

**JOINT**  
**PUBLIC NOTICE**

**CHARLESTON DISTRICT, CORPS OF ENGINEERS**  
**69A Hagood Avenue**  
**Charleston, SC 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-2019-01114

July 15, 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

**Mr. Lee Fleming**  
**CMMC, LLC**  
**1670 Drydock Avenue**  
**North Charleston, South Carolina 29405**

for a permit to perform maintenance dredging of nine berthing areas along 6,500 linear feet of the

**Cooper River**

at Piers C, D, F, G, H, J, S, T, and U at the CMMC facility (former Charleston Navy Complex) in North Charleston, Charleston County, South Carolina (Latitude: 32.8611 °, Longitude: -79.9614 °), Quad Sheet- Charleston.

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 performing maintenance dredging of nine berthing areas (Piers C, D, F, G, H, J, S, T, and U) operated by CMMC, LLC. In detail, the applicant is requesting authorization under a ten-year maintenance permit to dredge using either a hydraulic cutterhead dredge or a mechanical dredge with a clamshell bucket. The applicant is requesting both forms of dredging to provide for greater flexibility when hydraulic dredging is not available. When hydraulically dredging, the material would be transported to the Clouter Island Dredge Material Placement Facility (DMPF). When mechanical dredging, the material would be placed into a scow and transported to the Clouter Island

DMPF, where the sediment would be liquefied by adding water and the resultant slurry would be pumped into the DMPF. The applicant proposes to dredge to approximately 200,000 cubic yards annually to a depth of -40' MLW plus 2' allowable overdepth. If all areas were dredged annually, the anticipated dredge volume would be approximately 4,000,000 cubic yards over a 10 year period. However, dredging typically occurs in the berths on an as-needed basis instead of large-scale maintenance dredging, so the actual volume to be dredged is anticipated to be less. The applicant was previously authorized to dredge to a depth of 38' MLW plus 2' overdepth but is now requesting an additional two feet to have the necessary depths available for a greater length of time. As there are no impacts to wetlands, the applicant is not proposing mitigation. The project purpose is to provide safe operating depths during all tidal stages for the commercial/ industrial businesses using the piers at the CMMC, LLC facility.

**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 99.1 acres of estuarine substrates 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 not have a substantial individual or cumulative 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 the West Indian manatee, Atlantic sturgeon, shortnose sturgeon, green sea turtle, Kemp's Ridley sea turtle, leatherback sea turtle, and the loggerhead sea turtle have the potential to occur within the vicinity of the project area. However, it has been determined that the project will have no effect on sturgeon and sea turtles and will not result in the destruction or adverse modification of their designated or proposed critical habitat. In addition, the District Engineer has determined that the project is not likely to adversely affect the West Indian manatee. This public notice serves as a request for written concurrence from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

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)(l)(1)), and has initially determined that there are historic properties present, but these will not be adversely affected; therefore, there will be no adverse 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 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.

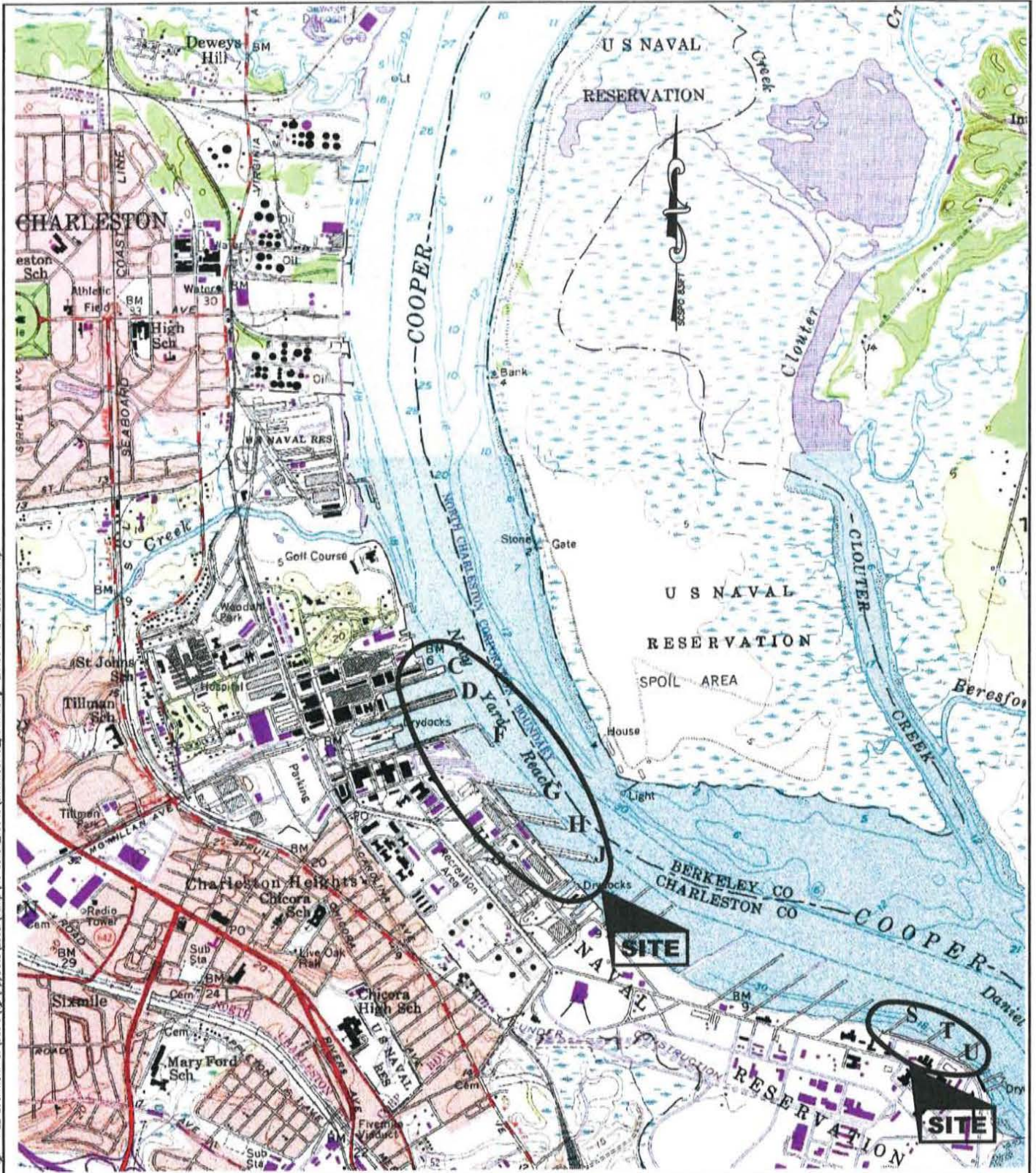
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

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. 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, SC 29403-5107**

If there are any questions concerning this public notice, please contact Chelsea B. Fannin, Project Manager, at (843) 329-8038, or by email at [Chelsea.B.Fannin@usace.army.mil](mailto:Chelsea.B.Fannin@usace.army.mil).



PLOTTED: May 15, 2019 - 9:10am BY: jlp FILE LOCATION: C:\Users\jlp\AppData\Local\Temp\AcPublish\_18548\chmm00119\_permit.dwg LAYOUT: TAB - Location Map  
 chmm00119

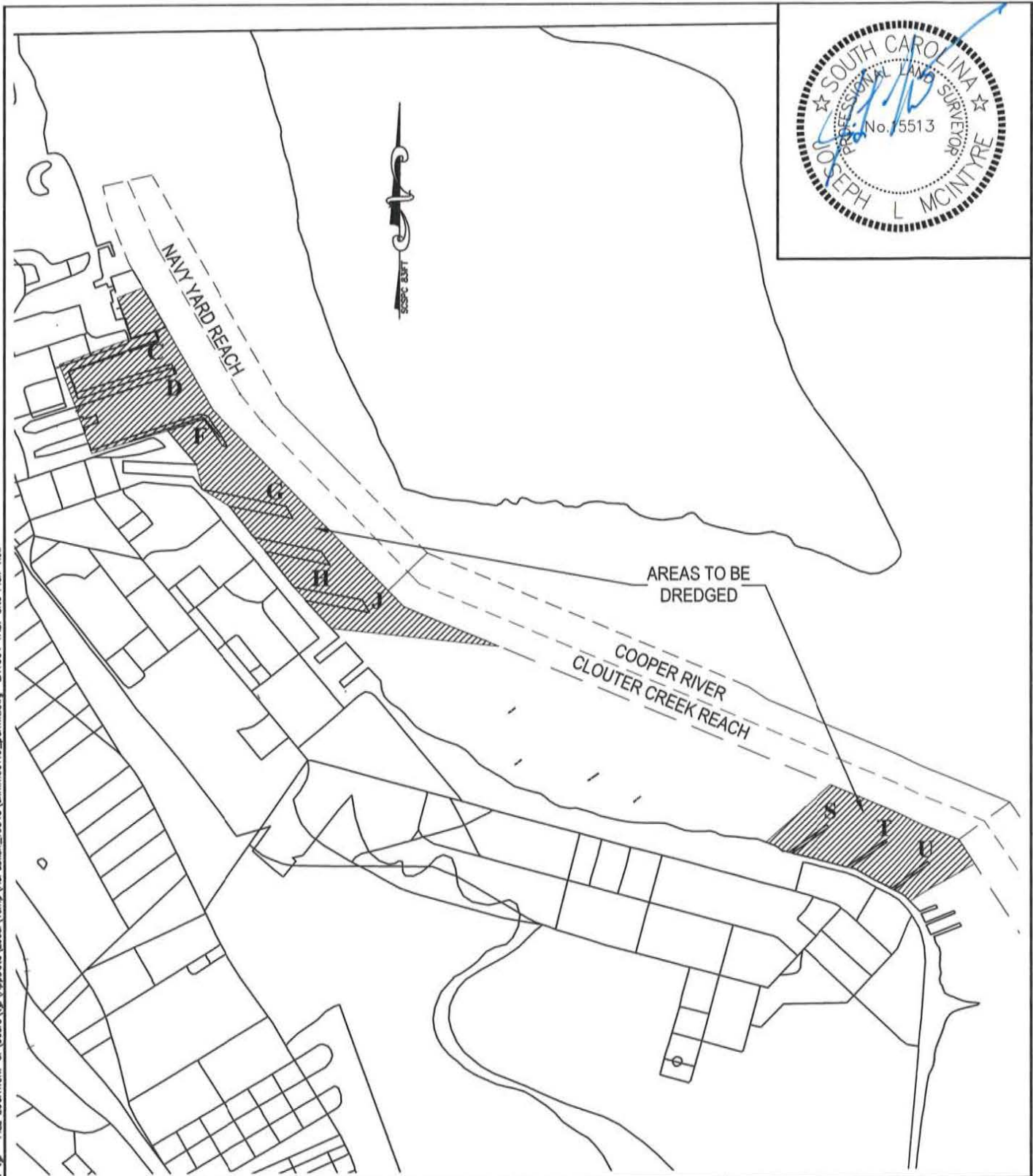
PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS  
 ADJACENT PROPERTY OWNERS  
 SEE ATTACHED  
 SURVEY DATUM: NAVD 88

**FIGURE 1**  
 LOCATION MAP  
 USGS QUAD "CHARLESTON"  
 NOT TO SCALE

CMMC, LLC  
 NORTH CHARLESTON  
 SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING  
 AT: NORTH CHARLESTON  
 IN: COOPER RIVER  
 COUNTY OF: CHARLESTON  
 SOUTH CAROLINA  
 SHEET: 1 OF 23 DATE: 05/07/2019

a Member of THE GEL GROUP, INC.



PLOTTED: May 15, 2019 - 8:10am BY: tjp FILE LOCATION: C:\Users\tjp\AppData\Local\Temp\AppData\Local\Temp\16546\chmm00119\_permit.dwg LAYOUT TAB: Site Plan View  
 chmm00119

PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NAVD 88

**FIGURE 2**  
SITE PLAN VIEW

SCALE: 1" = 1500'



CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

IN: COOPER RIVER

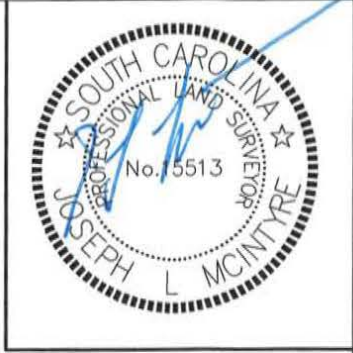
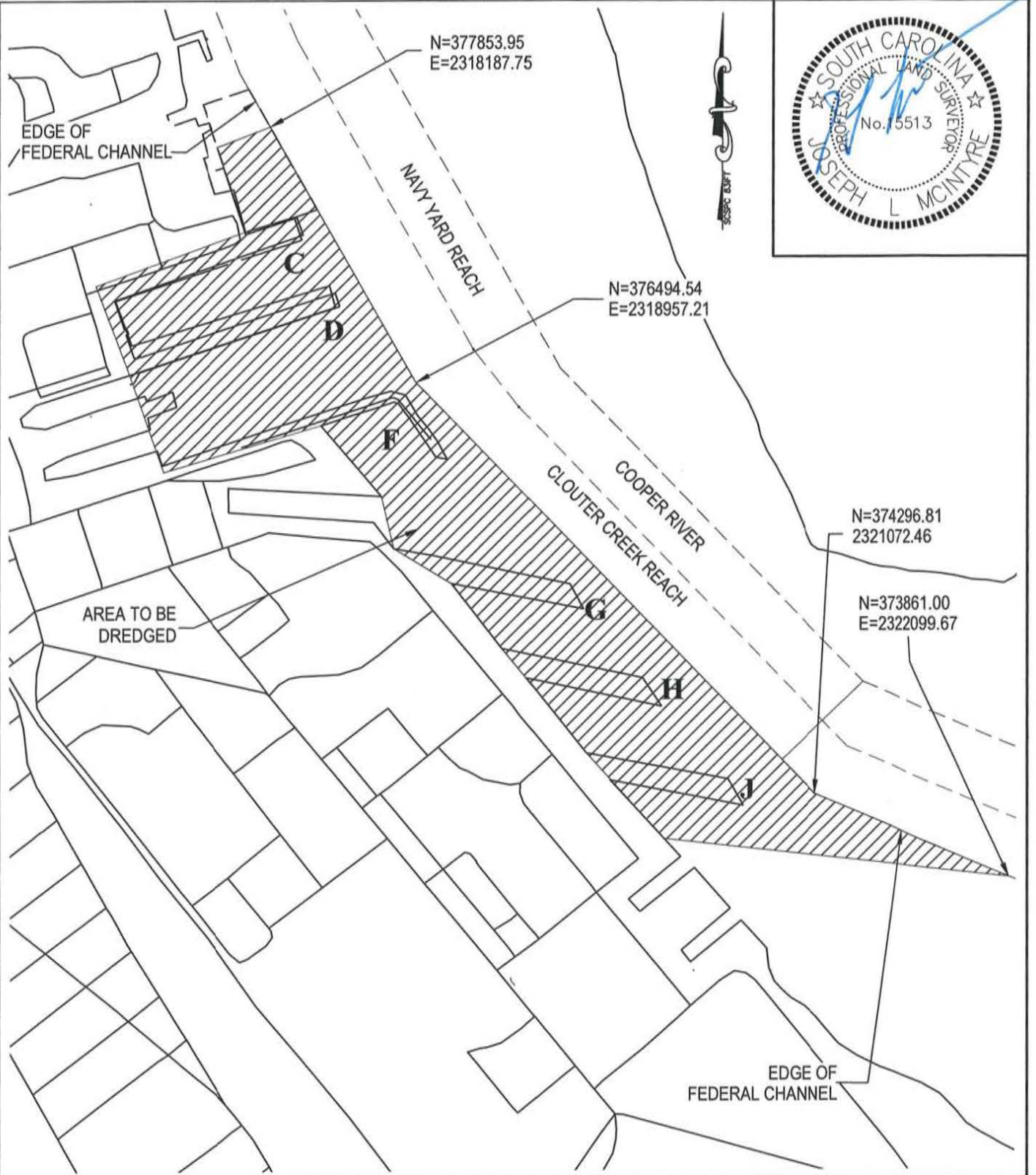
COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 2 OF 23

DATE: 05/07/2019

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FILE LOCATION: C:\Users\jlp\AppData\Local\Temp\AcPublish\_18548\chmm00119\_permit.dwg LAYOUT TAB: Enlarged View Piers C-D-F-G-H-J  
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**FIGURE 3**  
ENLARGED VIEW PIERS C-D-F-G-H-J

SCALE: 1" = 720'



CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

GEL ENGINEERING, LLC.

PURPOSE: MAINTAIN SAFE OPERATING DEPTH  
FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NAVD 88

PROPOSED: BERTH MAINTENANCE DREDGING

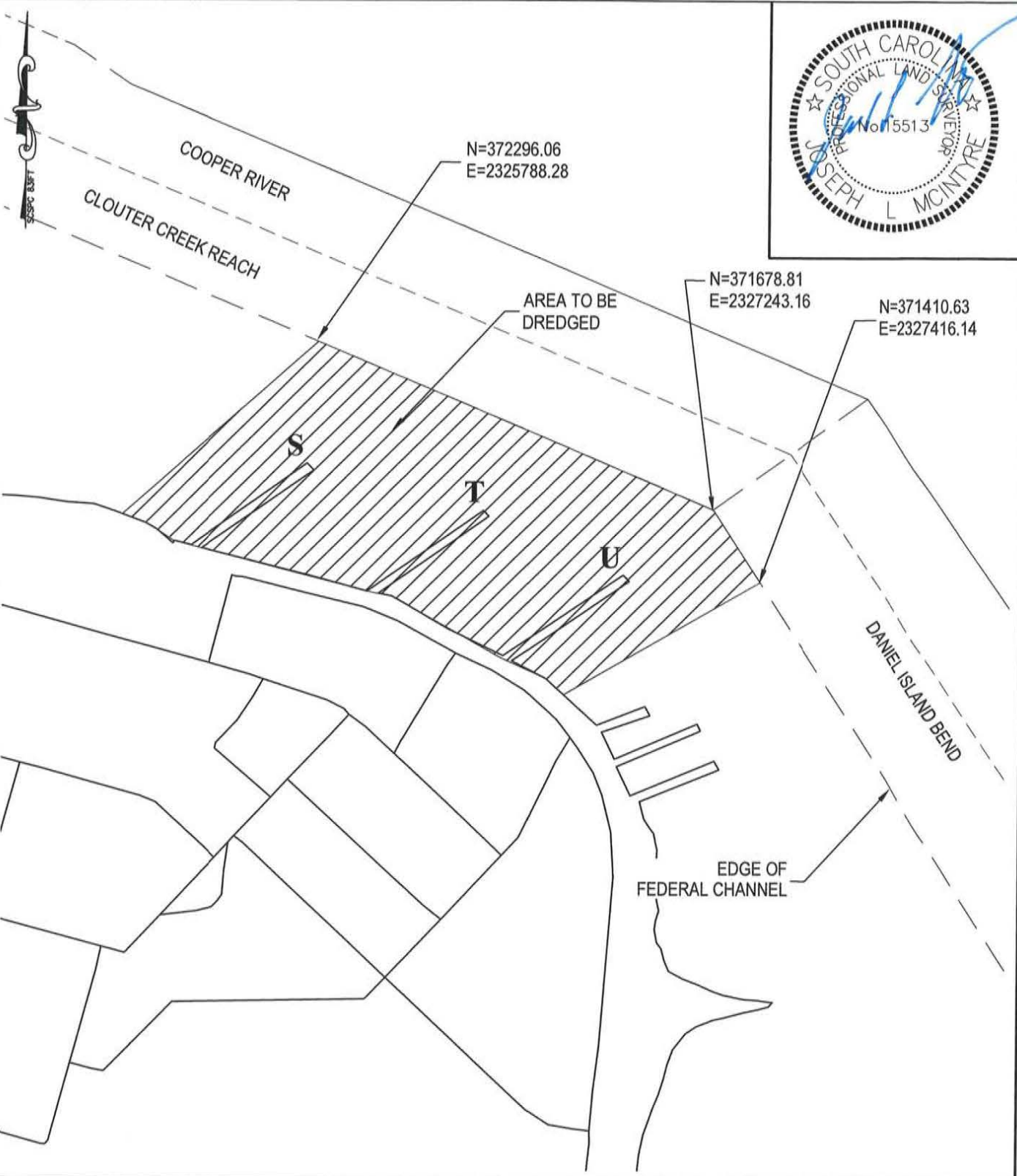
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 3 OF 23

DATE: 05/07/2019



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 chmm00119

PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NAVD 88

**FIGURE 4**  
ENLARGED VIEW PIERS S-T-U

SCALE: 1" = 500'



CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

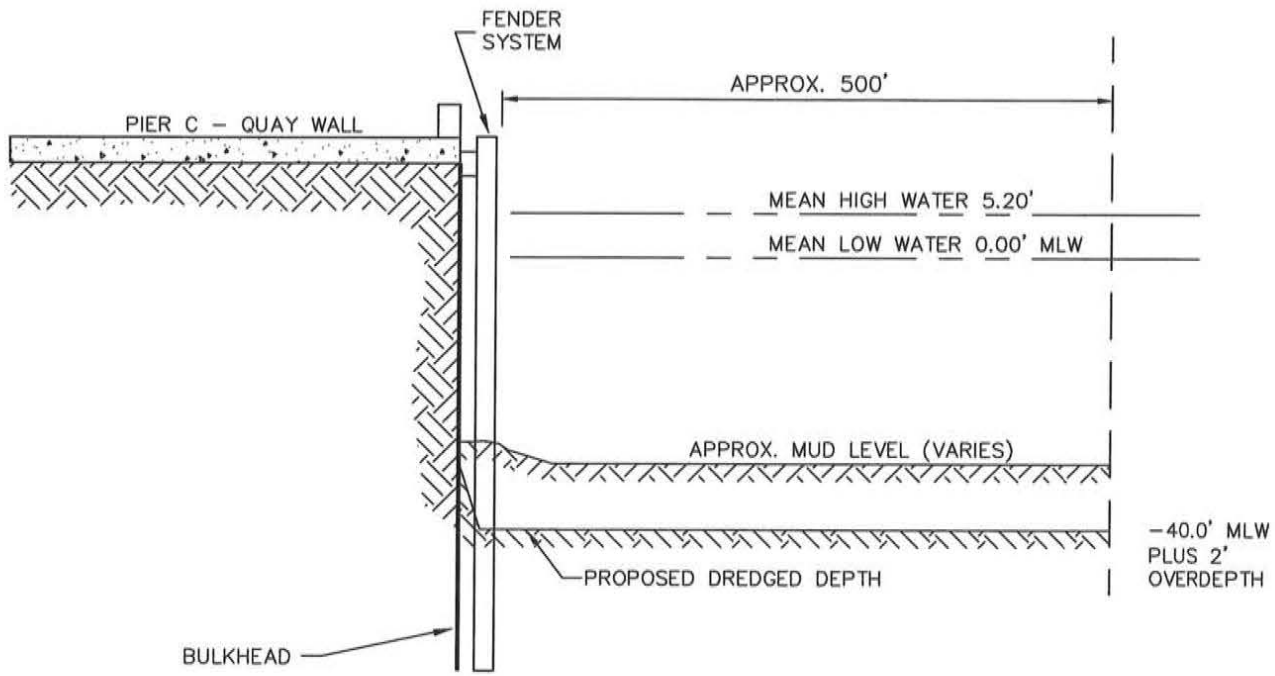
IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 4 OF 23

DATE: 05/07/2019

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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS  
 ADJACENT PROPERTY OWNERS  
 SEE ATTACHED  
 SURVEY DATUM: NAVD 88

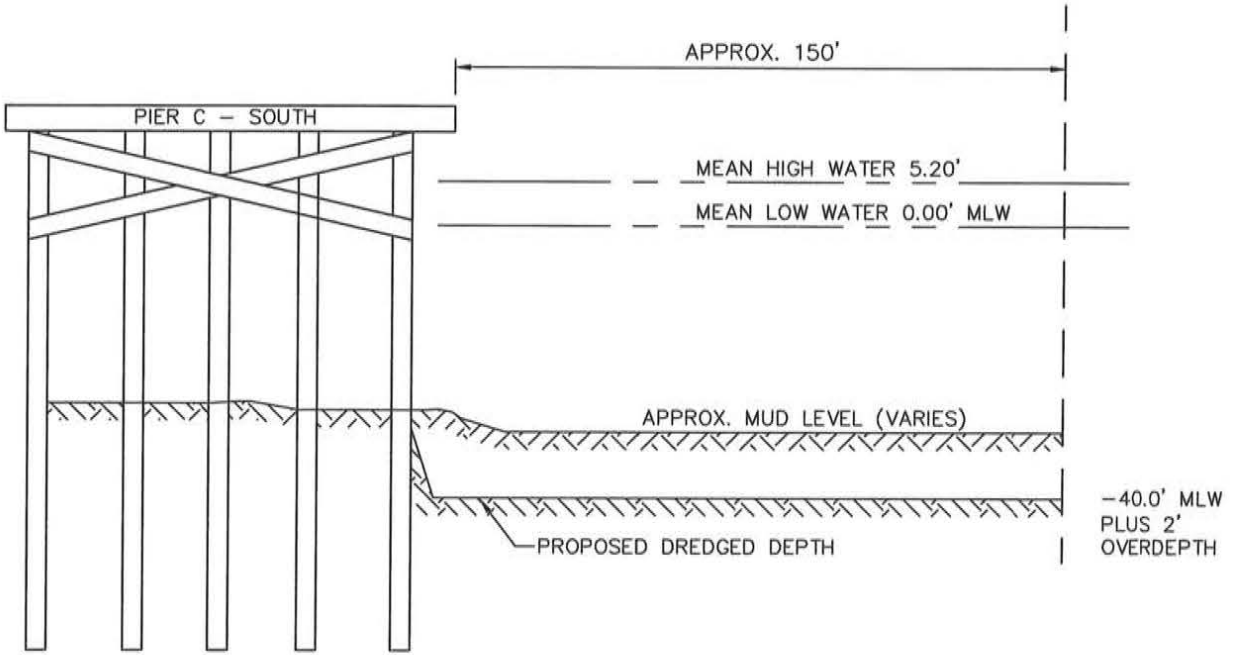
**FIGURE 5  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
 NORTH CHARLESTON  
 SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING  
 AT: NORTH CHARLESTON  
 IN: COOPER RIVER  
 COUNTY OF: CHARLESTON  
 SOUTH CAROLINA  
 SHEET: 5 OF 23 DATE: 05/07/2019





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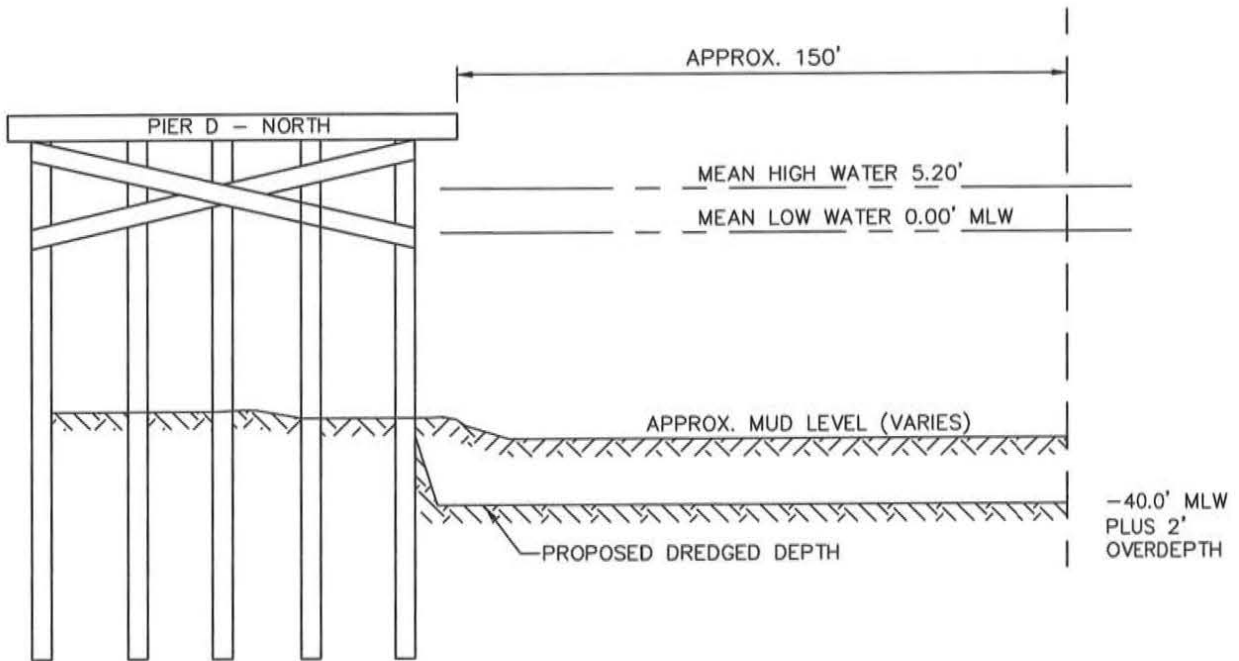
PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS  
 ADJACENT PROPERTY OWNERS  
 SEE ATTACHED  
 SURVEY DATUM: NAVD 88

**FIGURE 6**  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
 NORTH CHARLESTON  
 SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING  
 AT: NORTH CHARLESTON  
 IN: COOPER RIVER  
 COUNTY OF: CHARLESTON  
 SOUTH CAROLINA  
 SHEET: 6 OF 23 DATE: 05/07/2019



PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NAVD 88

**FIGURE 7  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

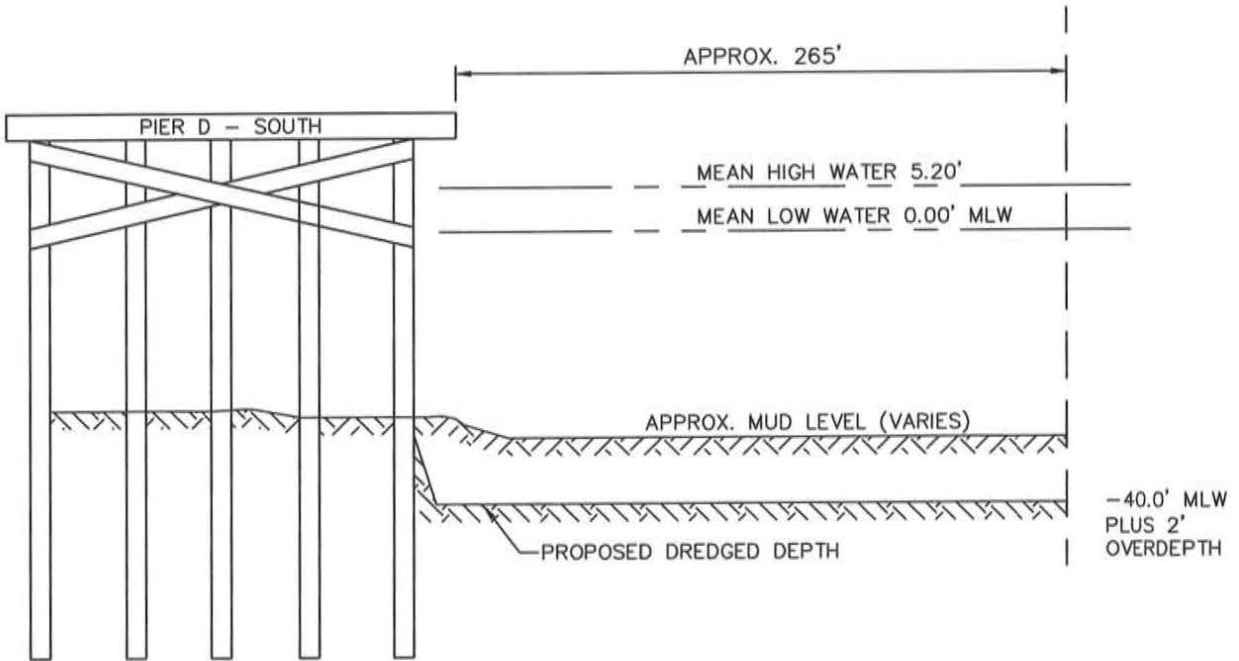
IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 7 OF 23

DATE: 05/07/2019

FILE LOCATION: C:\Users\jlp\AppData\Local\Temp\AppData\Local\Temp\chmm00119\_permit.dwg LAYOUT TAB: Cross-section (3)



FILE LOCATION: c:\Users\jlp\AppData\Local\Temp\AcPublish\_16548\chmm00119\_permit.dwg LAYOUT TAB: Cross-section (4)

PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NAVD 88

**FIGURE 8  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

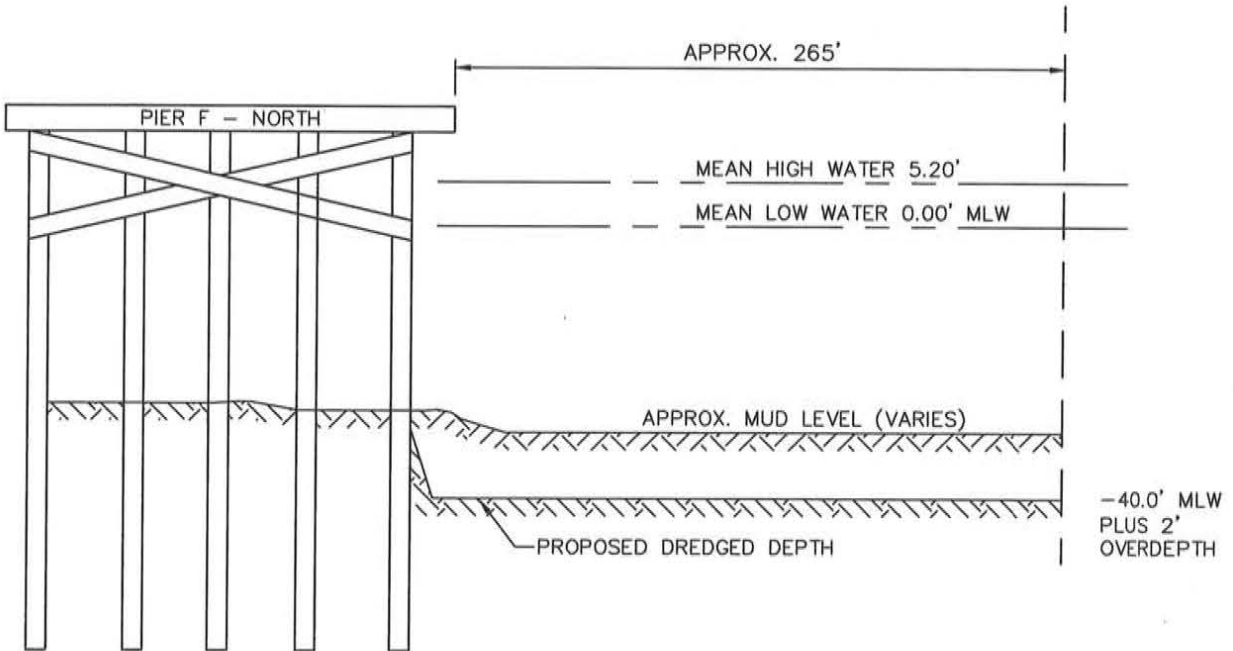
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 8 OF 23

DATE: 05/07/2019



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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NAVD 88

**FIGURE 9  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING

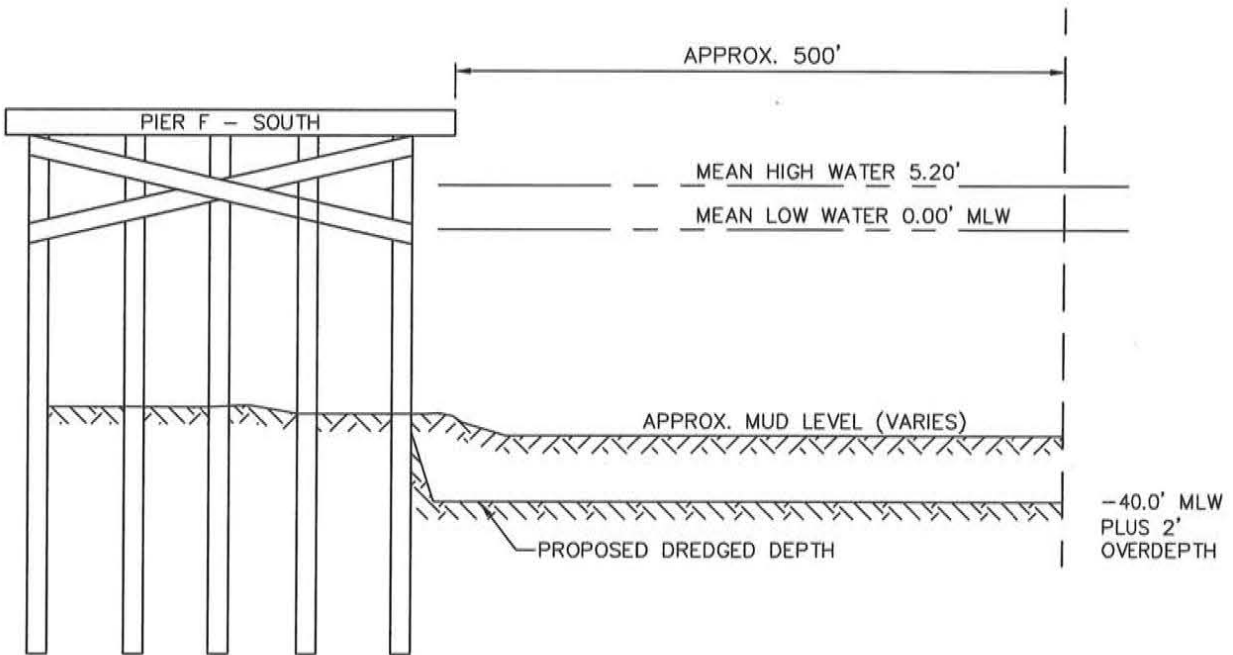
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 9 OF 23

DATE: 05/07/2019



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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 10  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

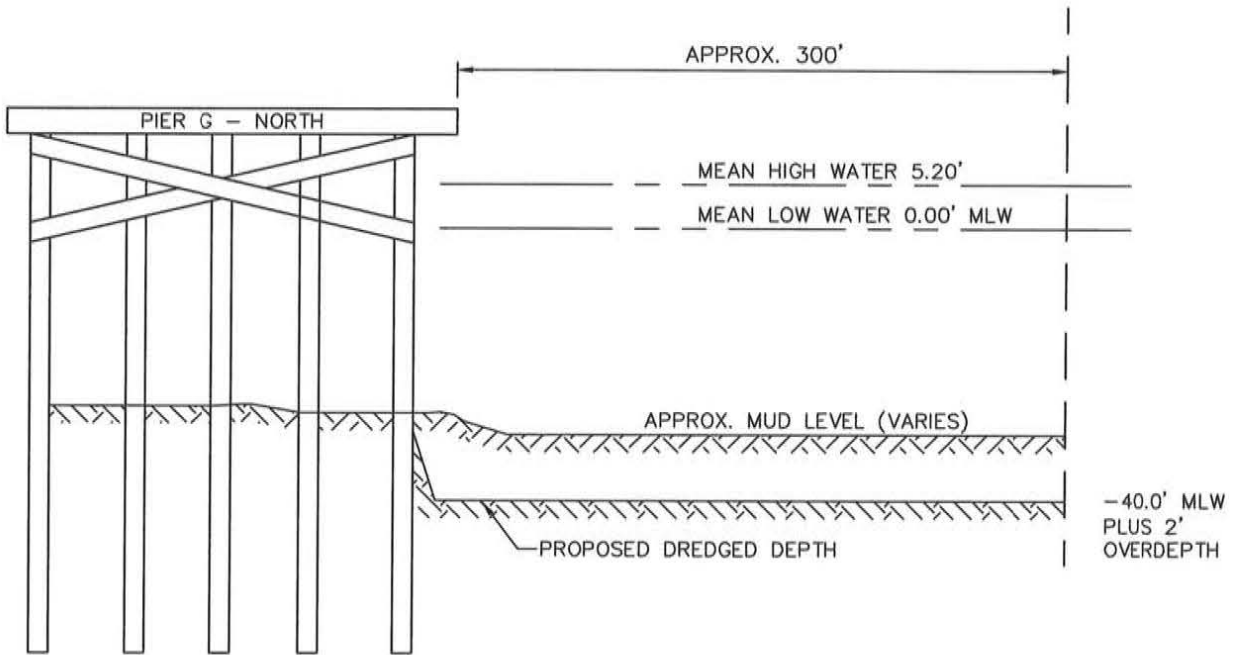
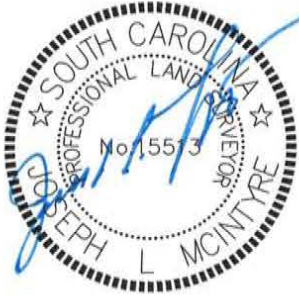
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 10 OF 23

DATE: 05/07/2019



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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 11  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

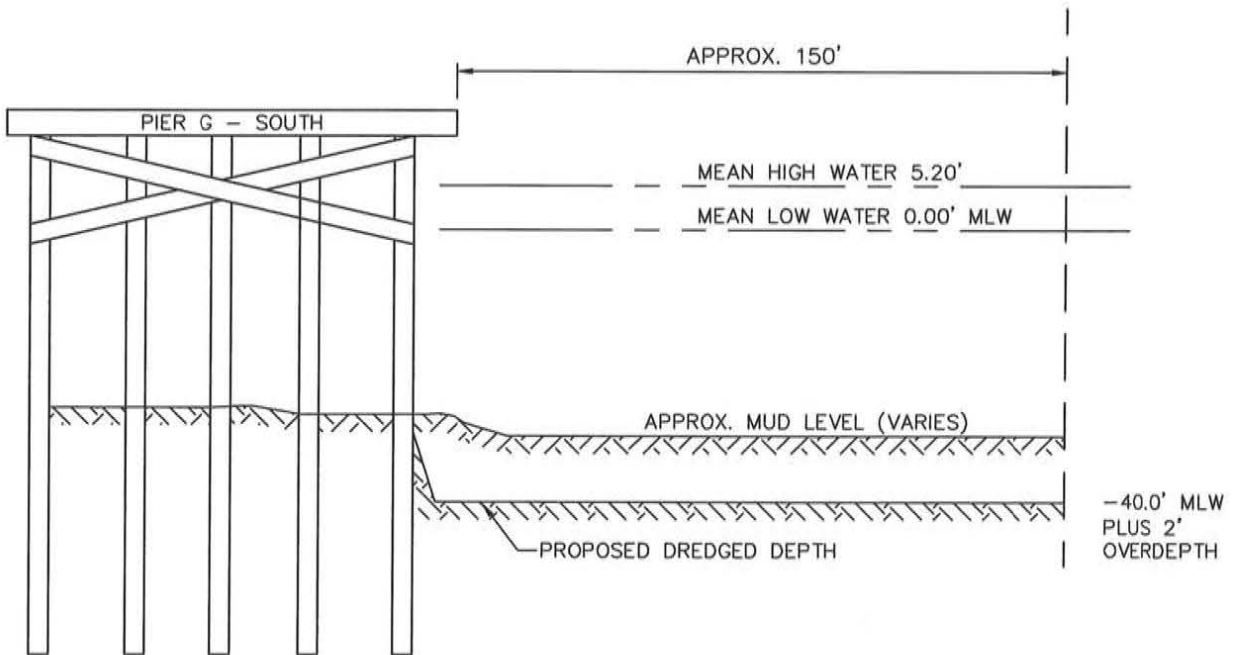
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 11 OF 23

DATE: 05/07/2019



FILE LOCATION: c:\Users\jlp\AppData\Local\Temp\AcPublish\_16548\chmm00119\_permit.dwg LAYOUT TAB: Cross-section (6)

PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 12  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

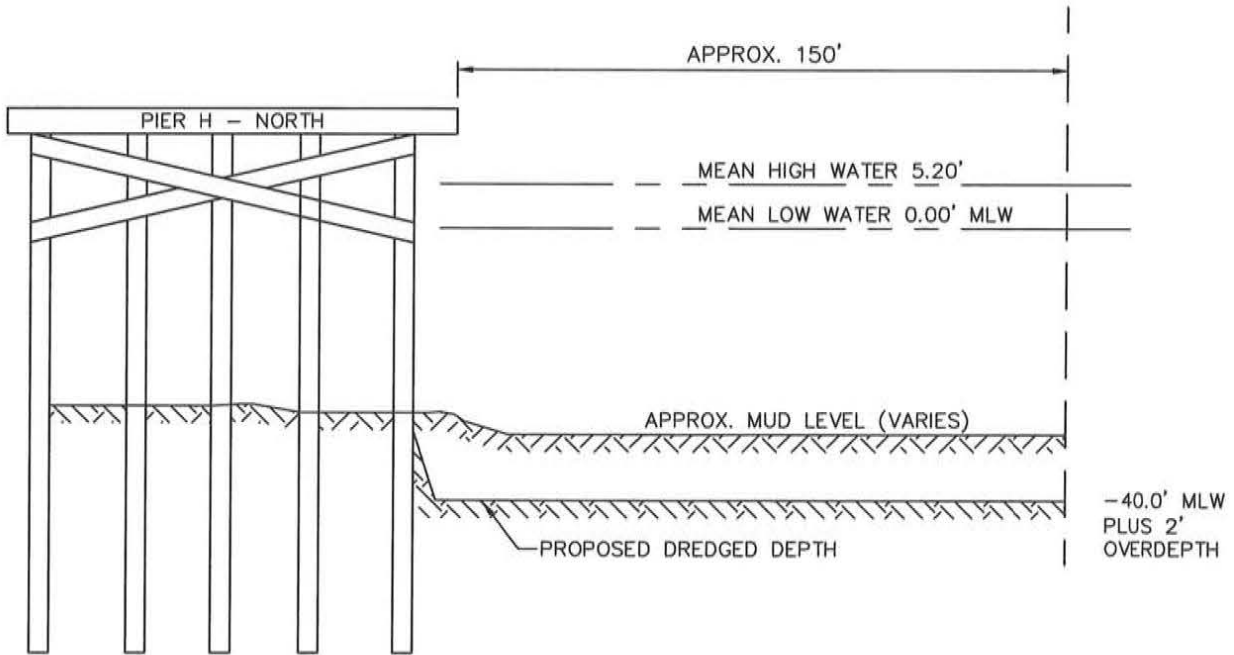
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 12 OF 23

DATE: 05/07/2019



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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 13  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

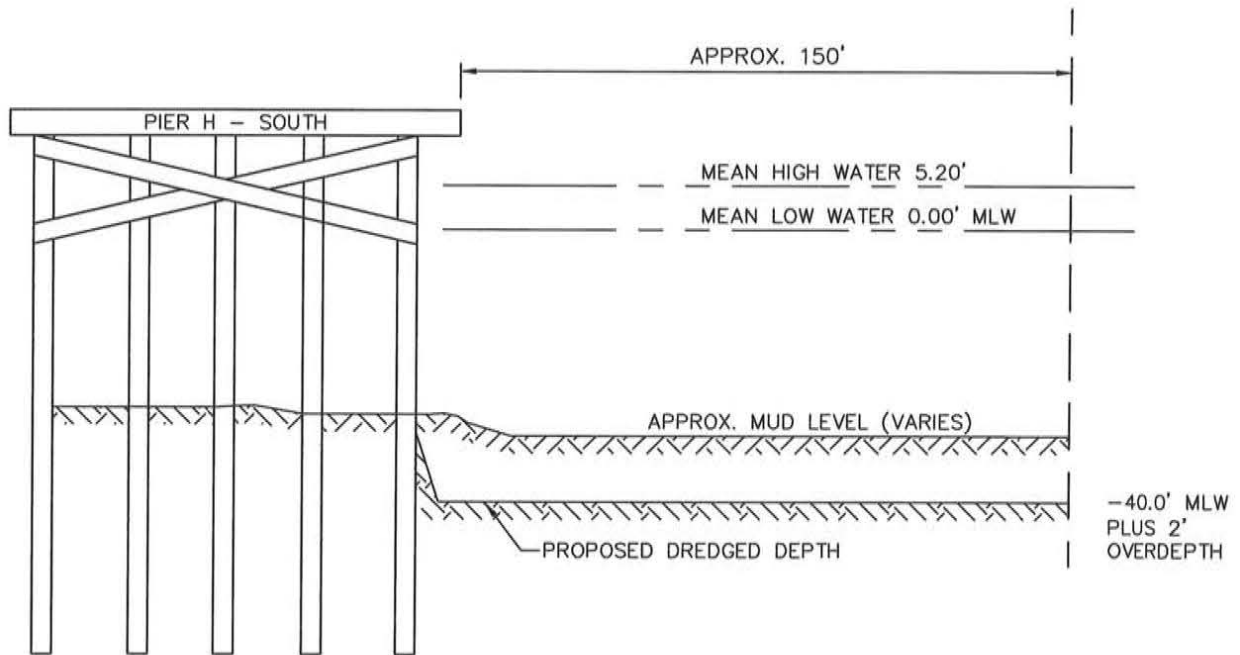
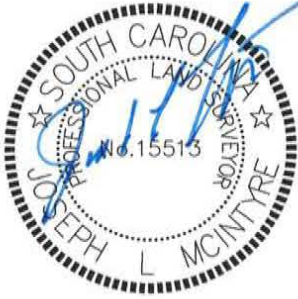
IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 13 OF 23

DATE: 05/07/2019





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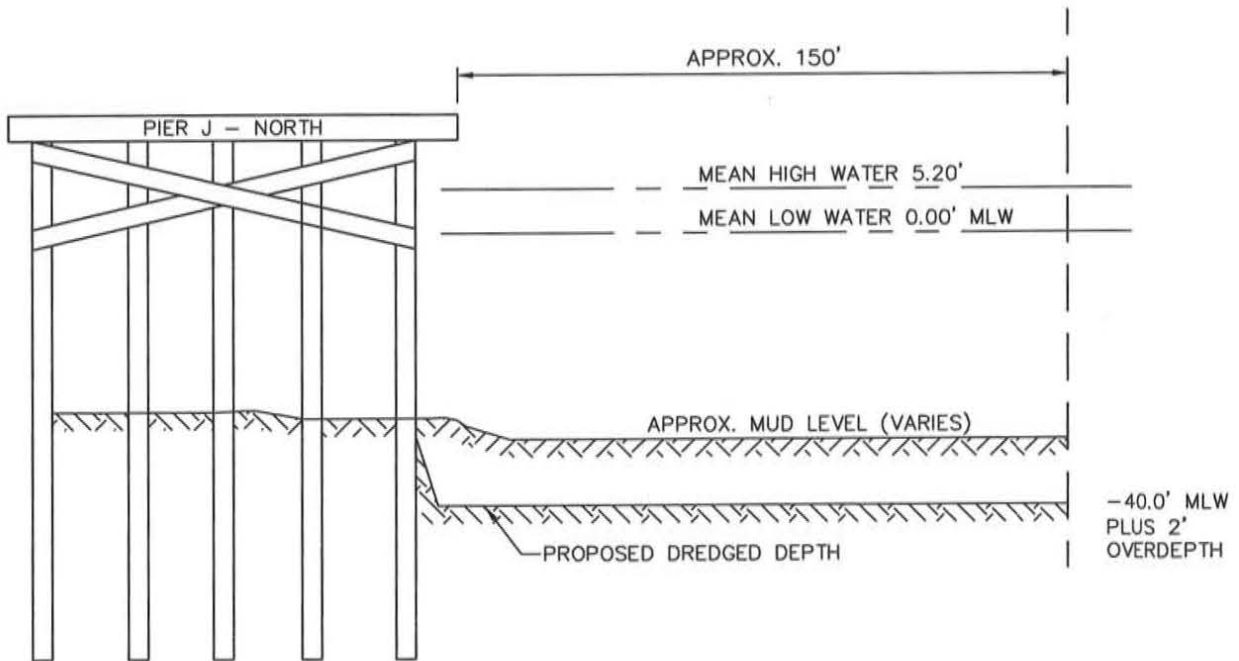
PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS  
 ADJACENT PROPERTY OWNERS  
 SEE ATTACHED  
 SURVEY DATUM: NGVD 29

**FIGURE 14  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
 NORTH CHARLESTON  
 SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING  
 AT: NORTH CHARLESTON  
 IN: COOPER RIVER  
 COUNTY OF: CHARLESTON  
 SOUTH CAROLINA  
 SHEET: 14 OF 23      DATE: 05/07/2019



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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 15  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

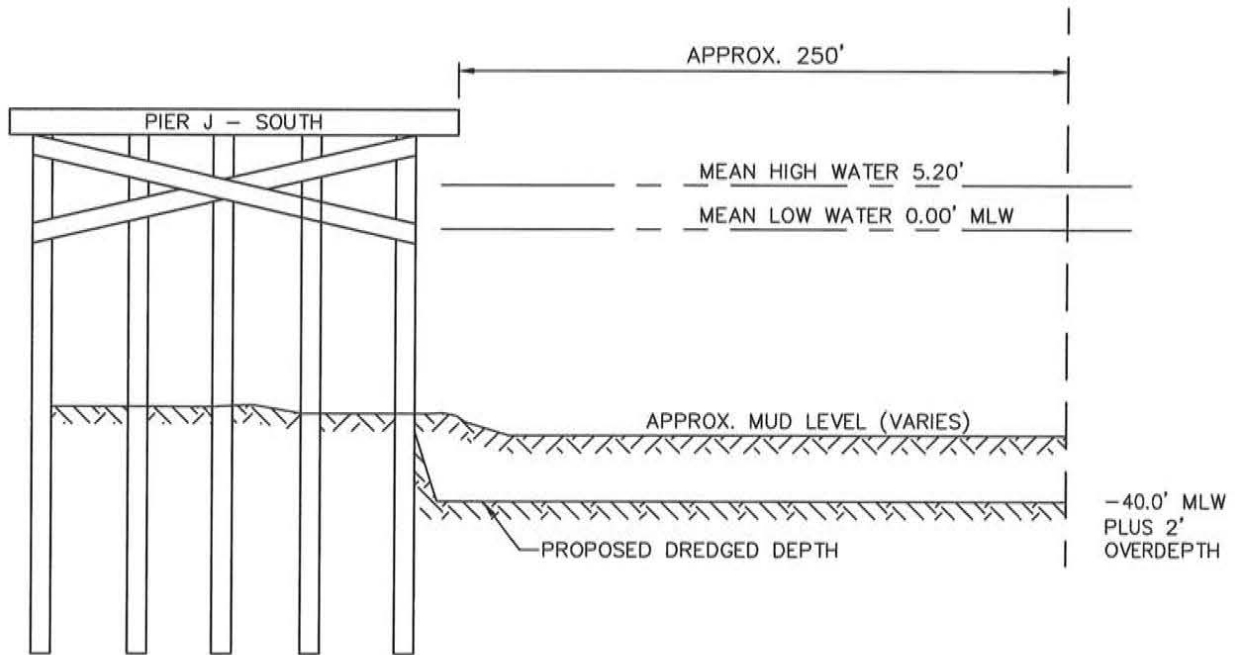
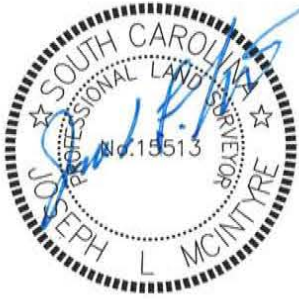
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 15 OF 23

DATE: 05/07/2019



PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 16  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

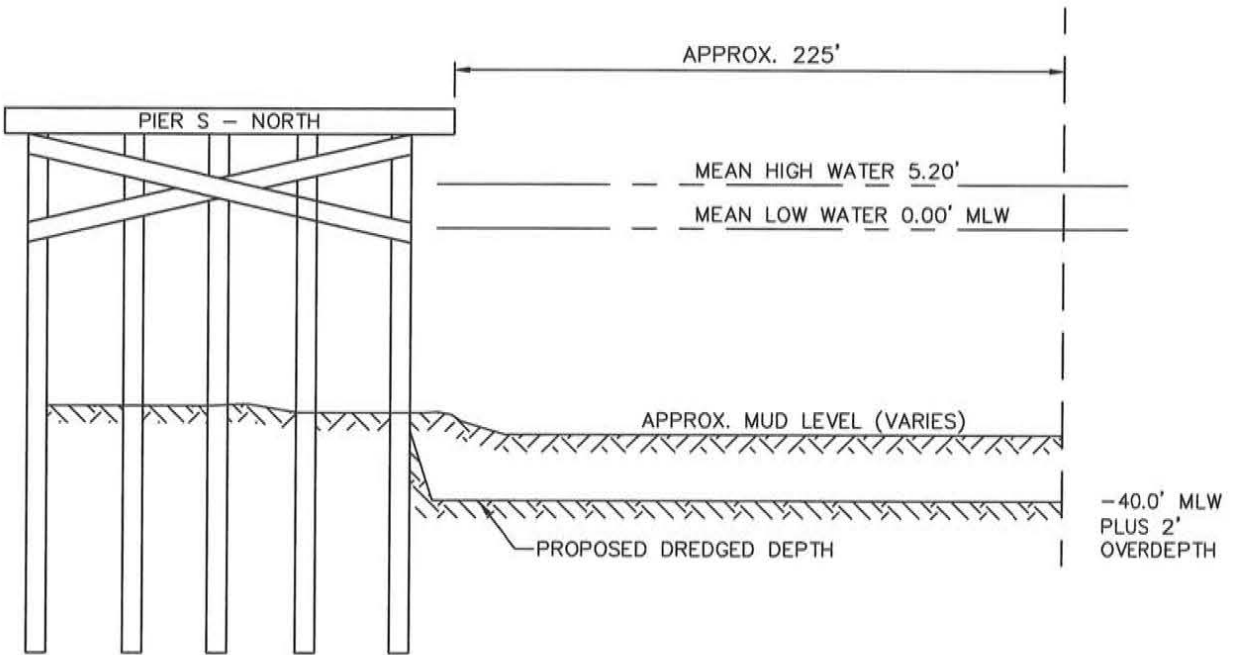
IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 16 OF 23

DATE: 05/07/2019

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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

**FIGURE 17  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING

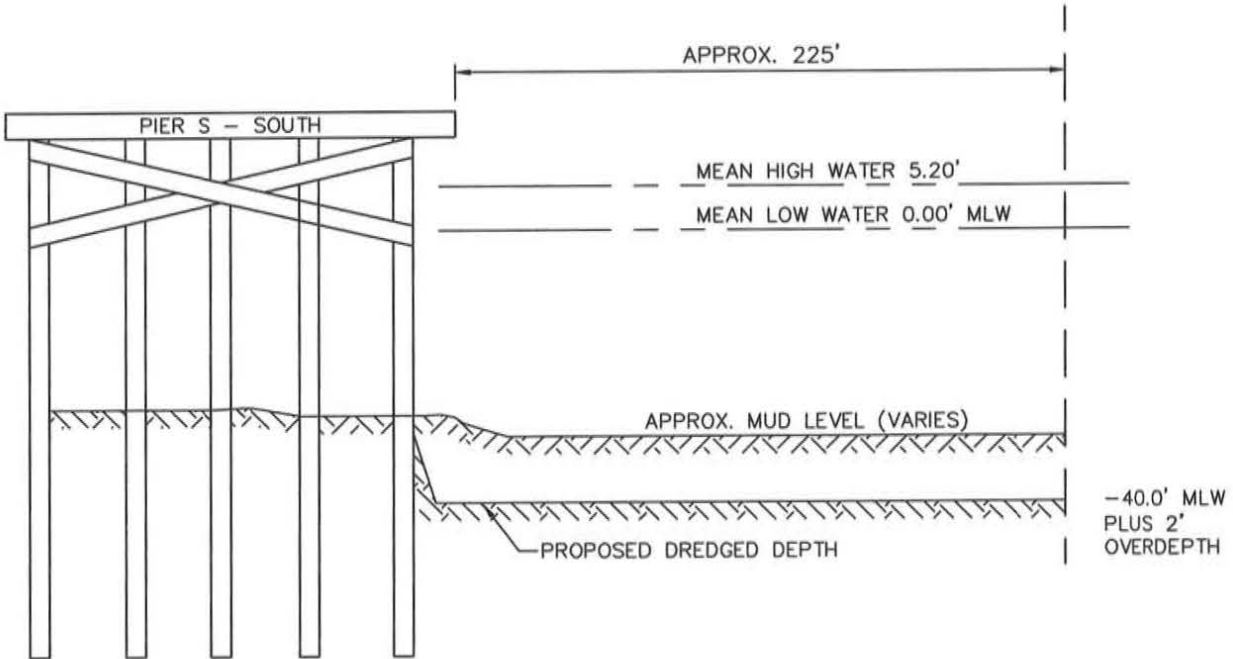
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 17 OF 23

DATE: 05/07/2019



PLOTTED: May 15, 2019 - 9:10am BY: tjp FILE LOCATION: C:\Users\tjp\AppData\Local\Temp\AcPublish...18548\chmm00119\_permit.dwg LAYOUT TAB: Cross-section (14)

PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

**FIGURE 18**  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING

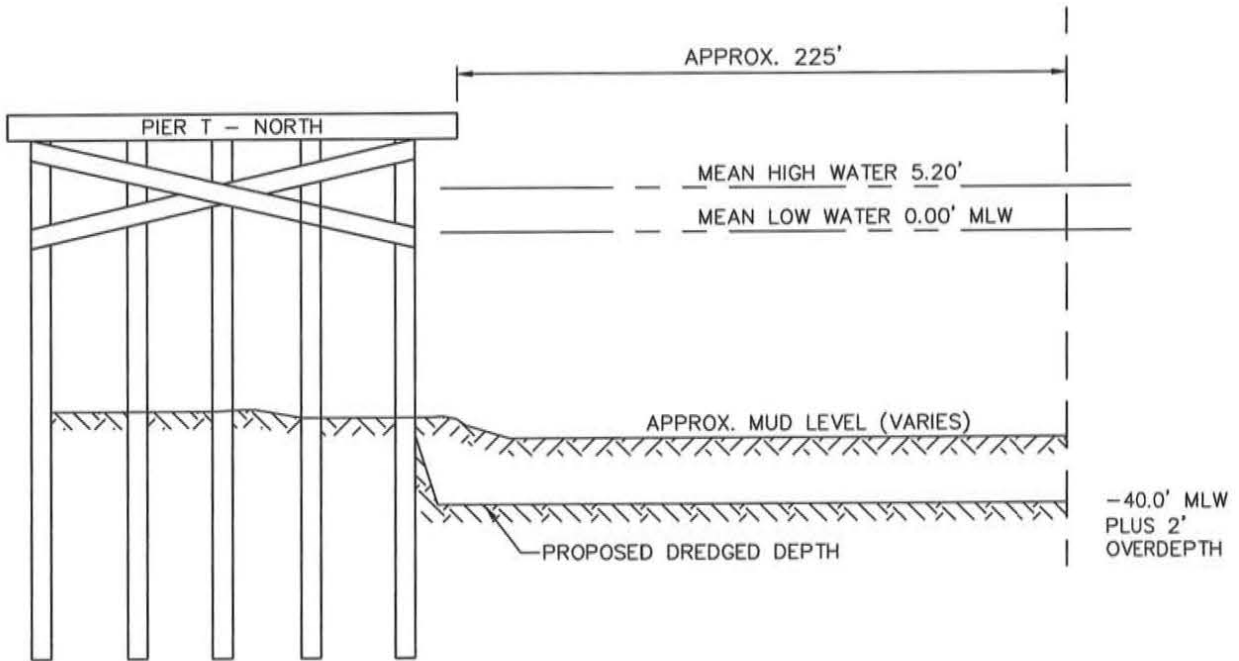
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 18 OF 23

DATE: 05/07/2019



PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 19  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

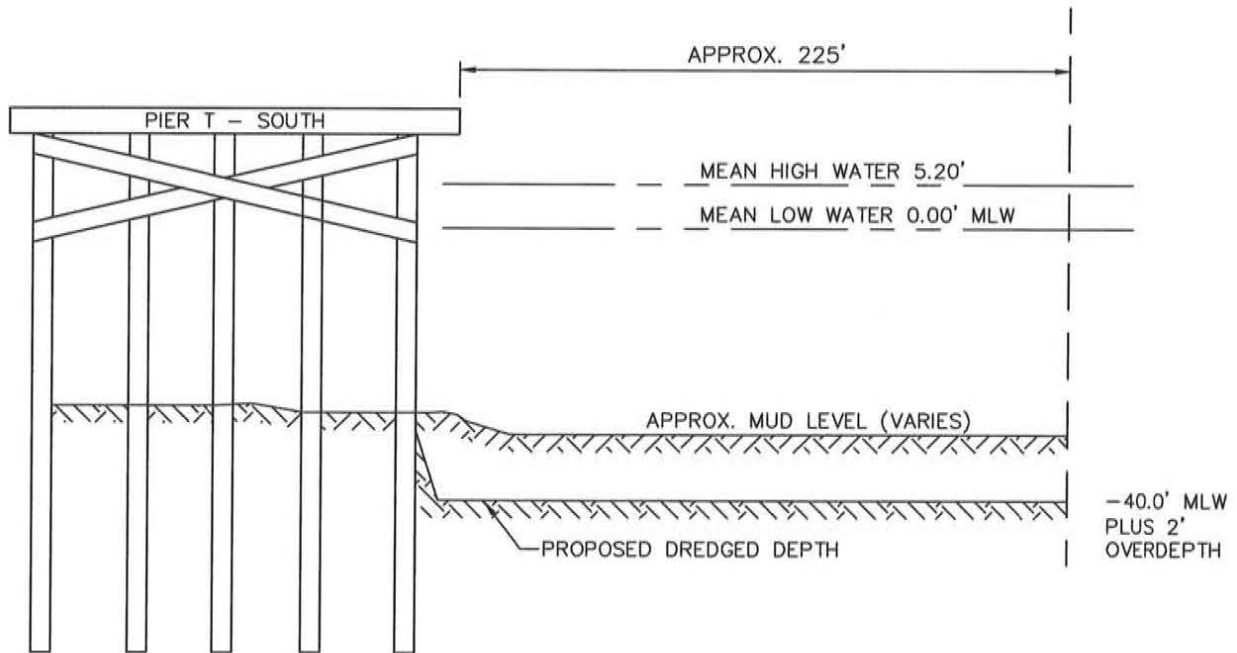
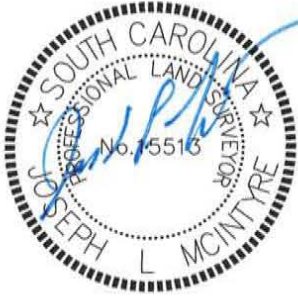
AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 19 OF 23

DATE: 05/07/2019



PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

FIGURE 20  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 20 OF 23

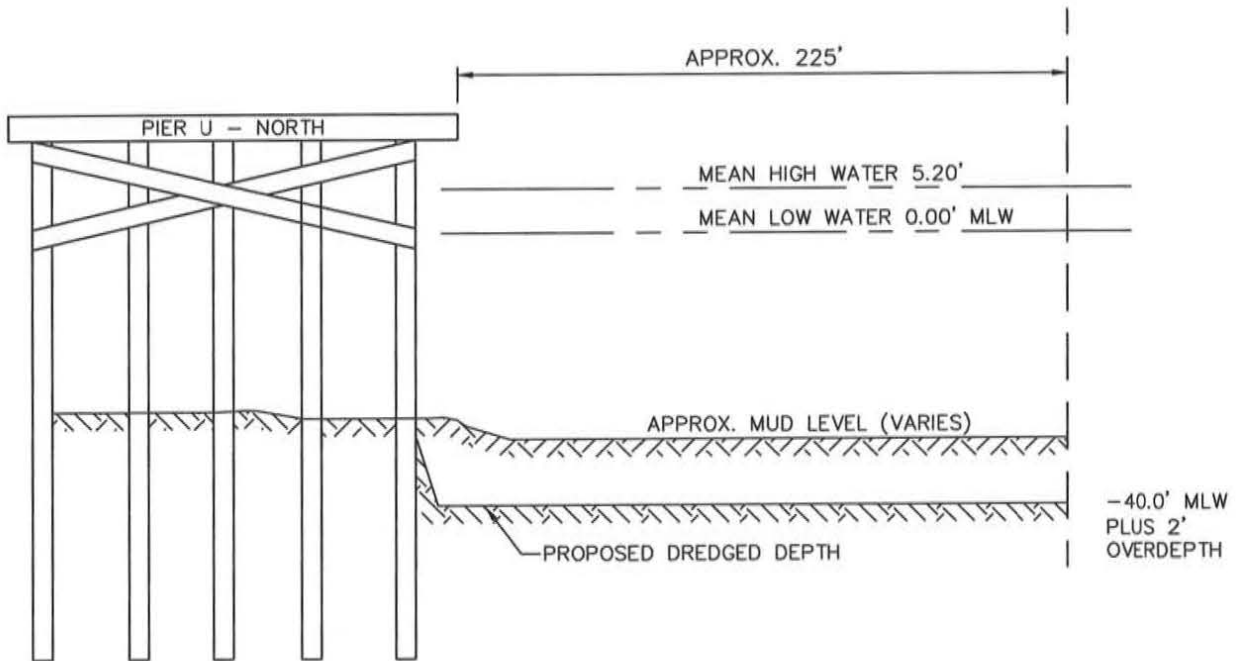
DATE: 05/07/2019

BY: jlp FILE LOCATION: C:\Users\jlp\AppData\Local\Temp\AcPublish\_16548\chmm00119\_permit.dwg LAYOUT TAB: Cross-section (16)

chmm00119

GEL ENGINEERING, LLC.

a Member of THE GEL GROUP, INC.



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PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS

ADJACENT PROPERTY OWNERS  
SEE ATTACHED

SURVEY DATUM: NGVD 29

**FIGURE 21  
CROSS-SECTION**

NOT TO SCALE

CMMC, LLC  
NORTH CHARLESTON  
SOUTH CAROLINA

PROPOSED: BERTH MAINTENANCE DREDGING

AT: NORTH CHARLESTON

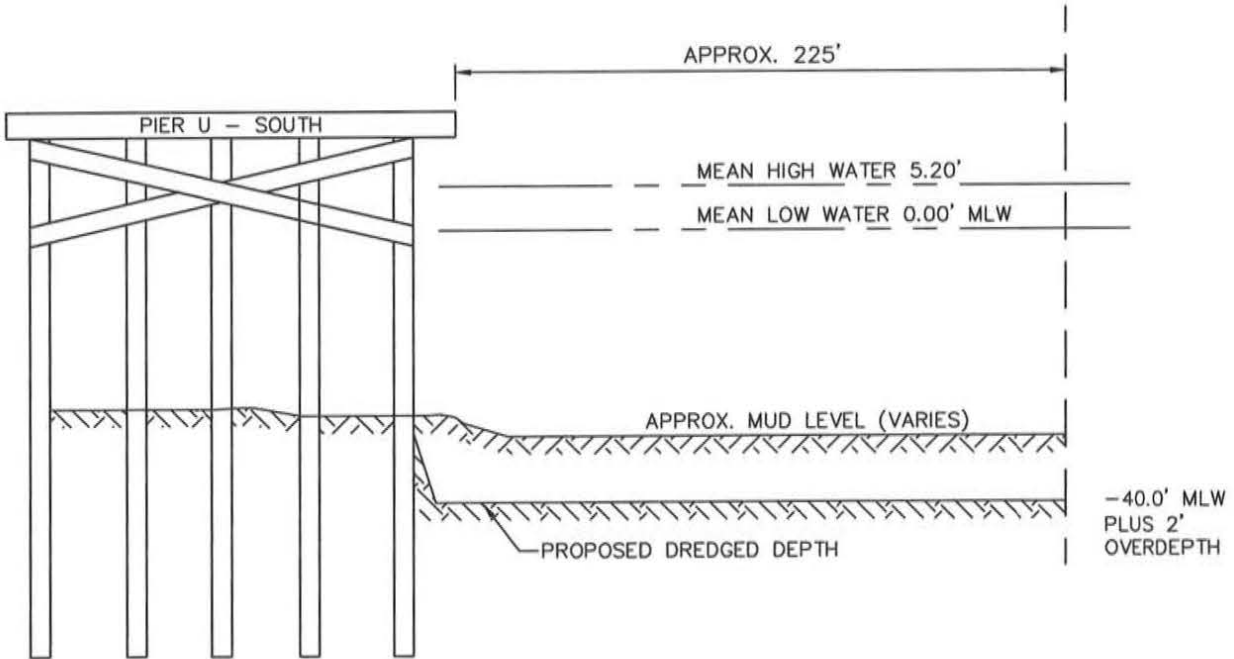
IN: COOPER RIVER

COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 21 OF 23

DATE: 05/07/2019





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PURPOSE: MAINTAIN SAFE OPERATING DEPTH  
 FOR DEEP-DRAFT VESSELS  
 ADJACENT PROPERTY OWNERS  
 SEE ATTACHED

SURVEY DATUM: NGVD 29

**FIGURE 22**  
CROSS-SECTION

NOT TO SCALE

CMMC, LLC  
 NORTH CHARLESTON  
 SOUTH CAROLINA

GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING

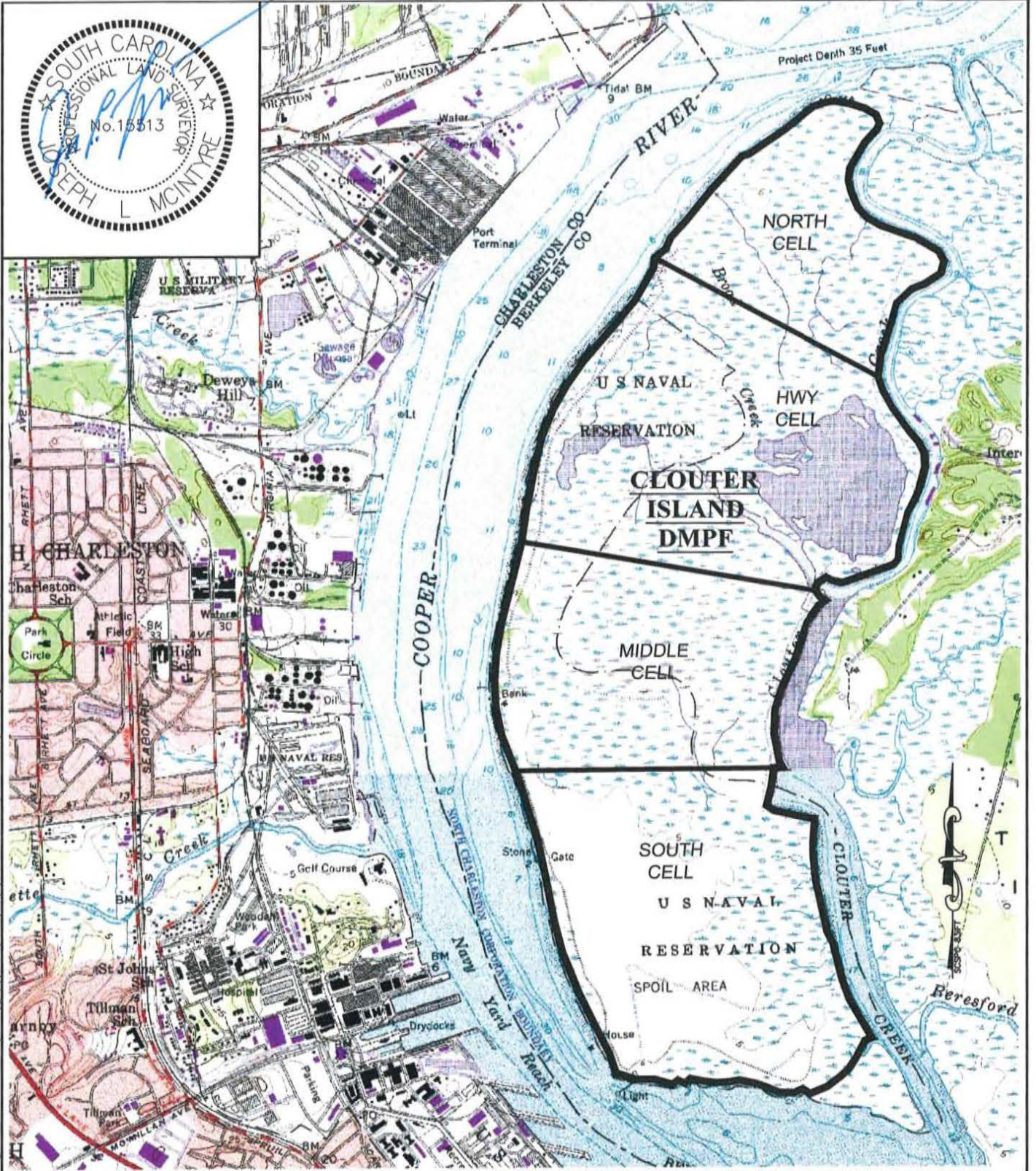
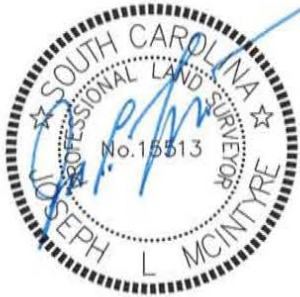
AT: NORTH CHARLESTON

IN: COOPER RIVER

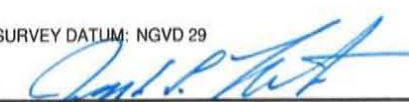
COUNTY OF: CHARLESTON  
SOUTH CAROLINA

SHEET: 22 OF 23

DATE: 05/07/2019



PLOTTED: May 15, 2019 - 9:10am BY: tjp FILE LOCATION: C:\Users\jtp\AppData\Local\Temp\MapData\Local\Temp\Map\Publish\15546\chmm00119\_permit.dwg LAYOUT TAB: Disposal Site

PURPOSE: MAINTAIN SAFE OPERATING DEPTH FOR DEEP-DRAFT VESSELS  
 ADJACENT PROPERTY OWNERS SEE ATTACHED  
 SURVEY DATUM: NGVD 29  


**FIGURE 23**  
**DISPOSAL SITE**  
 NOT TO SCALE  
 CMMC, LLC  
 NORTH CHARLESTON  
 SOUTH CAROLINA  
 GEL ENGINEERING, LLC.

PROPOSED: BERTH MAINTENANCE DREDGING  
 AT: NORTH CHARLESTON  
 IN: COOPER RIVER  
 COUNTY OF: CHARLESTON SOUTH CAROLINA  
 SHEET: 23 OF 23 DATE: 05/07/2019  
 a Member of THE GEL GROUP, INC.