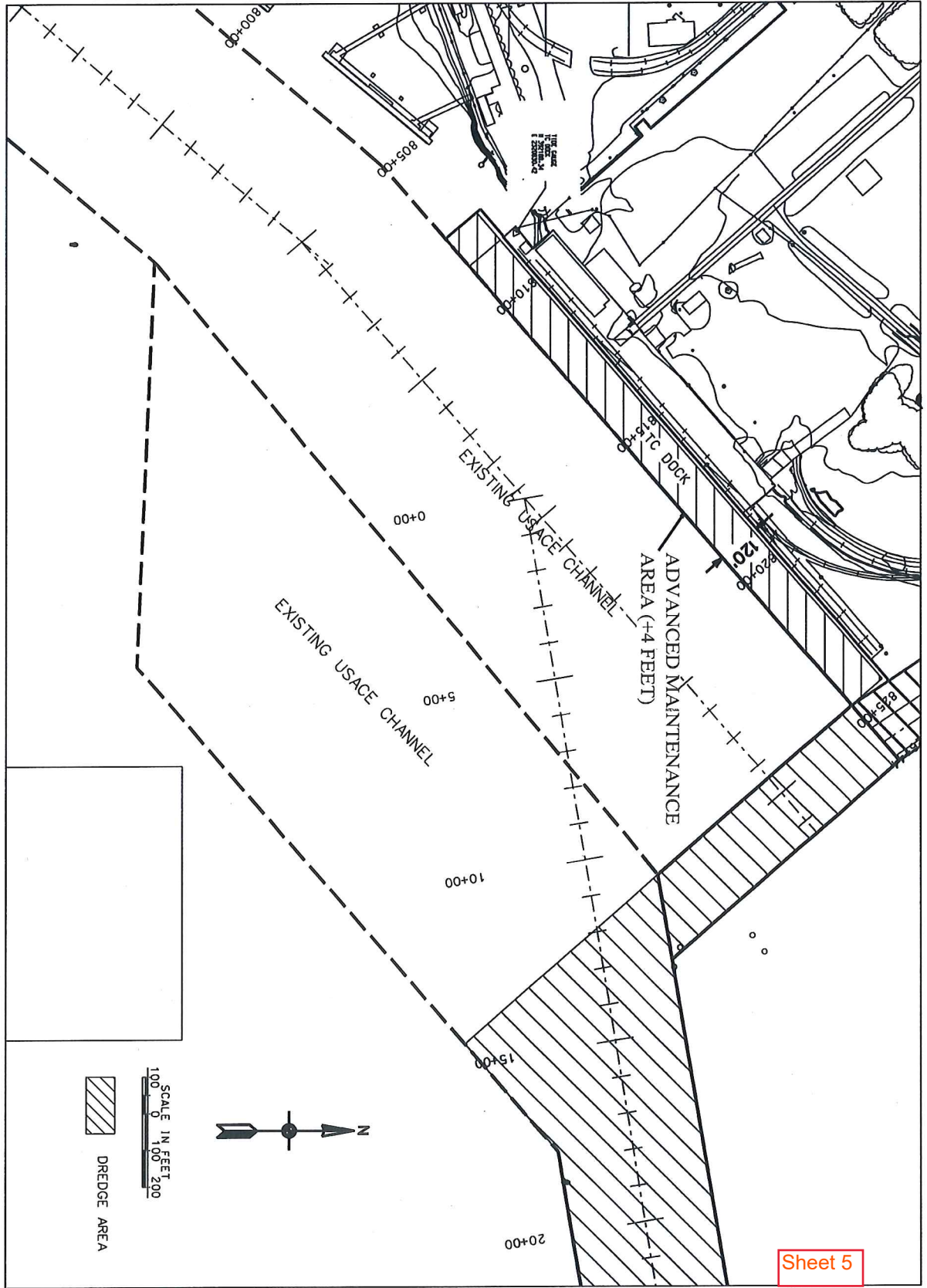
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SAC #:

Designed by: JJK Date: 03 MAR 2019
 Drawn by: MLC
 Checked by: SAG
 Approved by: SCOTT A. GLASS, P.E.

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 5

PERMIT
C-02
SHEET 5 OF 14

JOINT BASE CHARLESTON
MAINTENANCE DESIGN
PERMIT PLANS
CHARLESTON & BEVERLY COUNTIES, SOUTH CAROLINA

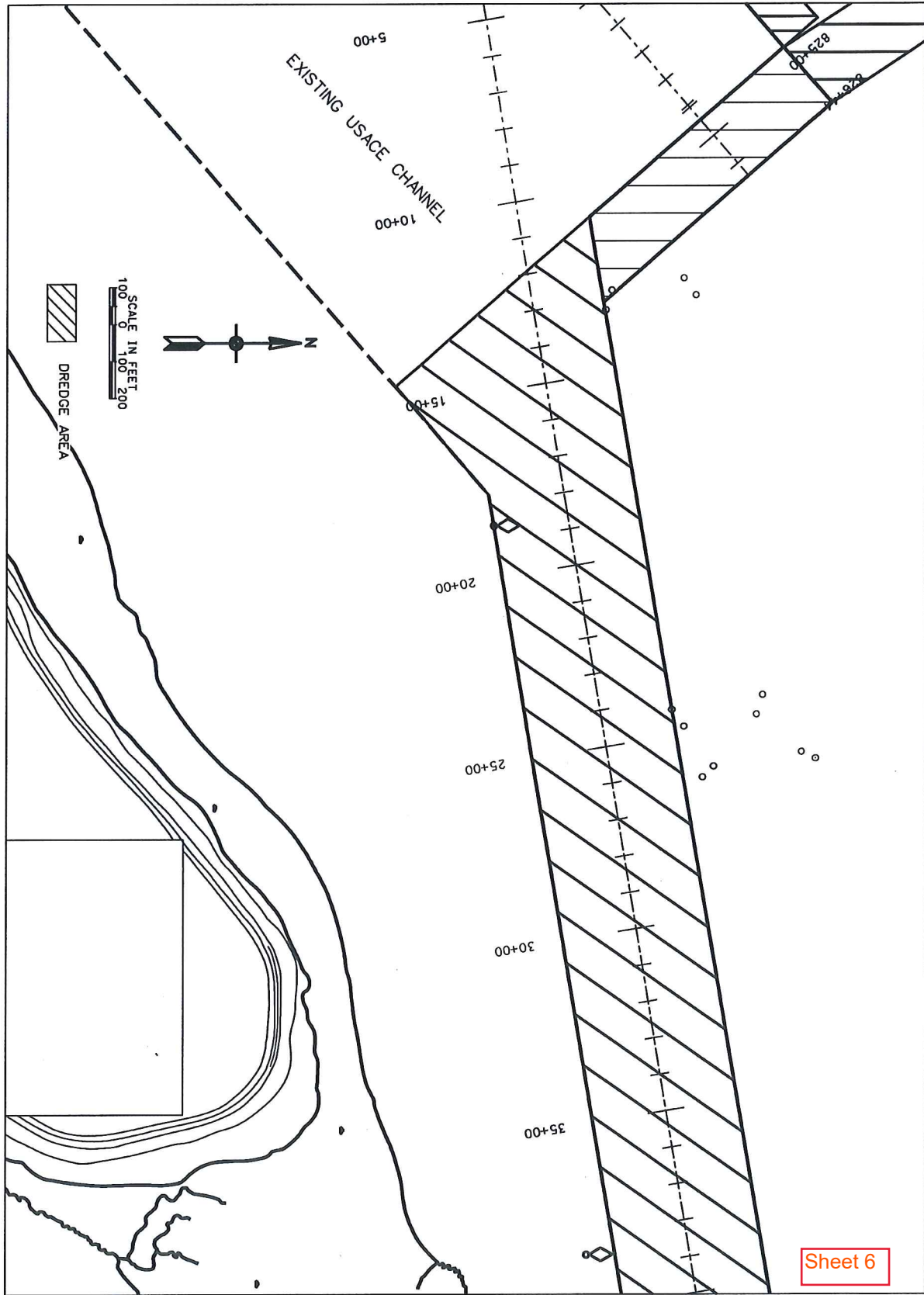
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SAC #:

Designed by	JLK	Date	30 MAR 2019
Drawn by	MLC	Design No.	PERMIT PLANS
Checked by	SAG	Drawing Code	
Approved by	SCOTT A GLASS, P.E.	As Issued	AS PER PLAN SHEET 5 OF 14

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 6

C-03
SHEET 3 OF 14

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERGLEY COUNTRIES, SOUTH CAROLINA

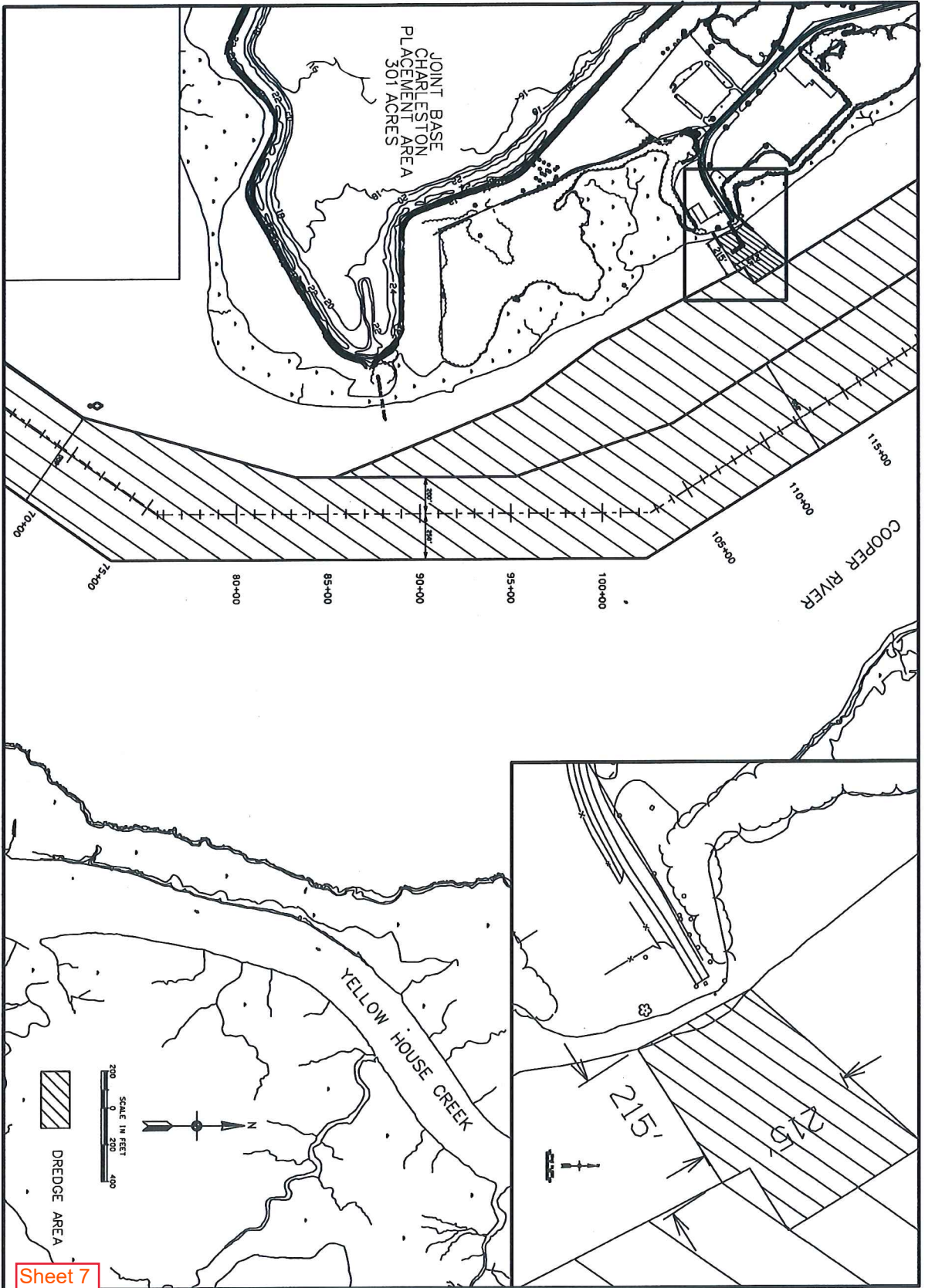
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

Designed by	JJK	Date	30 MAR 2016
Drawn by	JJK	Scale	AS SHOWN
Checked by	MUC	Project No.	PERMIT PLANS
Reviewed by	SAG	Sheet No.	3 OF 14
Approved by	SCOTT A. GLASS, P.E.	Permit No.	2016-01664

SAC #:

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 7

SHEET 7 OF 14
C-04

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

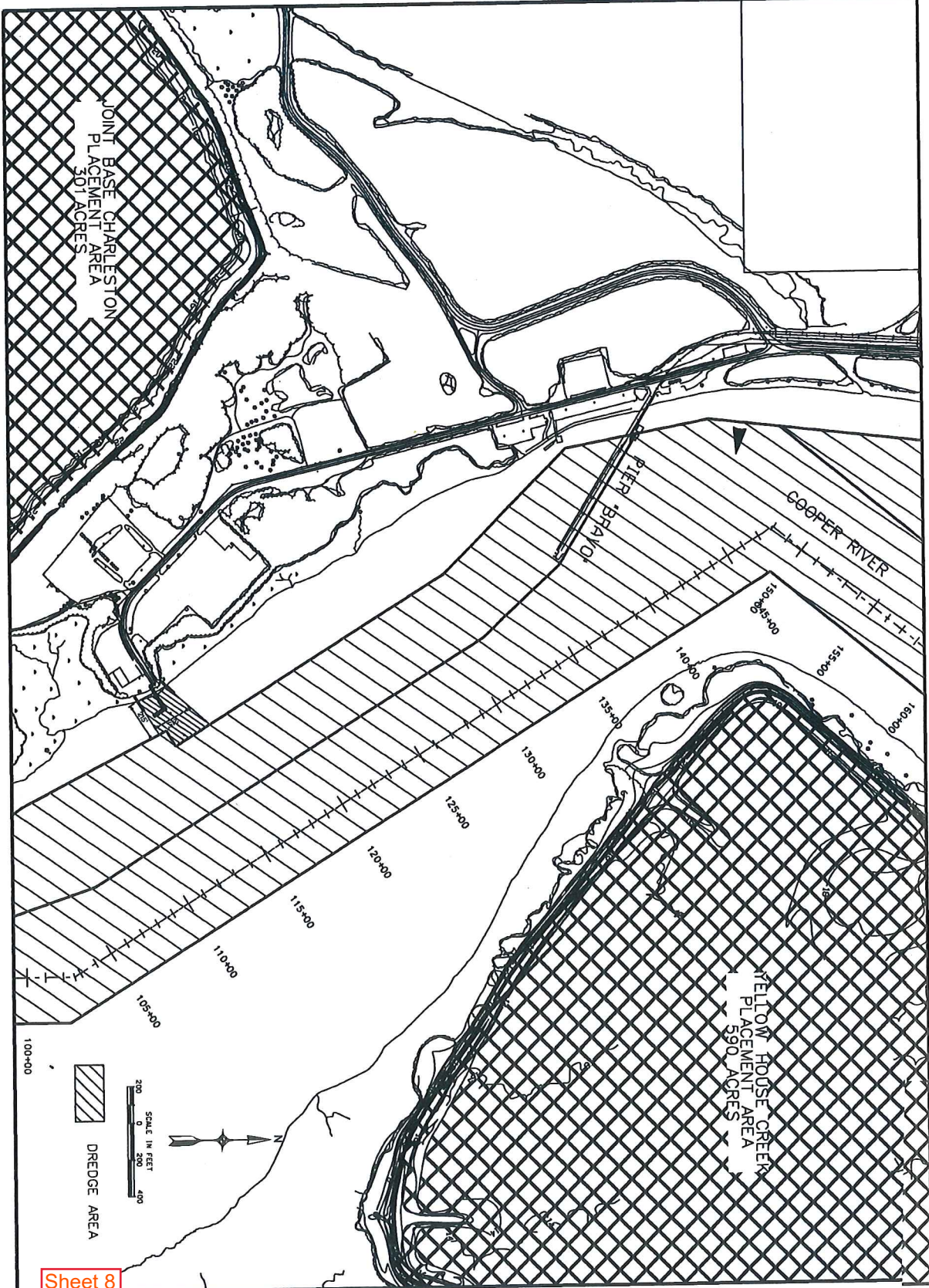
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

Designed by	JJK	Date	30 MAR 2019
Drawn by	MAC	Checked by	PERMIT PLANS
Reviewed by	SAG	Project No.	
Approved by	SCOTT A. GLASS, P.E.	Permit No.	

SAC #:

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 8

CHARLESTON DISTRICT
 PERMIT PLANS
 C-05
 SHEET 8 OF 14

JOINT BASE CHARLESTON
 MAINTENANCE DREDGING
 PERMIT PLANS
 CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 CHARLESTON, SOUTH CAROLINA
 SAC #:

Designed by	JJK	Date	03 MAR 2016
Drawn by	JJK	Check by	MAC
Reviewed by	MAC	Project Title	PERMIT PLANS
Approved by	SAD	Project Code	
Submitted by	SCOTT A. GLASS, P.E.	Project Number	

SAC-2019-01664

U.S. Army Corps
 of Engineers
 Charleston District



Sheet 9

PERMIT
SHEET 11 OF 14
096

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

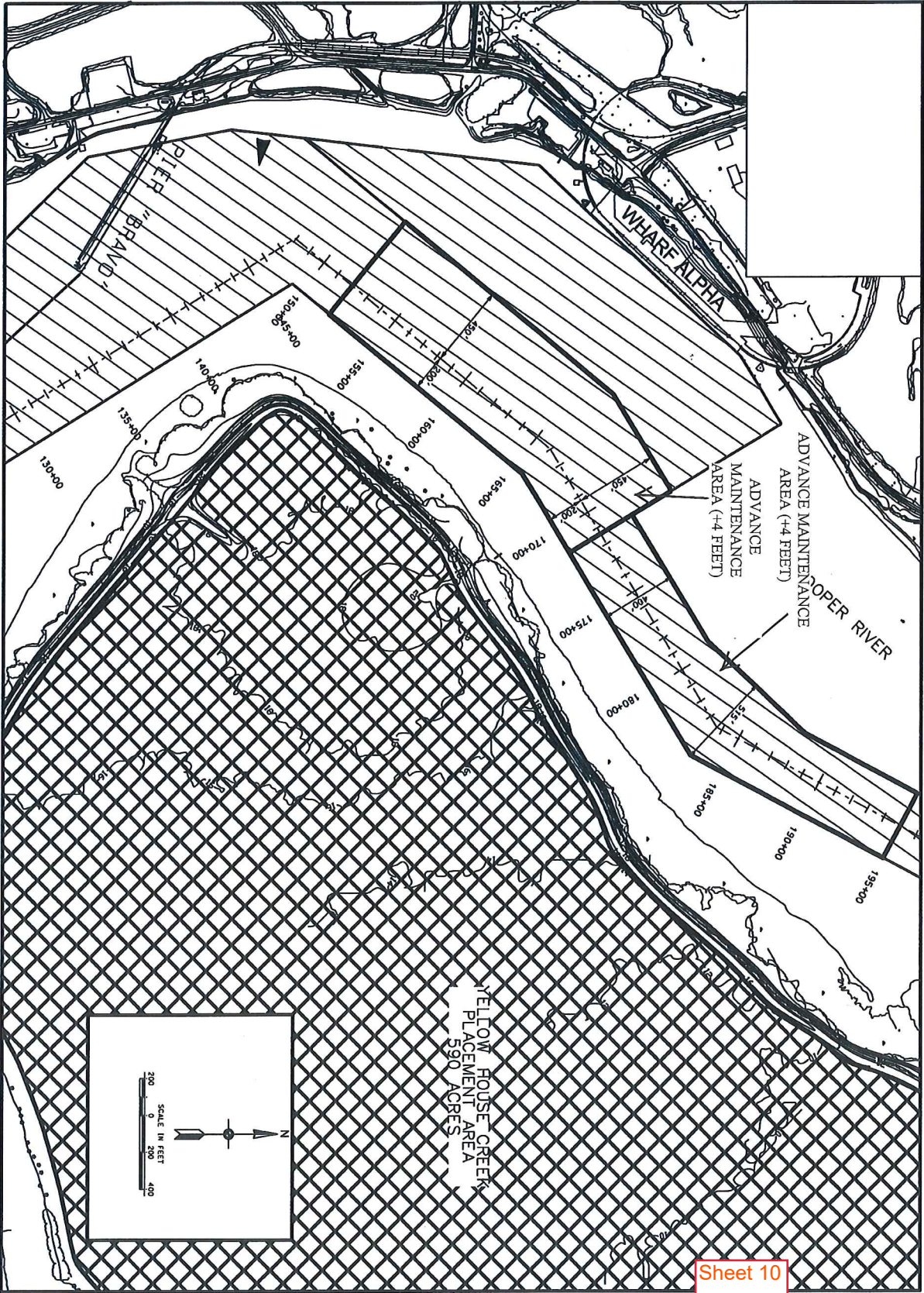
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

Designed by JJK Date 30 MAR 2019
Drawn by JJK MJC Permit Plans
Checked by SAG
Reviewed by SCOTT A GLASS, P.E.
By name PERM PLUS-00001
Permit No. 21-01-07
Proj. No. 7-10

SAC #:

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 10

PERMIT
SHEET 7 OF 14
C-07

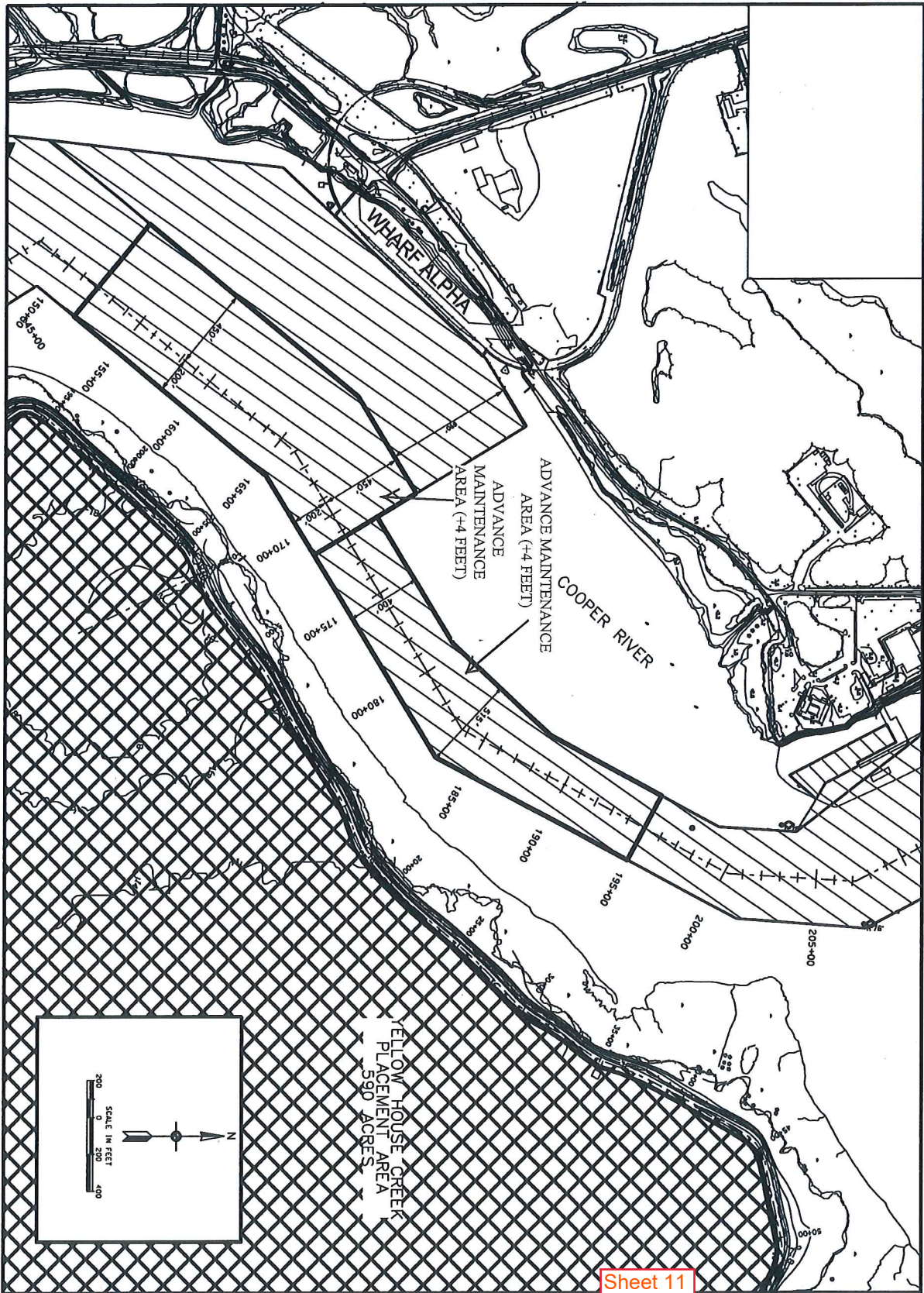
JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

Designed by JJK Date 03 MAR 2019
Drawn by JJK MUC Scale to as PERMIT PLANS
Checked by SAG Drawing Code
Approved by SCOTT A GLASS, P.E. File Name: R05C03-000219
Date of Issue: 03 MAR 2019
CDS with P + 00'

SAC-2019-01664

US Army Corps
of Engineers
Charleston District



Sheet 11

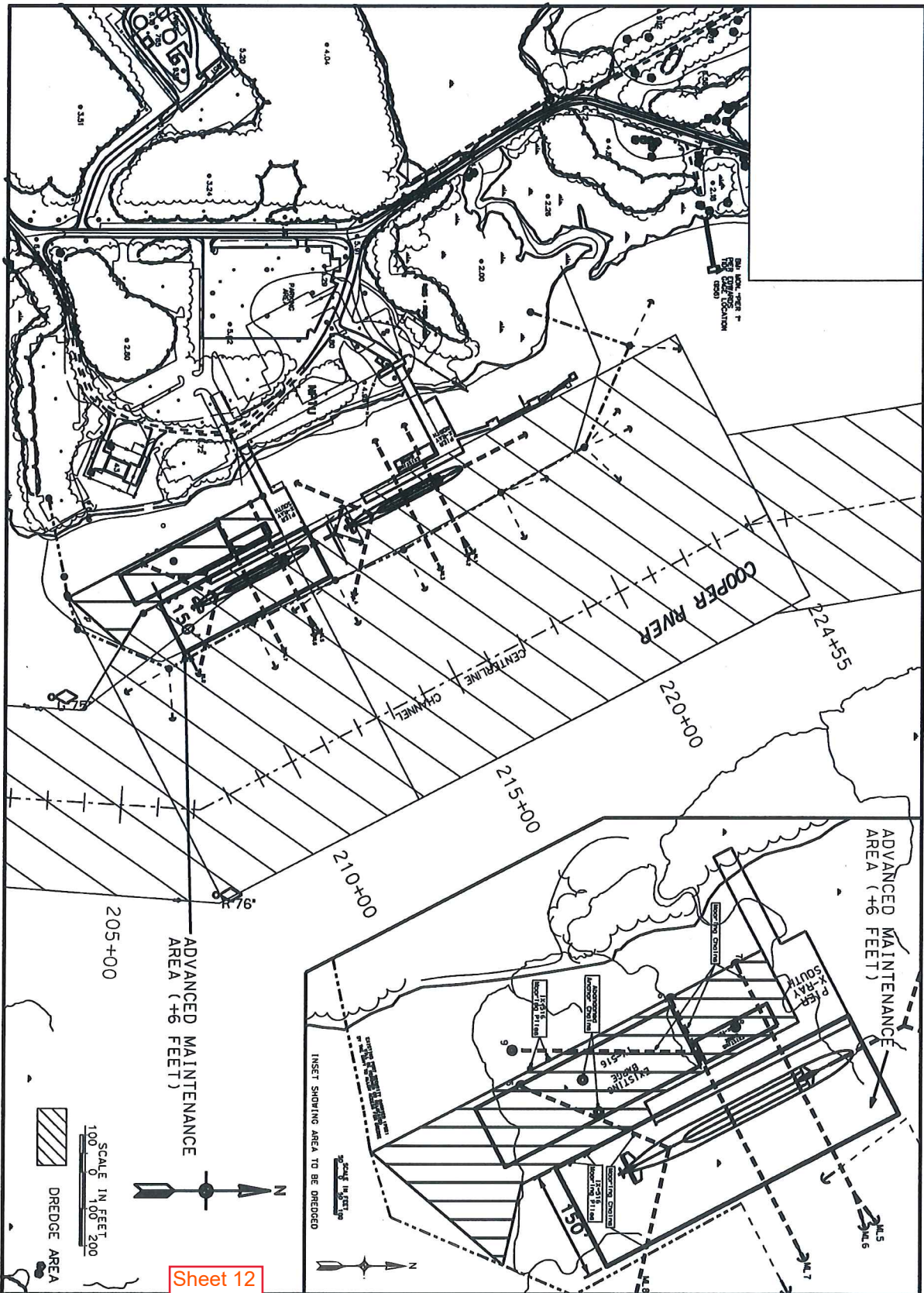
PERMIT
SHEET 1 OF 14
C-08

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKLEY COUNTY, SOUTH CAROLINA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON SOUTH CAROLINA
SAC #:
BOOIT A. GLASS, P.E.

DATE: 30 MAR 2019
DRAWN BY: JJK
CHECKED BY: MLD
DESIGNED BY: SAG
PROJECT: MAINTENANCE DREDGING
SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 12

PERMIT
SHEET 12 OF 14
C-09

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

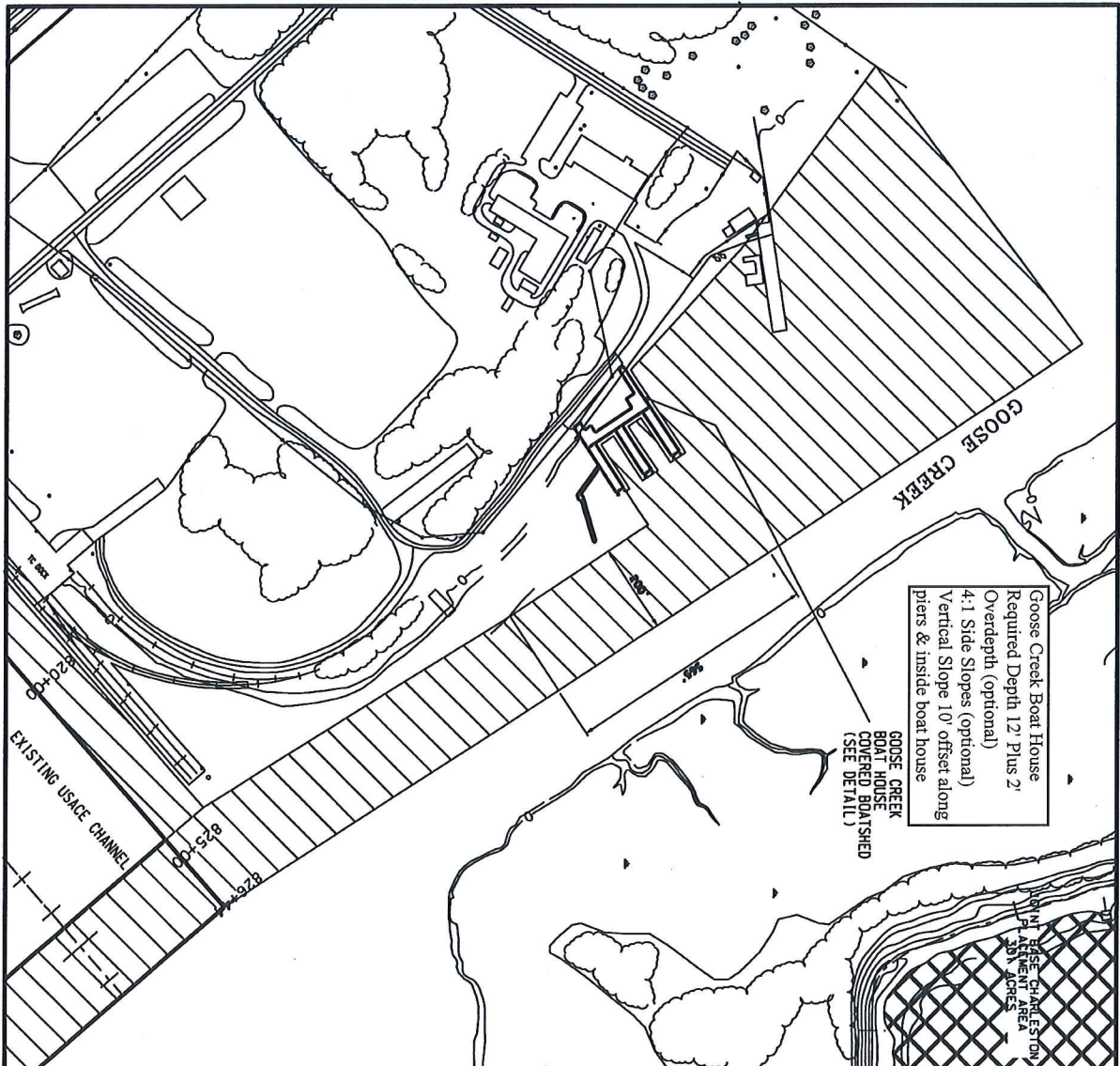
SAC #:

Designed by: JJK
Checked by: JJK
Reviewed by: SAG
Approved by: SCOTT A. GLASS, P.E.

DATE: 20 MAR 2018
SCALE: AS SHOWN
PROJECT: PERMIT PLANS
DRAWING NO: C-09
SHEET NO: 12 OF 14

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



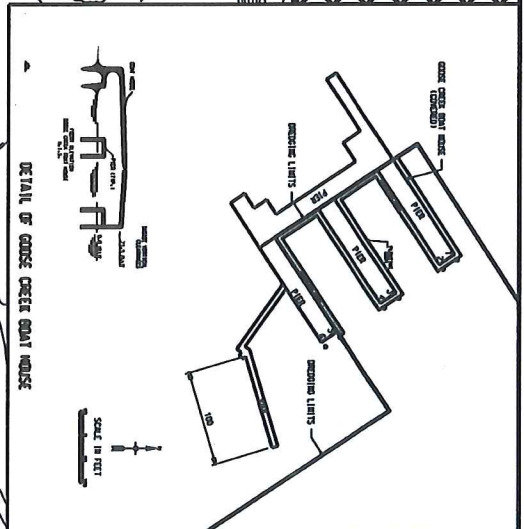
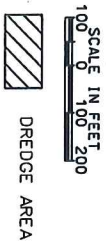
Goose Creek Boat House
 Required Depth 12' Plus 2'
 Overdepth (optional)
 4:1 Side Slopes (optional)
 Vertical Slope 10' offset along
 piers & inside boat house

GOOSE CREEK
 BOAT HOUSE
 COVERED BOATSHED
 (SEE DETAIL)

JOINT BASE CHARLESTON
 MAINTENANCE AREA
 200' WIDE

EXISTING USAGE CHANNEL

COOPER RIVER



Sheet 13

PERMIT
 SHEET NO. OF 14
 C-10

JOINT BASE CHARLESTON
 MAINTENANCE DREDGING
PERMIT PLANS
 BERKELEY COUNTY, SOUTH CAROLINA

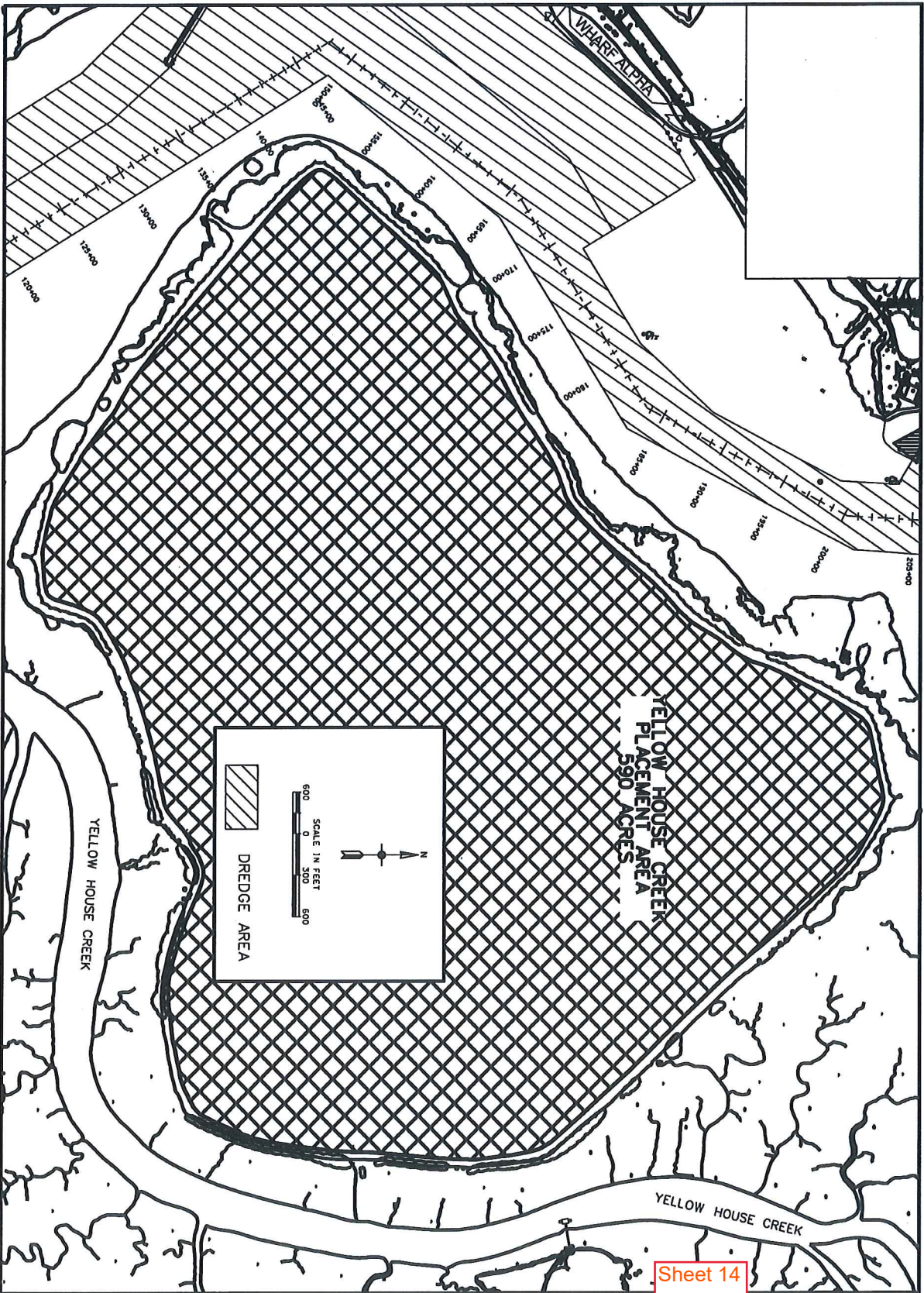
U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 CHARLESTON SOUTH CAROLINA

Designed by	JAK	Date	20 MAR 2019
Drawn by	JAK	Scale to be	PERMIT PLANS
Checked by	SAG	Issue Date	
Reviewed by	SCOTT A. GLASS, P.E.	As shown PERMIT PLANS-DESIGN	

SAC #:

SAC-2019-01664

US Army Corps
 of Engineers
 Charleston District



Sheet 14

SHEET 14 OF 14
C-011

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

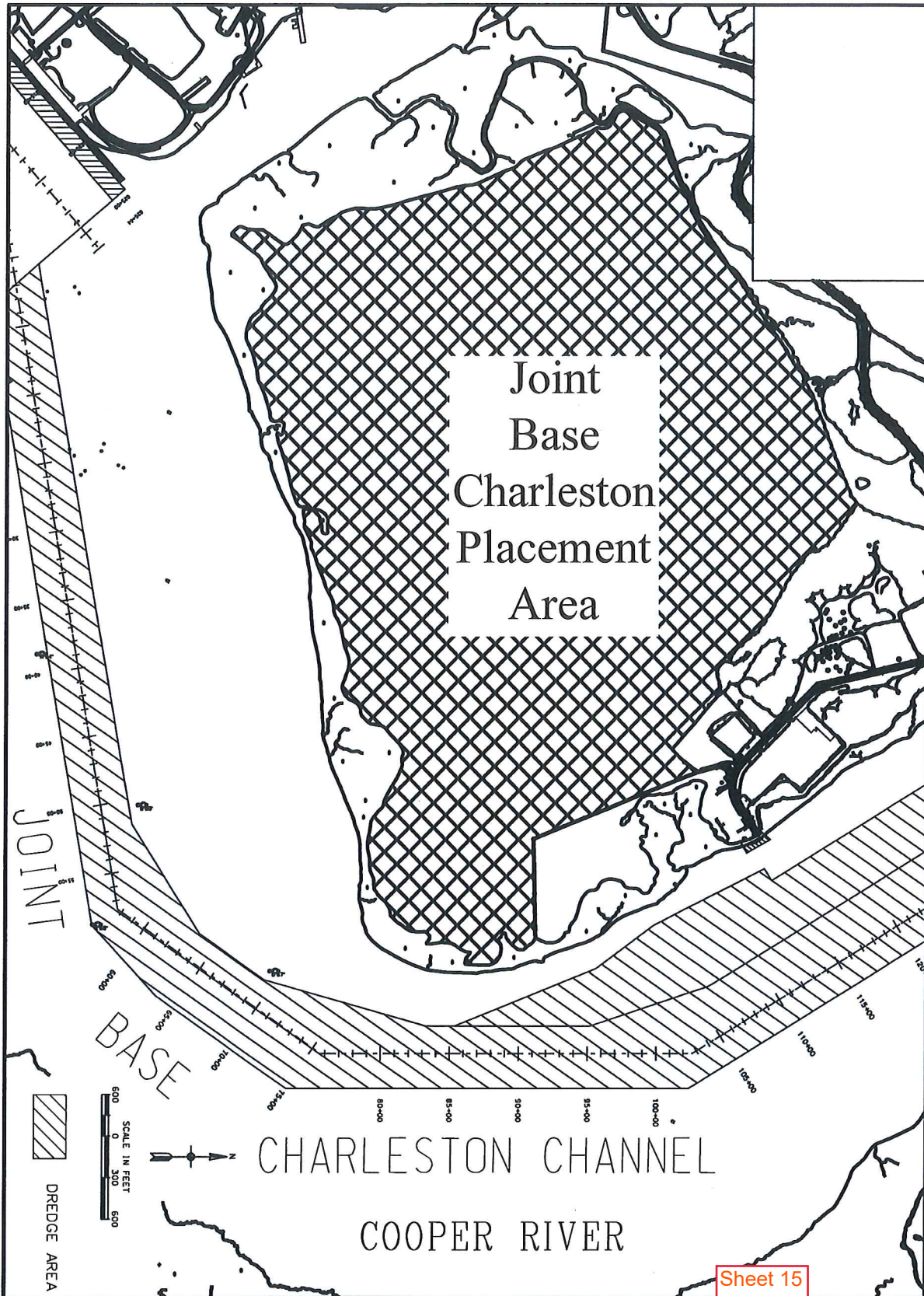
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

Designed by: JJK Date: 20 MAR 2012
 Drawn by: JJK, MUC
 Checked by: SAG
 Title: PERMIT PLANS
 Drawing Date:
 File Name: PERMPLANS-0201-02
 Job Date: 20 MAR 2012
 Job No: 12-02

SAC #:
 Issued by: SCOTT A. GLASS, P.E.

SAC-2019-01664

US Army Corps
of Engineers
Charleston District



Sheet 15

PERMIT
C-012
SHEET 15 OF 14

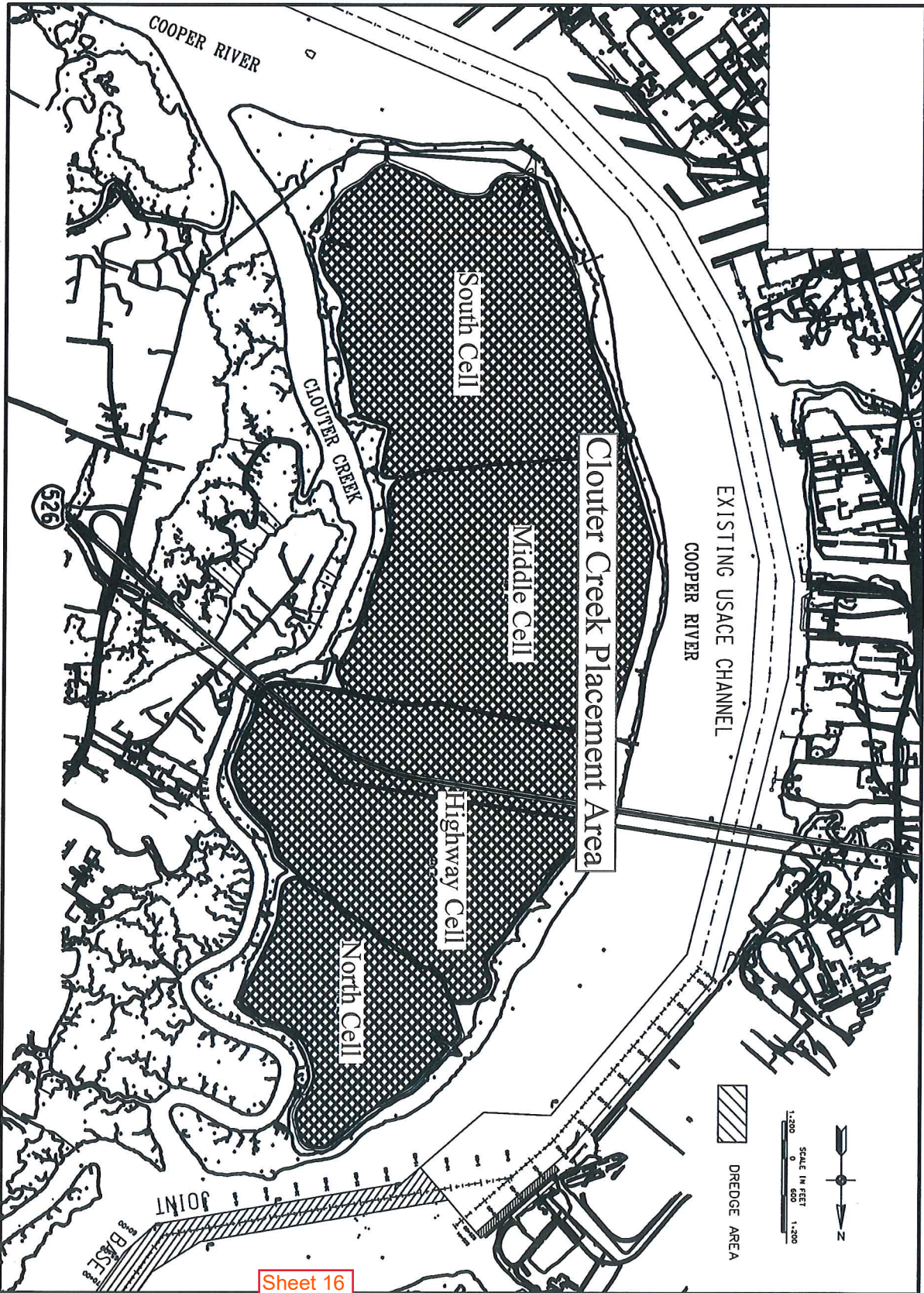
JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SCOTT A. GLASS, P.E.

SAC-2019-01664

U.S. Army Corps
of Engineers
Charleston District



Sheet 16

PROJECT NUMBER: C-13
SHEET 15 OF 14

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

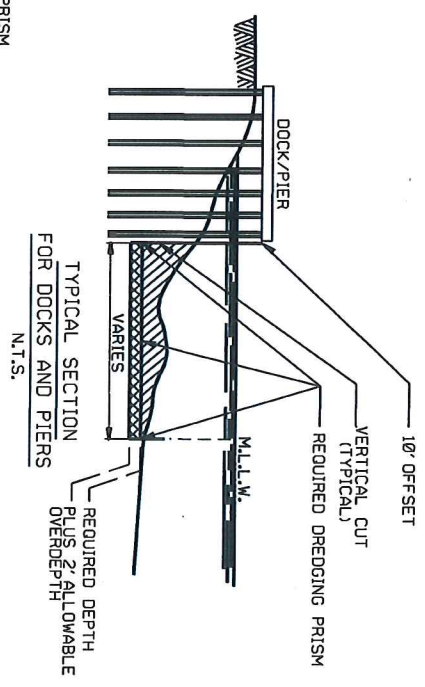
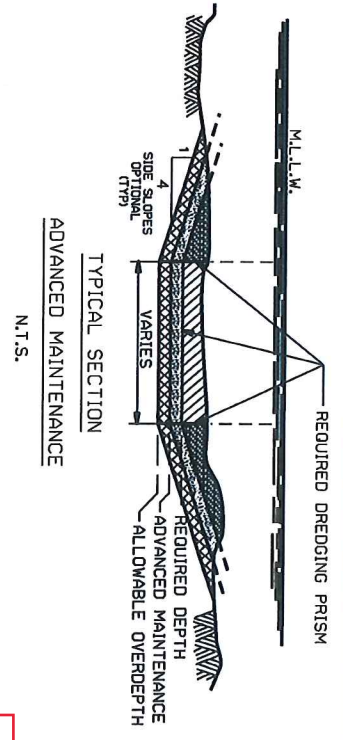
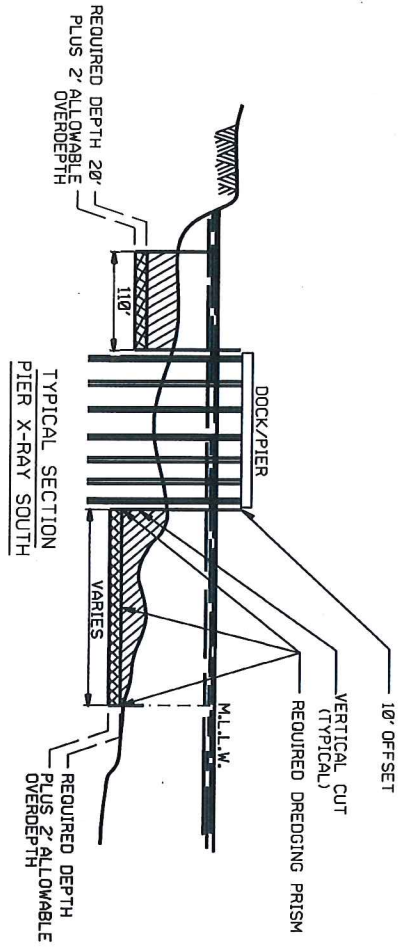
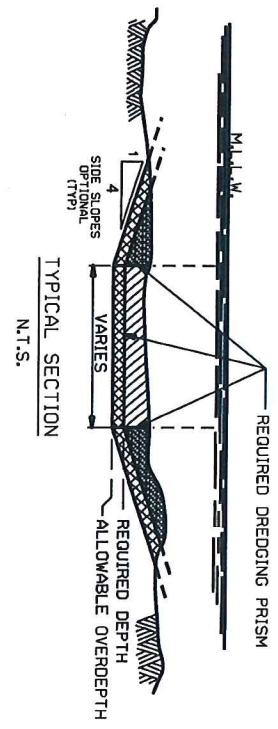
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

DESIGNED BY: JJK
CHECKED BY: MUX
DATE: 20 MAR 2018
PROJECT: PERMIT PLANS
DRAWING CODE:
APPROVED BY: SAG
DATE: 20 MAR 2018
BY NAME: PERMITTED BY DISTRICT
PROJECT NO: 20 MAR 2018
SCALE: 1" = 1,000'

SAC #:

SAC-2019-01664

US Army Corps
of Engineers
Charleston District



- NOTES:
1. ALL HORIZONTAL COORDINATES ARE BASED ON THE SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM, NAD83 (NSRS2007).
 2. VERTICAL CUT AT DOCK FACE AND MOORING DOLPHINS IS LIMITED TO 10 FEET FROM STRUCTURE.

Sheet 17

SAC-2019-01664

JOINT BASE CHARLESTON
MAINTENANCE DREDGING
PERMIT PLANS
CHARLESTON & BERKELEY COUNTY, SOUTH CAROLINA

C-14
SHEET 14 OF 14

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON SOUTH CAROLINA

SAC #:
SCOTT A. GLASS, P.E.

Issued by: JJK
Checked by: JJK
Designed by: SAG
Date: 20 MAR 2019
Project: PERMIT PLANS
Drawing Code: 25 MAR 2019

U.S. Army Corps
of Engineers
Charleston District