

**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**  
**Charleston, South Carolina 29405**

REGULATORY DIVISION  
Refer to: P/N #2005-2W-286-P

16 September 2005

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

**KINDER MORGAN**  
**C/O APPLIED TECHNOLOGY & MANAGEMENT, INC.**  
**260 WEST COLEMAN BOULEVARD**  
**MT. PLEASANT, SOUTH CAROLINA 29464**

for a permit to perform dredging and redevelopment at an existing industrial site in waters of

THE SHIPYARD RIVER AND COOPER RIVER

at 1801 Milford Street, Charleston, in Charleston County, South Carolina  
(Latitude: 32.82778; Longitude: 79.93833).

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 both of the above mentioned offices until

**12 O'CLOCK NOON, MONDAY,**

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

The proposed work consists of the following components:

**Waterside Improvements**

**Dock 2 – At Shipyards River Coal Terminal (Phase 1):**

- Remove existing liquids handling equipment and hoppers;
- Construct a 20 ft x 104 ft equipment ramp from the shore to access existing dock;
- Install two land-based mooring dolphins to accommodate larger ships;
- Install two bulk hoppers on existing fixed concrete dock using existing rail equipment; and
- Replace existing cleats with mooring bollards and repair existing fendering to accommodate larger ships.

**Dock 3 - New liquids dock at Salmons Dredging Corporation (Phase 2):**

- Demolish existing mooring (concrete marginal wharf) structure at Salmons immediately south of a tidal slough on the west bank of Shipyard River;
- Hydraulically dredge approximately 110,000 cy of material (4.31 acres at dredge depth of -42.0 ft MLW; approximately 0.13 acres of dredge area is currently tidal marsh and will be excavated);
- Construct a 950 ft long sheet pile bulkhead to minimize sloughing and decrease sideslopes;
- Construct a pile supported 40 ft x 40 ft liquids handling dock platform including fenders landward of the bulkhead;
- Construct a 40 ft x 90 ft boat/barge loading ramp; and
- Construct pile supported structures to secure ships including: 3 (three) 20 ft x 20 ft breasting dolphins on uplands and 1 (one) 20 ft x 20 ft breasting dolphin in tidal wetland (0.01 acres shading); 3 shore dolphins (no impacts); and 3 mono-pile mooring dolphins to be located over tidal wetland or water including bollards, fenders, and access walkways (0.03 acres shading).

**Dock 4 - Existing Allied Terminals Bulk Dock (Phase 2):**

- Remove decking from existing bulk dock (0.06 acres);
- Hydraulically dredge approximately 11,000 cy of material (1.13 acres at dredge depth of -47.0 ft MLW);
- Remove existing derelict structures from tidal wetlands (0.07 acres enhancement/restoration) on south side of existing dock;
- Remove existing liquid transport pipes (2.02 acres of total structure removal; 0.73 acres restoration/enhancement through removal of shading);
- Existing pipeline support structures (bents) will be left in place to support approximately 1,930 lf new conveyor (approx. 800 lf over tidal wetlands, 0.11 acres shading)
- Install 11 new concrete pile-supported bents (0.01 acres shading) to support westernmost 380 lf of new conveyor;
- Relocate existing barge to new Bunker Barge Dock;
- Construct new pile supported 58 ft x 610 ft fixed concrete dock;
- Construct 4 new 8 ft x 8 ft mono-pile mooring dolphins and 4 ft wide access walkways (375 lf total); and
- Construct 80 ft long sheet pile wall to protect existing sewer outfall pipe (North Charleston Sewer District) from potential damage/undermining caused by dredging.

**Bunker Barge Dock – At Shipyard River Coal Terminal:**

- Construct a 935 ft sheetpile wall landward of existing revetment;
- Construct a 40 ft by 90 ft fixed concrete barge dock; and
- Construct 4 mono-pile mooring/breasting dolphins.

**Land Side Improvements**

- Remove 6 liquids storage tanks in existing KM tank farm;
- Construct an earthen berm around 25 acres of area currently in use as a tank farm to use for purposes of coal storage. The interior will be lined with clay to prevent leaching and control exposure pathway;
- Construct a 17.5 acre stormwater treatment pond for the coal storage area;
- Construct a shuttle conveyor for coal transport;
- Construct an access road and truck overpass from Greenleaf Street

- Construct an egress tunnel leading northeast through the earthen berm from the conveyor area to the railroad;
- Add (approx.) 26,600 lf of railway (fill 0.14 acres of tidal wetlands with approx. filled along KM shoreline); and
- Construct liquid pipe rack from new Dock 3 to tank farm on current Allied property.

A mitigation plan will be developed to compensate for wetland impacts. The purpose of the proposed project is to increase the efficiency of material conveyance and storage at the Shipyard River Terminal via the redevelopment of existing facilities as well as adjacent facilities currently owned by Salmon's Dredging Corporation and Allied Terminals, Inc.

**NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the**

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

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 the Coastal Zone Management Program (15 CFR 930). 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 5.79 acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our 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). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended), the District Engineer has consulted the most recently available information and has determined that the project is not likely to adversely affect any Federally endangered, threatened, or proposed species or result in the destruction or adverse modification of designated or proposed critical habitat. 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.

The District Engineer has consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property

listed as being eligible for inclusion in the Register. Consultation of the National Register constitutes the extent of cultural resource investigations by the District Engineer, and he is otherwise unaware of the presence of such resources. Presently unknown archaeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

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, 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 of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this 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.

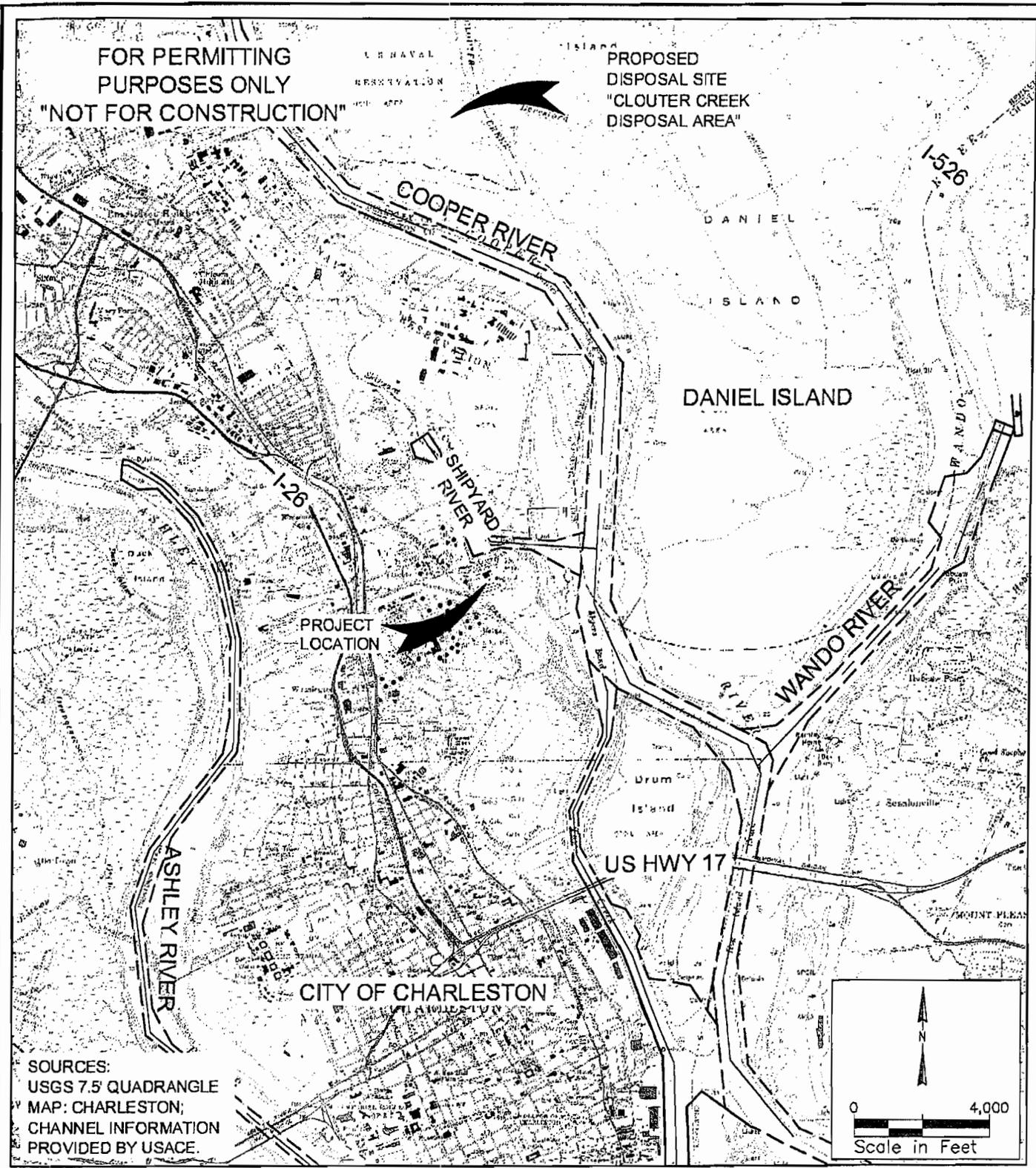
If there are any questions concerning this public notice, please contact me at 843-329-8044 or toll free at 1-866-329-8187.



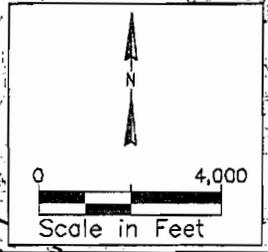
Robin D. Collier-Socha  
Project Manager  
Regulatory Division  
U.S. Army Corps of Engineers

FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

PROPOSED  
DISPOSAL SITE  
"CLOUTER CREEK  
DISPOSAL AREA"



SOURCES:  
USGS 7.5' QUADRANGLE  
MAP: CHARLESTON;  
CHANNEL INFORMATION  
PROVIDED BY USACE.



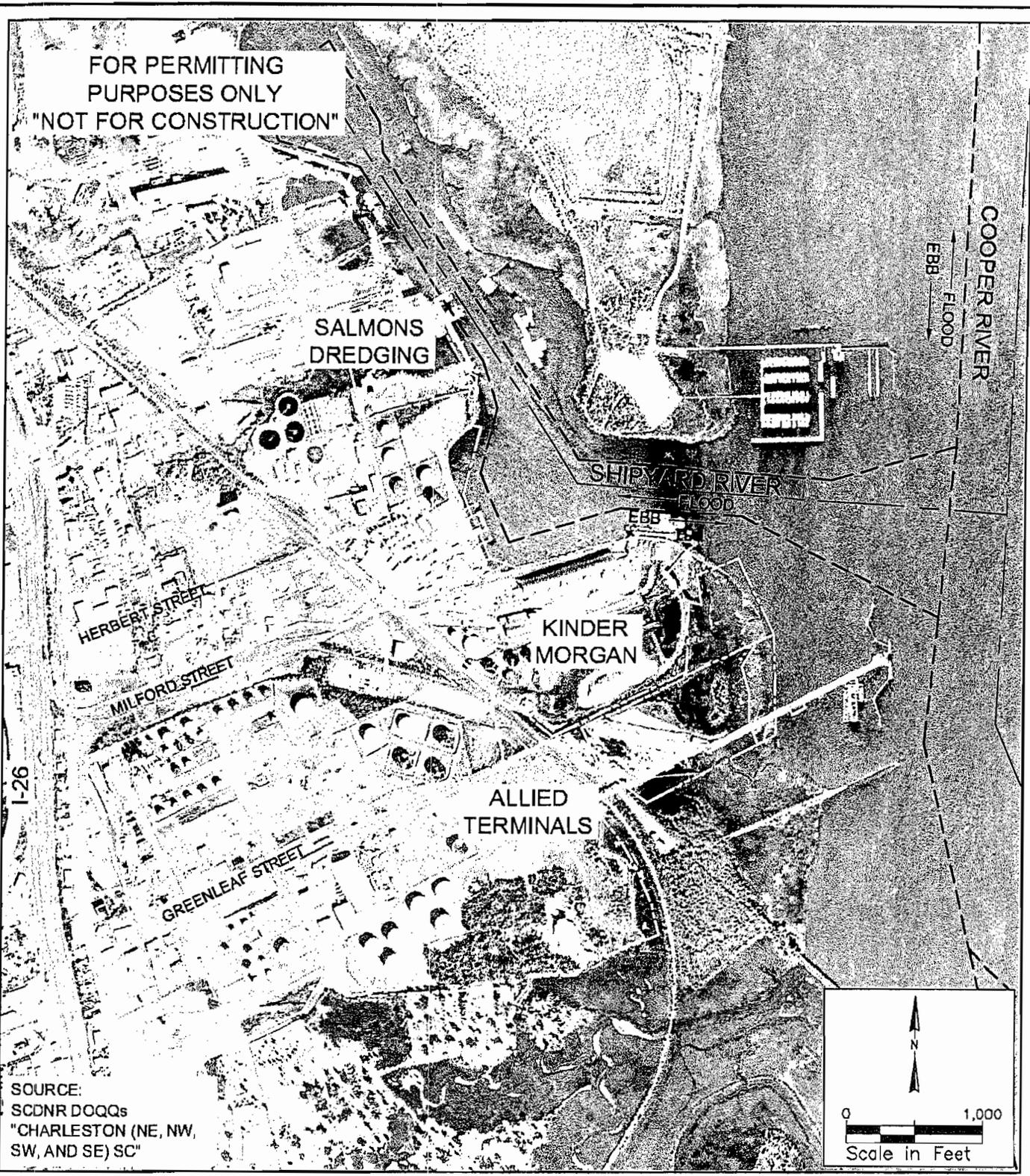
PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

LOCATION MAP

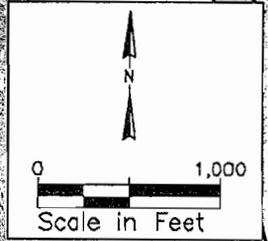
KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 1

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PURPOSES ONLY  
"NOT FOR CONSTRUCTION"



SOURCE:  
SCDNR DOQQs  
"CHARLESTON (NE, NW,  
SW, AND SE) SC"



PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

### VICINITY MAP AND PROJECT PARCEL PLAN

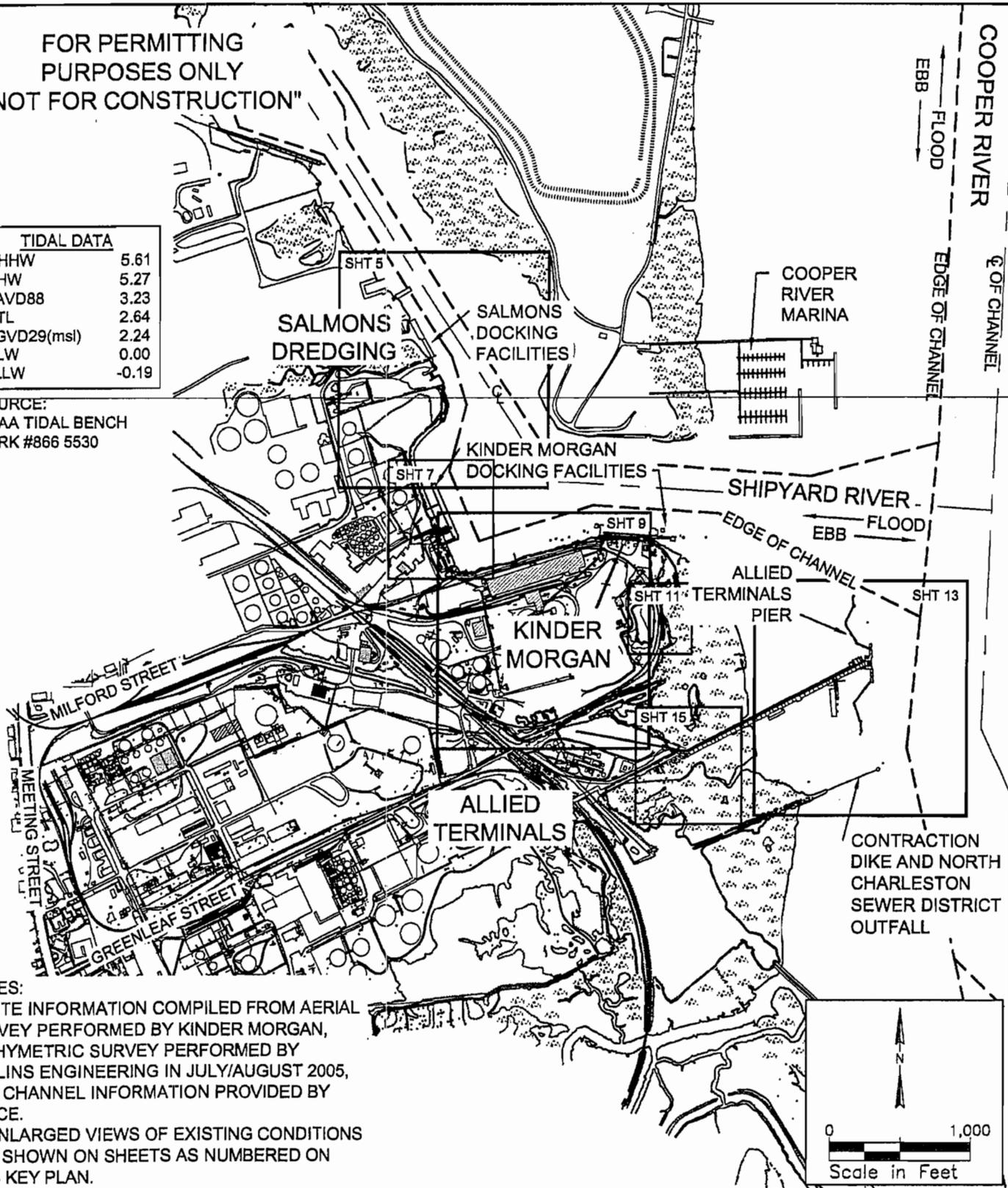
KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 2

FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

TIDAL DATA	
MHHW	5.61
MHW	5.27
NAVD88	3.23
MTL	2.64
NGVD29(msl)	2.24
MLW	0.00
MLLW	-0.19

SOURCE:  
NOAA TIDAL BENCH  
MARK #866 5530



NOTES:

1. SITE INFORMATION COMPILED FROM AERIAL SURVEY PERFORMED BY KINDER MORGAN, BATHYMETRIC SURVEY PERFORMED BY COLLINS ENGINEERING IN JULY/AUGUST 2005, AND CHANNEL INFORMATION PROVIDED BY USACE.
2. ENLARGED VIEWS OF EXISTING CONDITIONS ARE SHOWN ON SHEETS AS NUMBERED ON THIS KEY PLAN.

PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

EXISTING CONDITIONS  
OVERALL/KEY PLAN

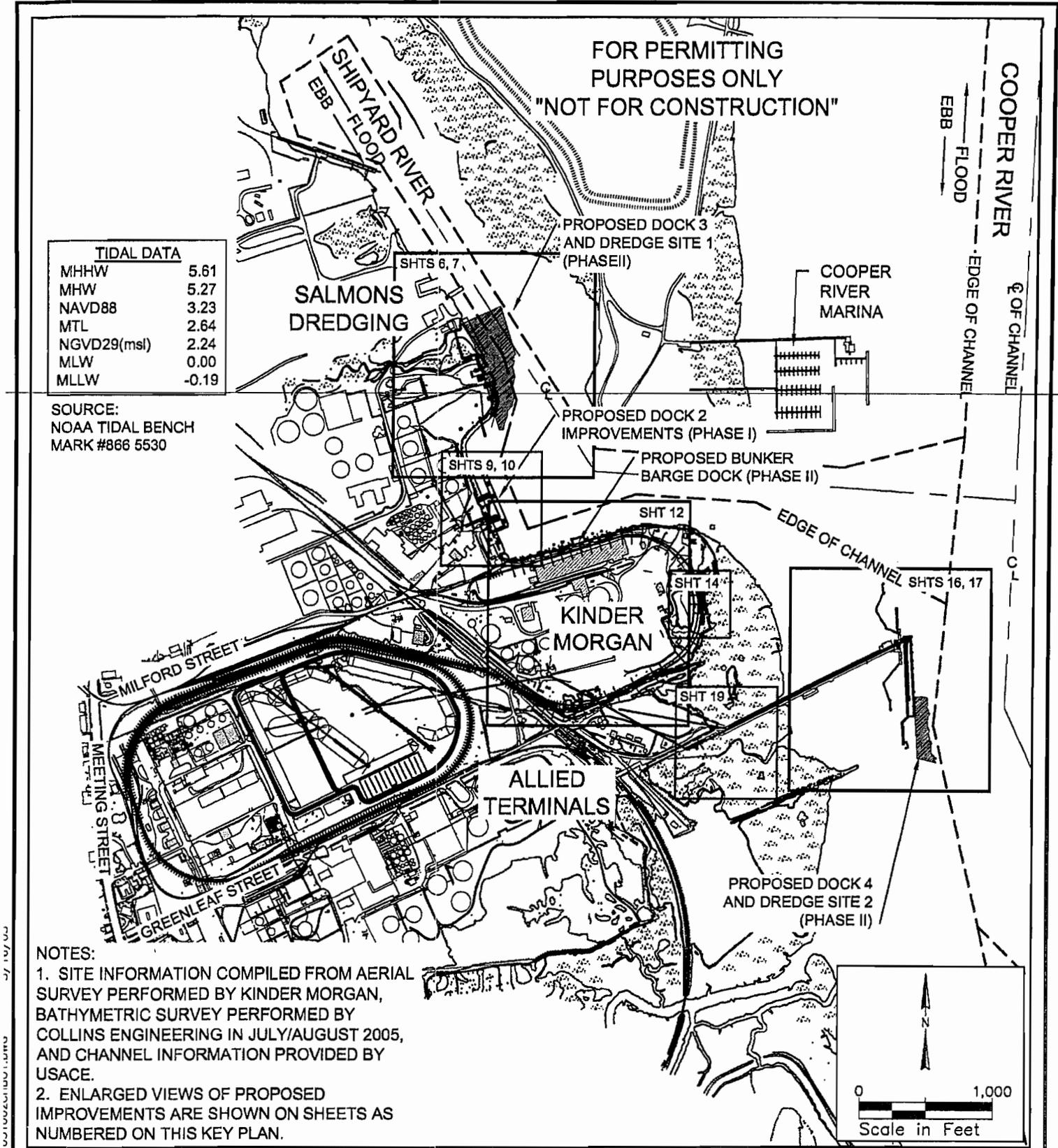
KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 3

FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

TIDAL DATA	
MHHW	5.61
MHW	5.27
NAVD88	3.23
MTL	2.64
NGVD29(msl)	2.24
MLW	0.00
MLLW	-0.19

SOURCE:  
NOAA TIDAL BENCH  
MARK #866 5530



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2. ENLARGED VIEWS OF PROPOSED IMPROVEMENTS ARE SHOWN ON SHEETS AS NUMBERED ON THIS KEY PLAN.

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

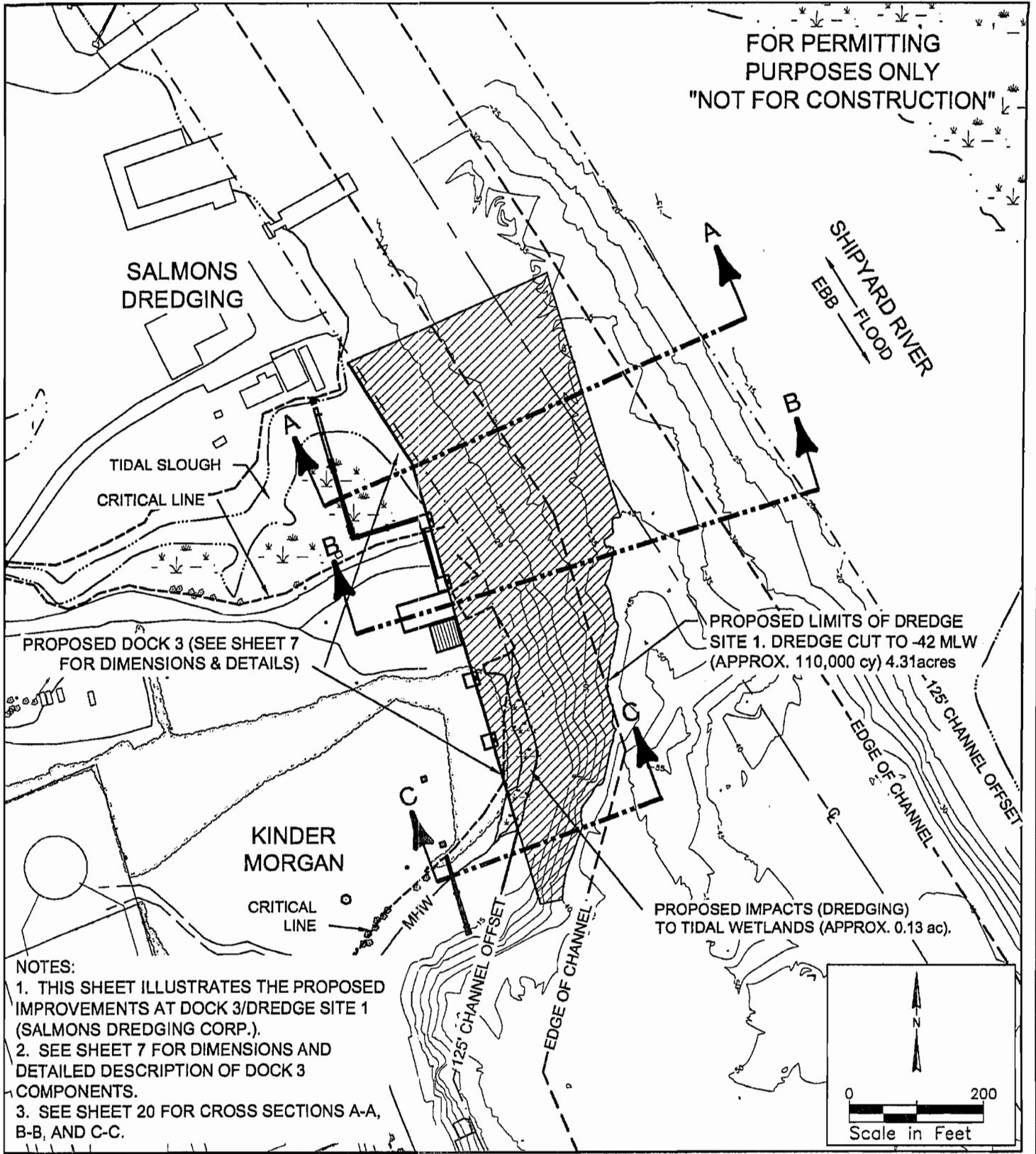
**PROPOSED IMPROVEMENTS  
OVERALL/KEY PLAN**

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 4



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**NOTES:**

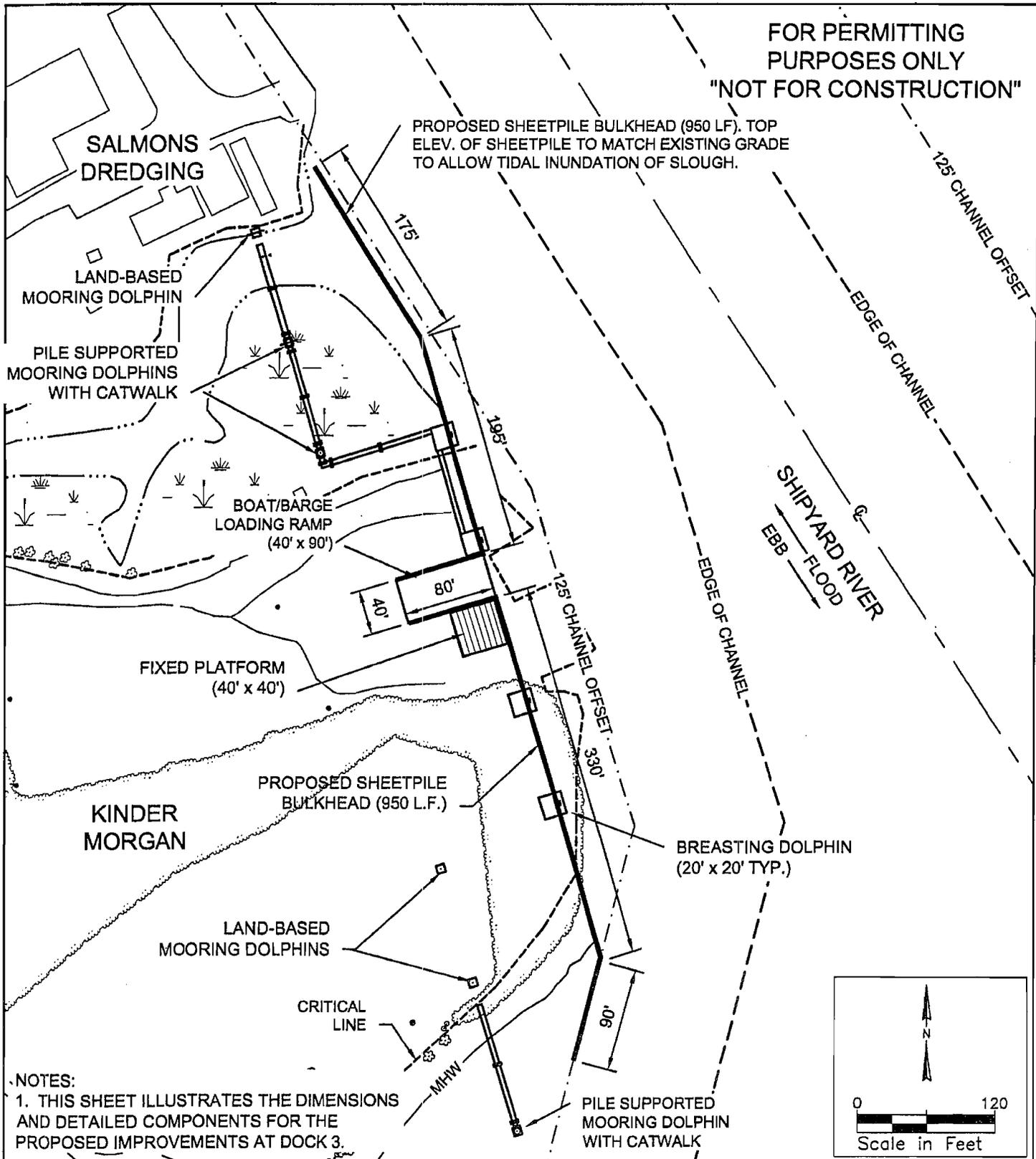
1. THIS SHEET ILLUSTRATES THE PROPOSED IMPROVEMENTS AT DOCK 3/DREDGE SITE 1 (SALMONS DREDGING CORP.).
2. SEE SHEET 7 FOR DIMENSIONS AND DETAILED DESCRIPTION OF DOCK 3 COMPONENTS.
3. SEE SHEET 20 FOR CROSS SECTIONS A-A, B-B, AND C-C.

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**PROPOSED IMPROVEMENTS  
 DOCK 3/DREDGE SITE 1**  
 KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 6

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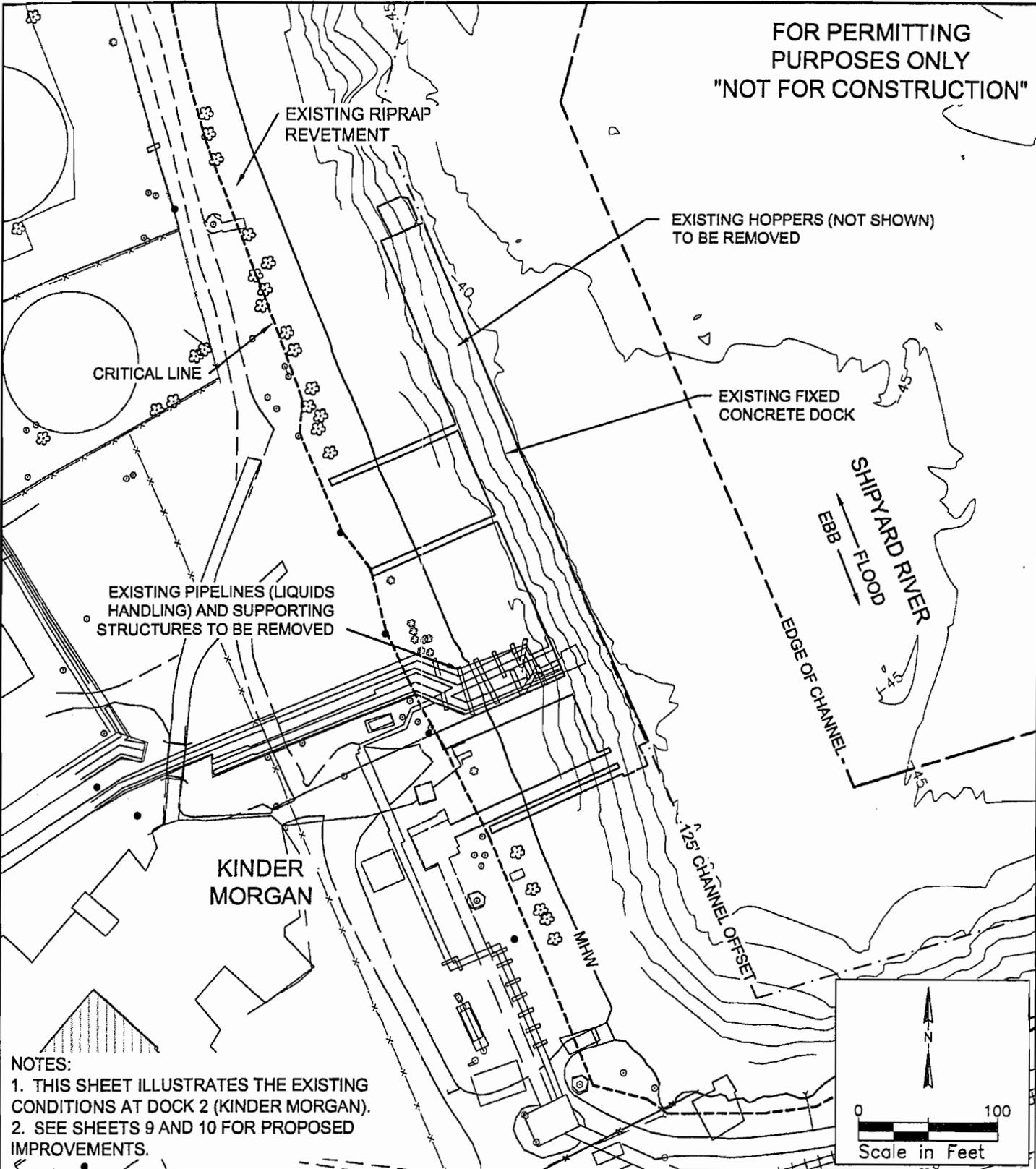


PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

PROPOSED IMPROVEMENTS  
 DOCK 3 WITH DIMENSIONS  
 KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

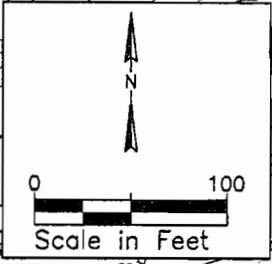
PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 7

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PURPOSES ONLY  
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**NOTES:**

1. THIS SHEET ILLUSTRATES THE EXISTING CONDITIONS AT DOCK 2 (KINDER MORGAN).
2. SEE SHEETS 9 AND 10 FOR PROPOSED IMPROVEMENTS.



PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

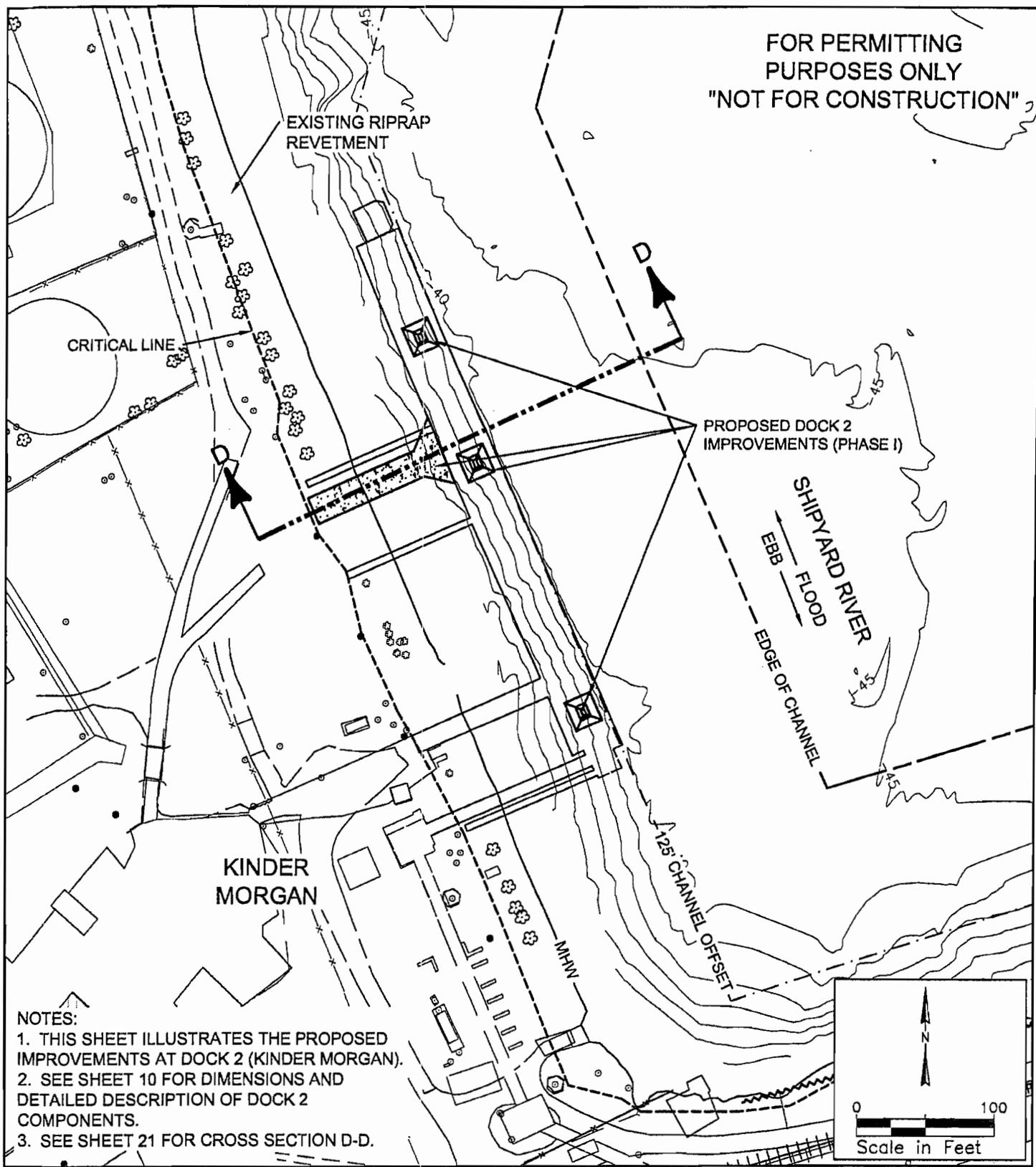
**EXISTING CONDITIONS  
DOCK 2**

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 8

05100ZCHB01.DWG 3/16/05

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"NOT FOR CONSTRUCTION"



- NOTES:
1. THIS SHEET ILLUSTRATES THE PROPOSED IMPROVEMENTS AT DOCK 2 (KINDER MORGAN).
  2. SEE SHEET 10 FOR DIMENSIONS AND DETAILED DESCRIPTION OF DOCK 2 COMPONENTS.
  3. SEE SHEET 21 FOR CROSS SECTION D-D.

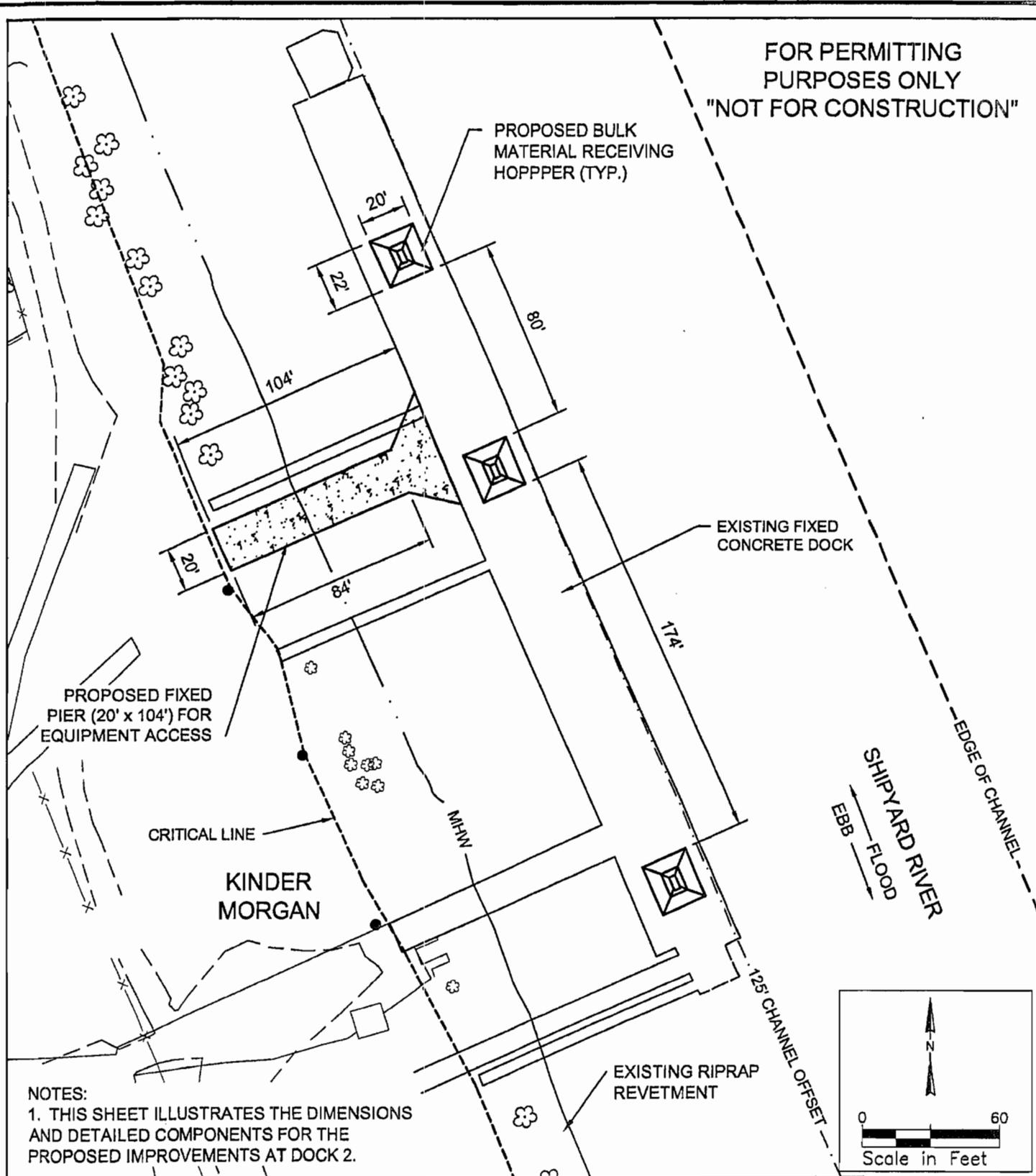
PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

PROPOSED IMPROVEMENTS  
 DOCK 2  
 KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 9

37 107 05  
 03/11/05 11:27 AM

FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"



PROPOSED FIXED  
PIER (20' x 104') FOR  
EQUIPMENT ACCESS

PROPOSED BULK  
MATERIAL RECEIVING  
HOPPER (TYP.)

EXISTING FIXED  
CONCRETE DOCK

CRITICAL LINE

KINDER  
MORGAN

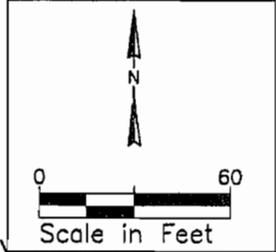
SHIPYARD RIVER  
EBB  
FLOOD

EDGE OF CHANNEL

125' CHANNEL OFFSET

EXISTING RIPRAP  
REVTMENT

NOTES:  
1. THIS SHEET ILLUSTRATES THE DIMENSIONS  
AND DETAILED COMPONENTS FOR THE  
PROPOSED IMPROVEMENTS AT DOCK 2.

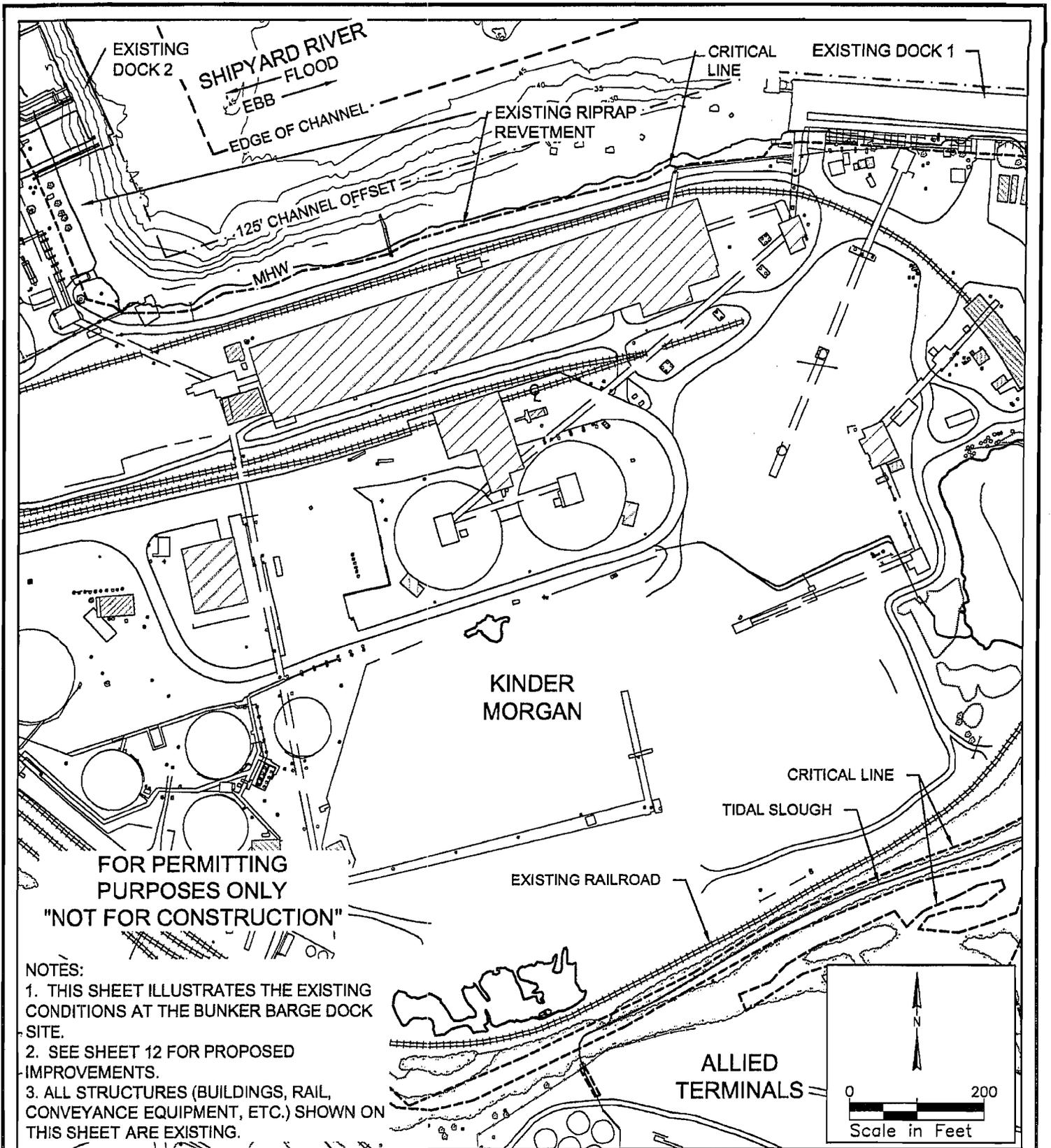


PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

PROPOSED IMPROVEMENTS  
DOCK 2 (DIMENSIONS)  
  
KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 10

3/15/05 G.M. 118472701.05



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**NOTES:**

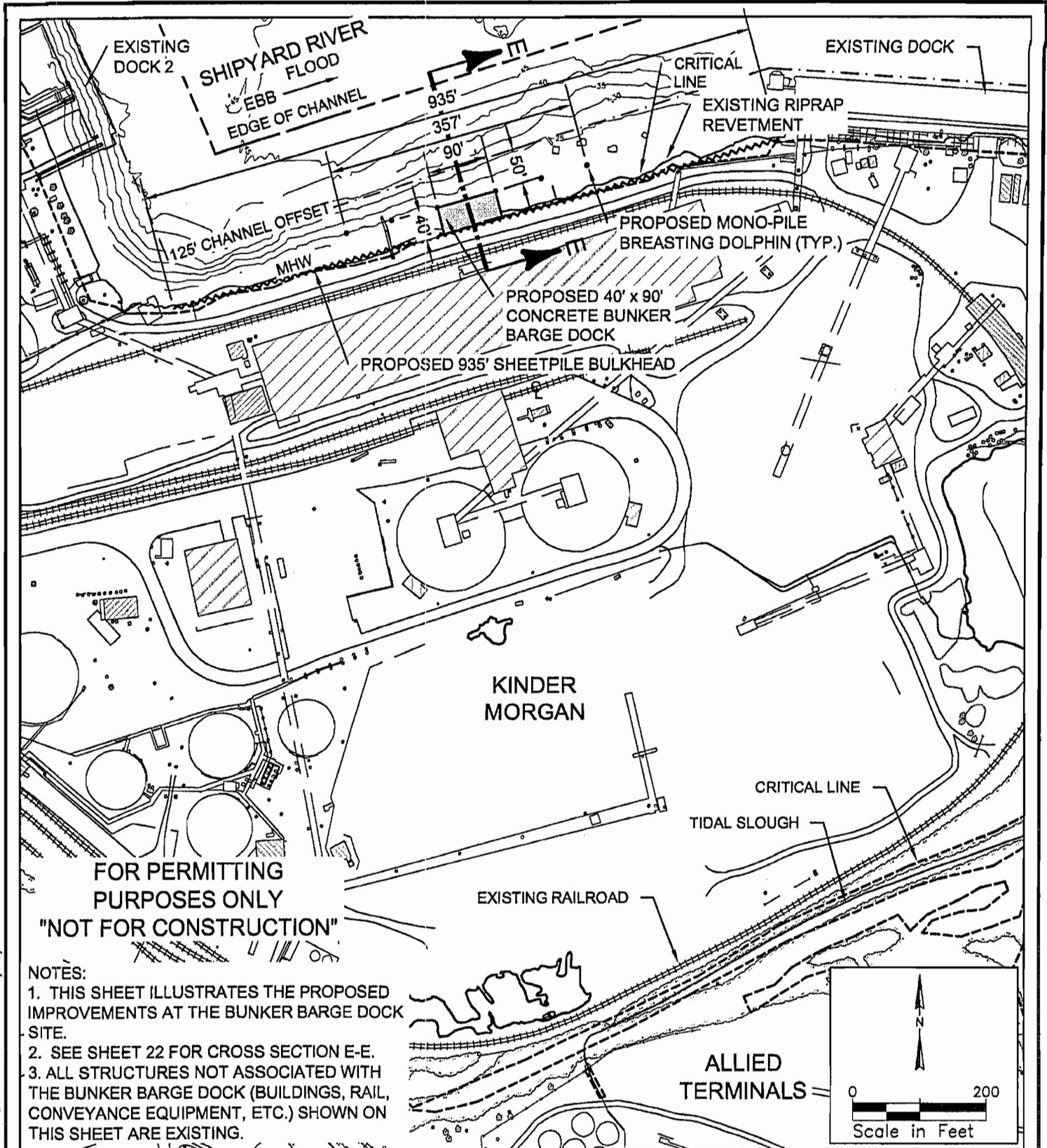
1. THIS SHEET ILLUSTRATES THE EXISTING CONDITIONS AT THE BUNKER BARGE DOCK SITE.
2. SEE SHEET 12 FOR PROPOSED IMPROVEMENTS.
3. ALL STRUCTURES (BUILDINGS, RAIL, CONVEYANCE EQUIPMENT, ETC.) SHOWN ON THIS SHEET ARE EXISTING.

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**EXISTING CONDITIONS  
BUNKER BARGE DOCK**

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA



**FOR PERMITTING PURPOSES ONLY  
"NOT FOR CONSTRUCTION"**

**NOTES:**

1. THIS SHEET ILLUSTRATES THE PROPOSED IMPROVEMENTS AT THE BUNKER BARGE DOCK SITE.
2. SEE SHEET 22 FOR CROSS SECTION E-E.
3. ALL STRUCTURES NOT ASSOCIATED WITH THE BUNKER BARGE DOCK (BUILDINGS, RAIL, CONVEYANCE EQUIPMENT, ETC.) SHOWN ON THIS SHEET ARE EXISTING.

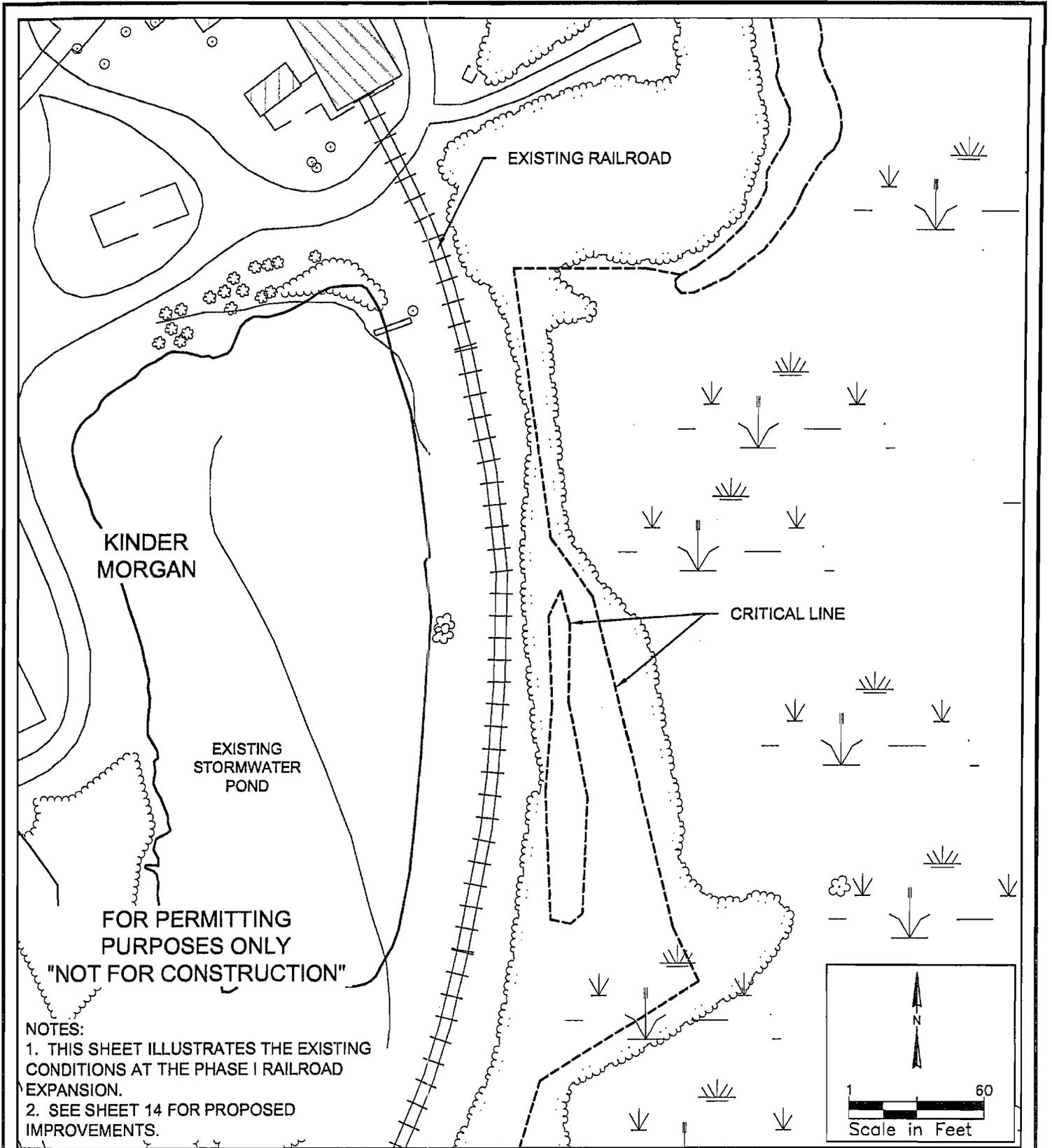
PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**PROPOSED IMPROVEMENTS  
BUNKER BARGE DOCK**

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT OF MOORING FACILITIES, IMPACTS TO TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA

5/16/05 US10024H601.JWG



KINDER MORGAN

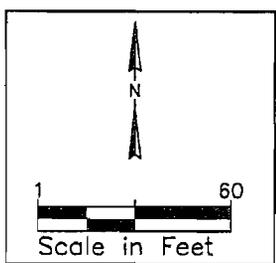
EXISTING RAILROAD

EXISTING STORMWATER POND

CRITICAL LINE

FOR PERMITTING PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

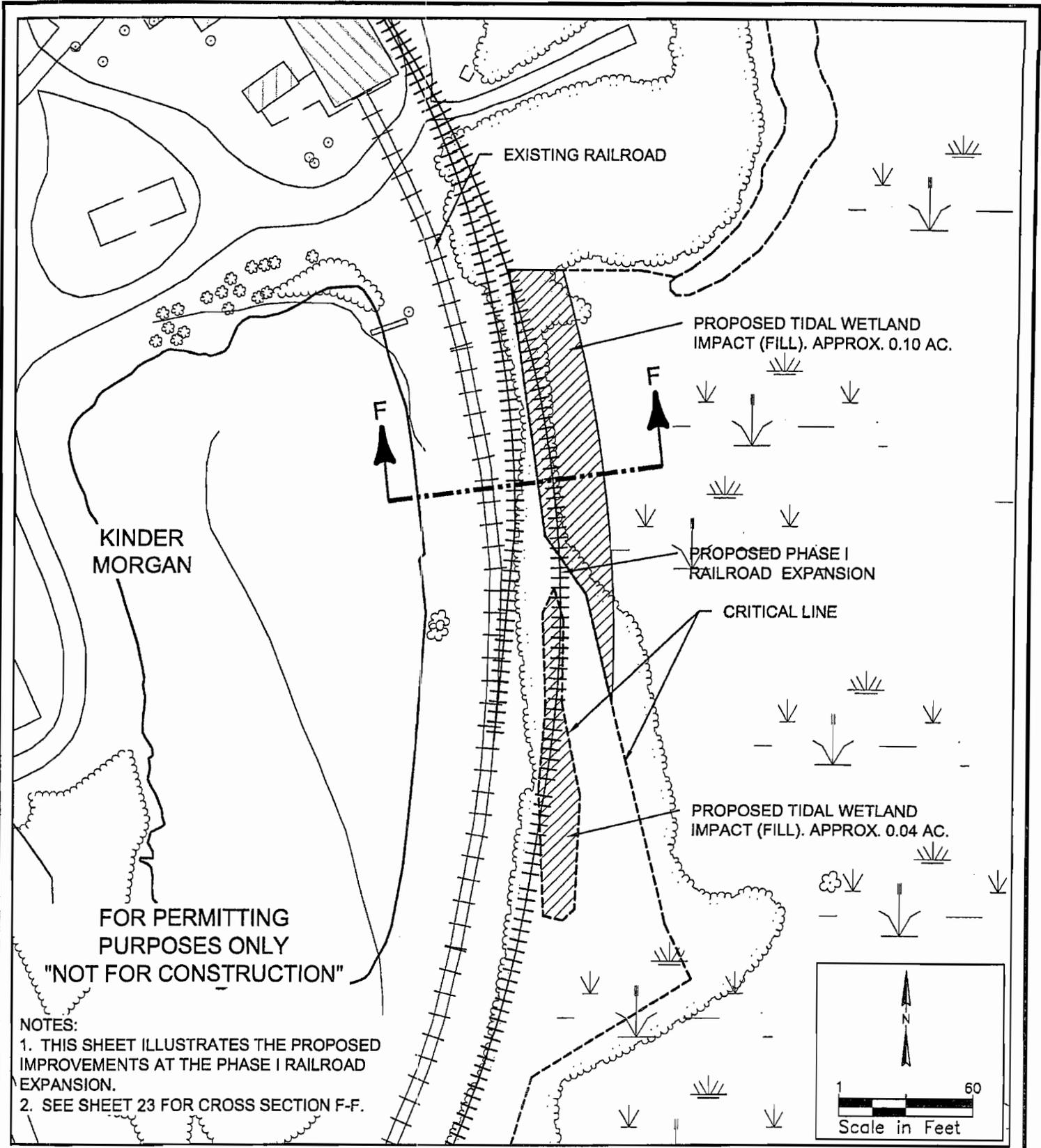
NOTES:  
1. THIS SHEET ILLUSTRATES THE EXISTING CONDITIONS AT THE PHASE I RAILROAD EXPANSION.  
2. SEE SHEET 14 FOR PROPOSED IMPROVEMENTS.



PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

EXISTING CONDITIONS  
PHASE I RAILROAD  
  
KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT OF MOORING FACILITIES, IMPACTS TO TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 13



FOR PERMITTING PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

- NOTES:
1. THIS SHEET ILLUSTRATES THE PROPOSED IMPROVEMENTS AT THE PHASE I RAILROAD EXPANSION.
  2. SEE SHEET 23 FOR CROSS SECTION F-F.

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**PROPOSED IMPROVEMENTS  
 PHASE I RAILROAD**

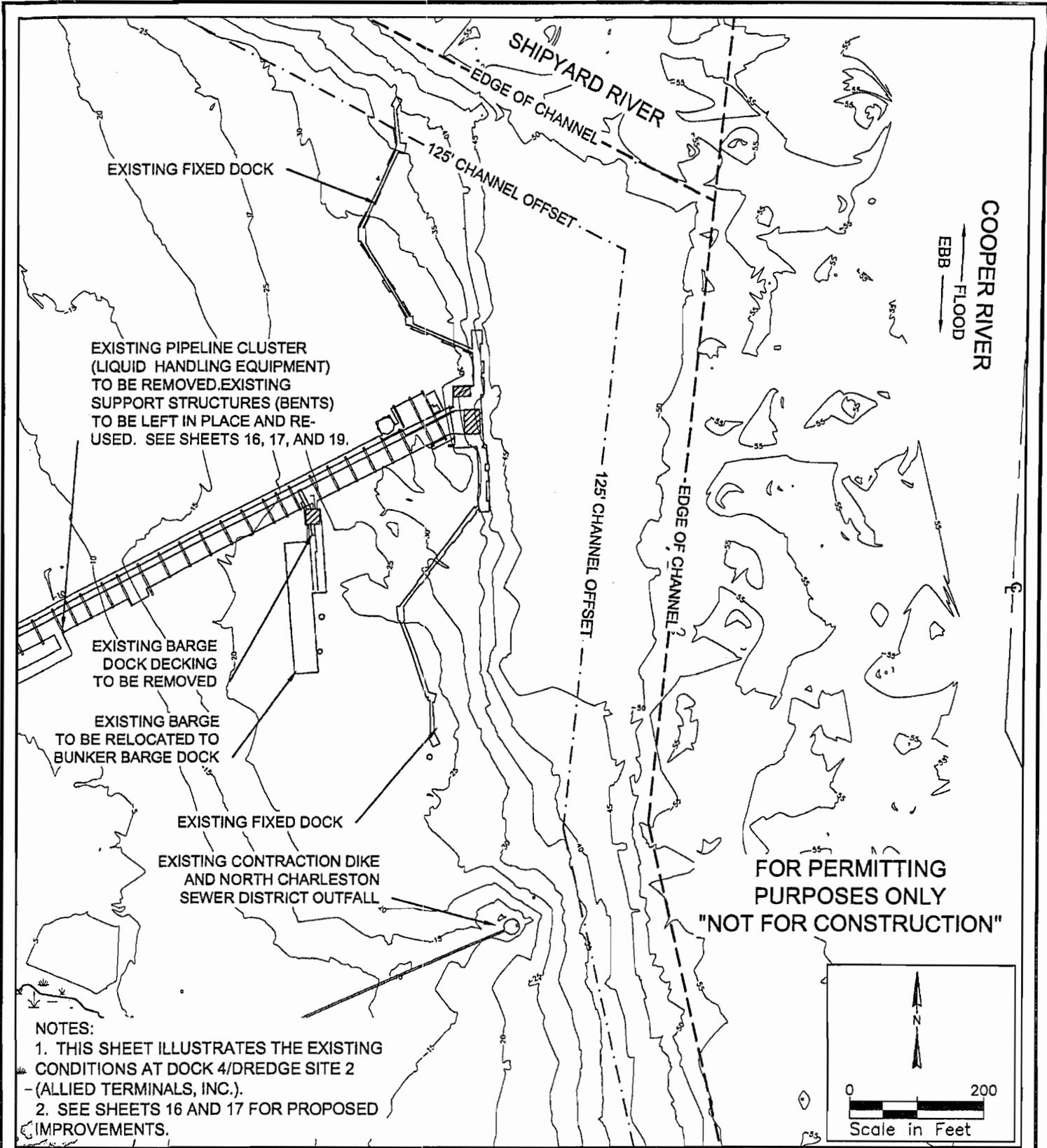
KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT OF MOORING FACILITIES, IMPACTS TO TIDAL WETLANDS

IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA

SHEET 14

100274801.DWG 3/16/05



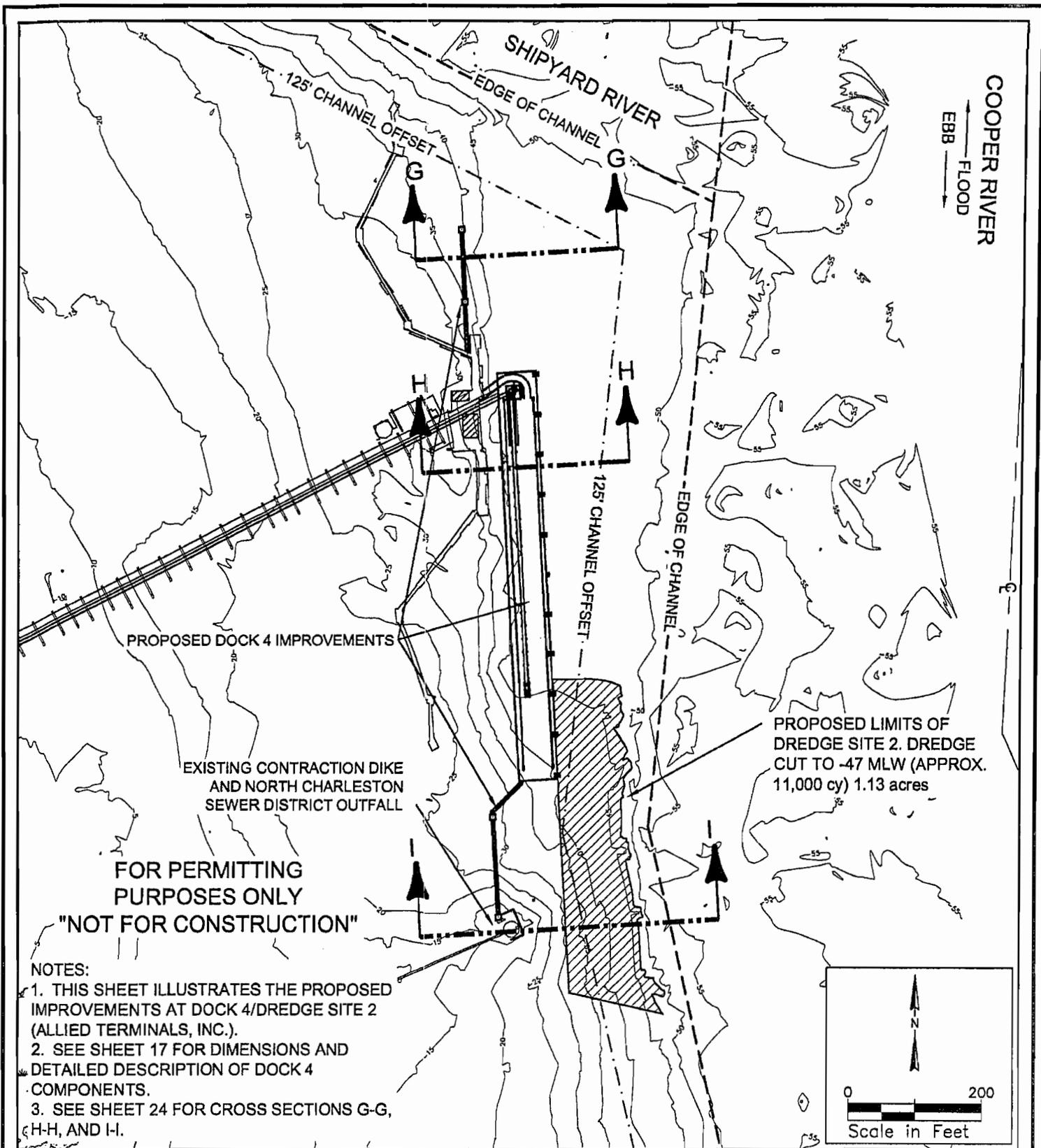
**NOTES:**  
 1. THIS SHEET ILLUSTRATES THE EXISTING CONDITIONS AT DOCK 4/DREDGE SITE 2 - (ALLIED TERMINALS, INC.).  
 2. SEE SHEETS 16 AND 17 FOR PROPOSED IMPROVEMENTS.

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**EXISTING CONDITIONS  
 DOCK 4/DREDGE SITE 2**  
  
 KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT OF MOORING FACILITIES, IMPACTS TO TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA

05/19/11/5  
 GMDT108H2700150



FOR PERMITTING PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

NOTES:

1. THIS SHEET ILLUSTRATES THE PROPOSED IMPROVEMENTS AT DOCK 4/DREDGE SITE 2 (ALLIED TERMINALS, INC.).
2. SEE SHEET 17 FOR DIMENSIONS AND DETAILED DESCRIPTION OF DOCK 4 COMPONENTS.
3. SEE SHEET 24 FOR CROSS SECTIONS G-G, H-H, AND I-I.

PROPOSED LIMITS OF DREDGE SITE 2. DREDGE CUT TO -47 MLW (APPROX. 11,000 cy) 1.13 acres

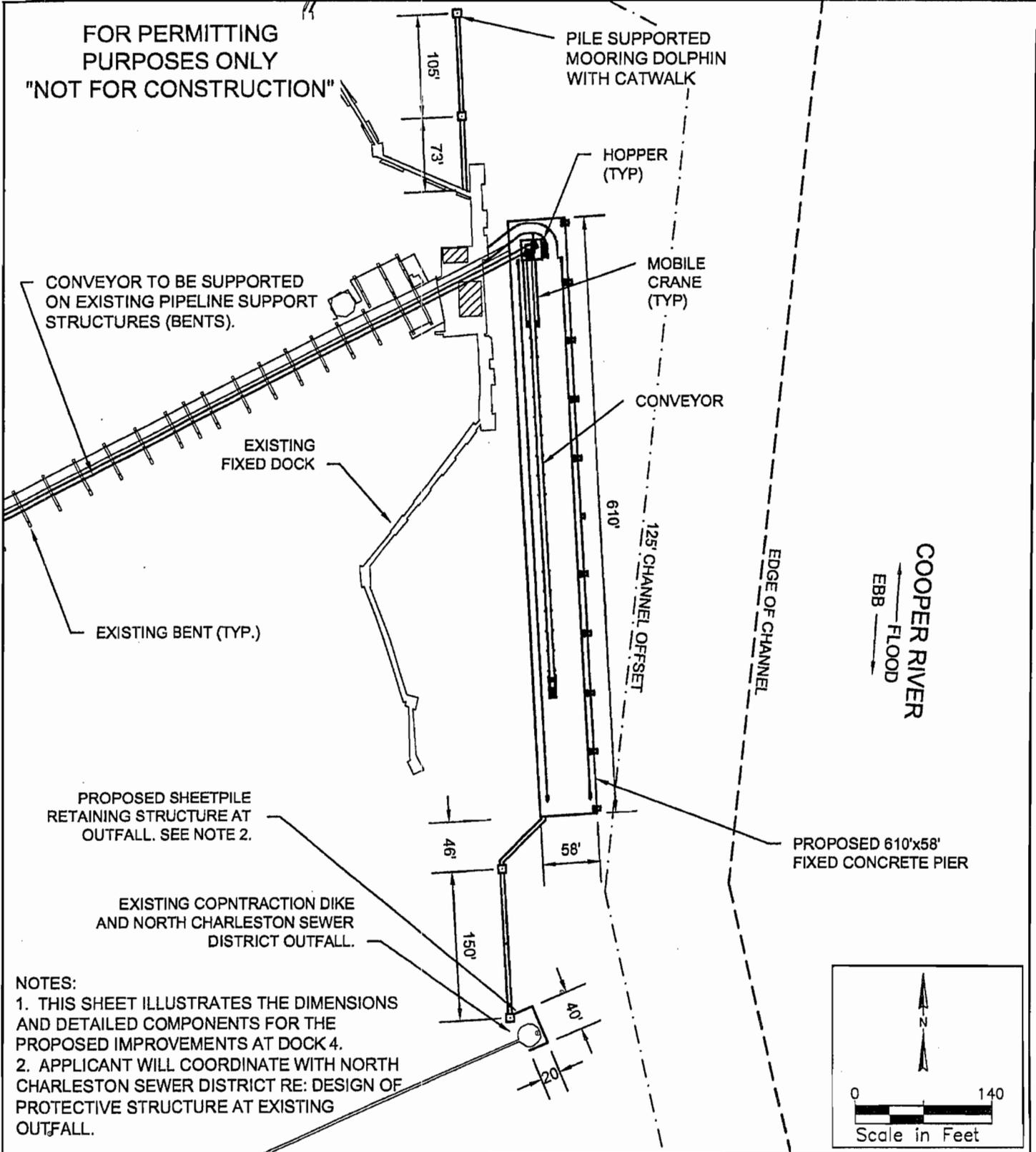
05100202CHB01.DWG 3/16/05

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**PROPOSED IMPROVEMENTS  
 DOCK 4/DREDGE SITE 2**  
 KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

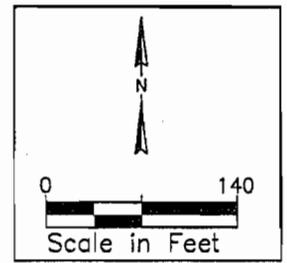
PROPOSED: DREDGING, REDEVELOPMENT OF MOORING FACILITIES, IMPACTS TO TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 16

FOR PERMITTING PURPOSES ONLY  
"NOT FOR CONSTRUCTION"



**NOTES:**

1. THIS SHEET ILLUSTRATES THE DIMENSIONS AND DETAILED COMPONENTS FOR THE PROPOSED IMPROVEMENTS AT DOCK 4.
2. APPLICANT WILL COORDINATE WITH NORTH CHARLESTON SEWER DISTRICT RE: DESIGN OF PROTECTIVE STRUCTURE AT EXISTING OUTFALL.



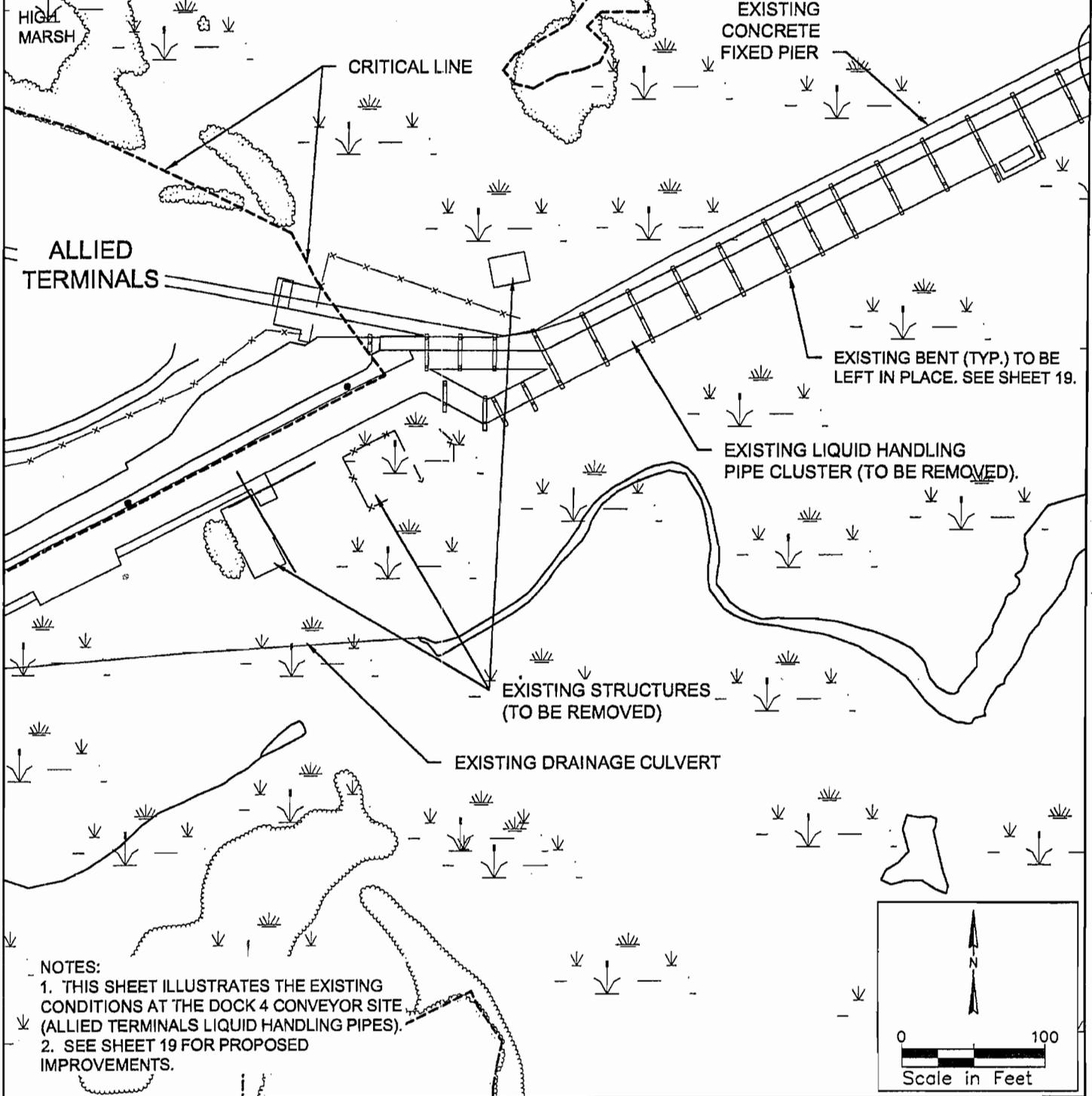
PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**PROPOSED IMPROVEMENTS  
DOCK 4 WITH DIMENSIONS**

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

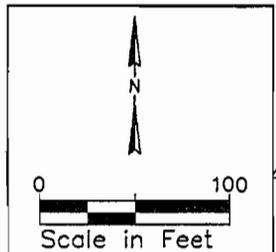
PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 17

FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"



**NOTES:**

1. THIS SHEET ILLUSTRATES THE EXISTING CONDITIONS AT THE DOCK 4 CONVEYOR SITE (ALLIED TERMINALS LIQUID HANDLING PIPES).
2. SEE SHEET 19 FOR PROPOSED IMPROVEMENTS.



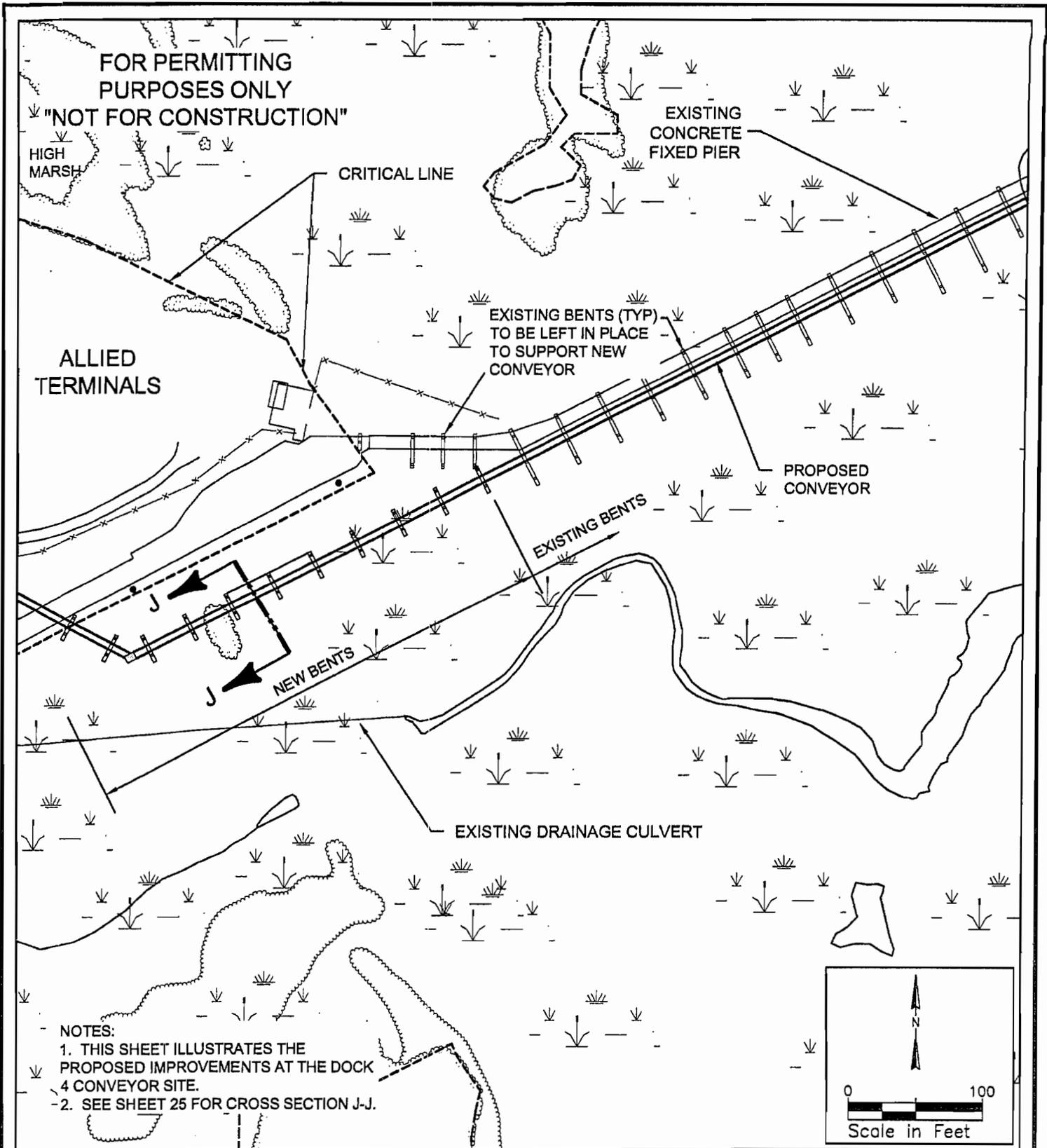
3/7/19/US  
05 100/241801.DWG

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

**EXISTING CONDITIONS  
DOCK 4 CONVEYOR**

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 18

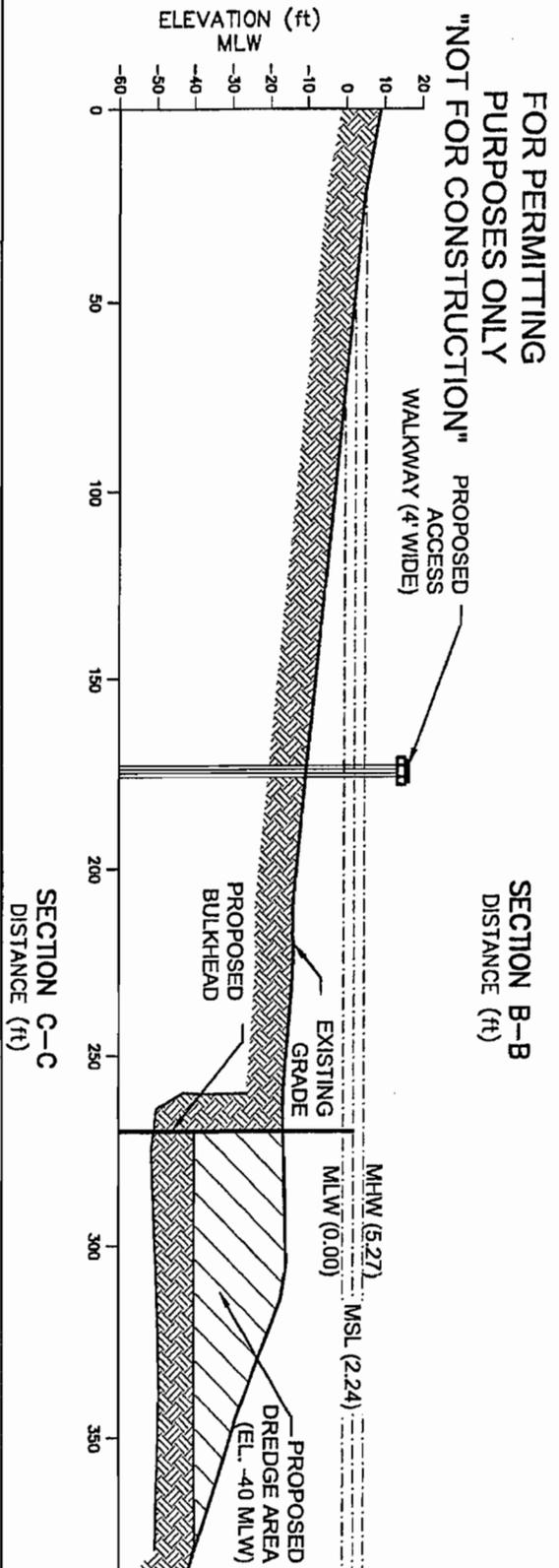
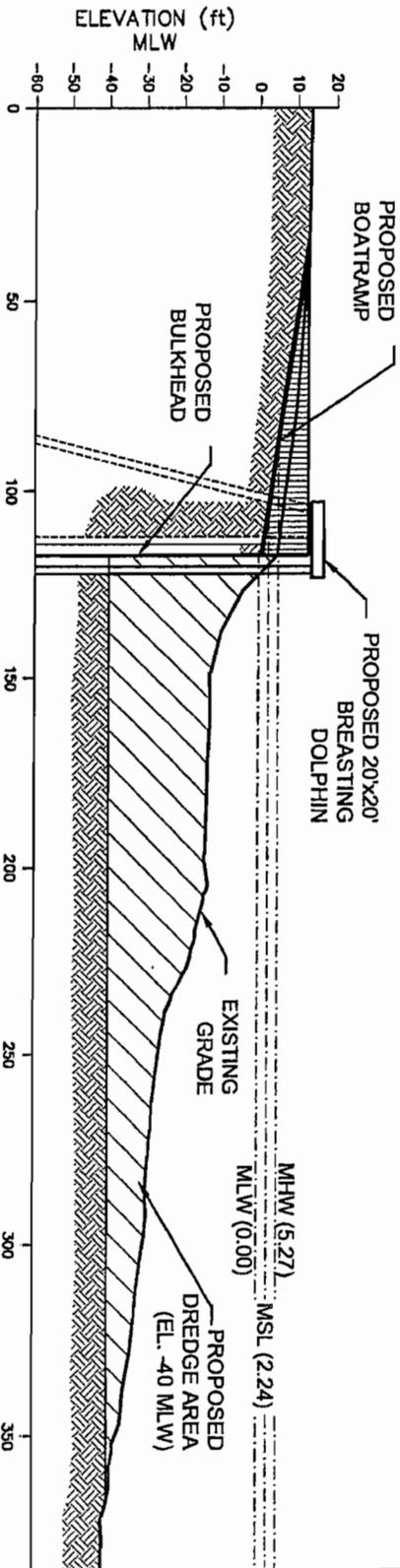
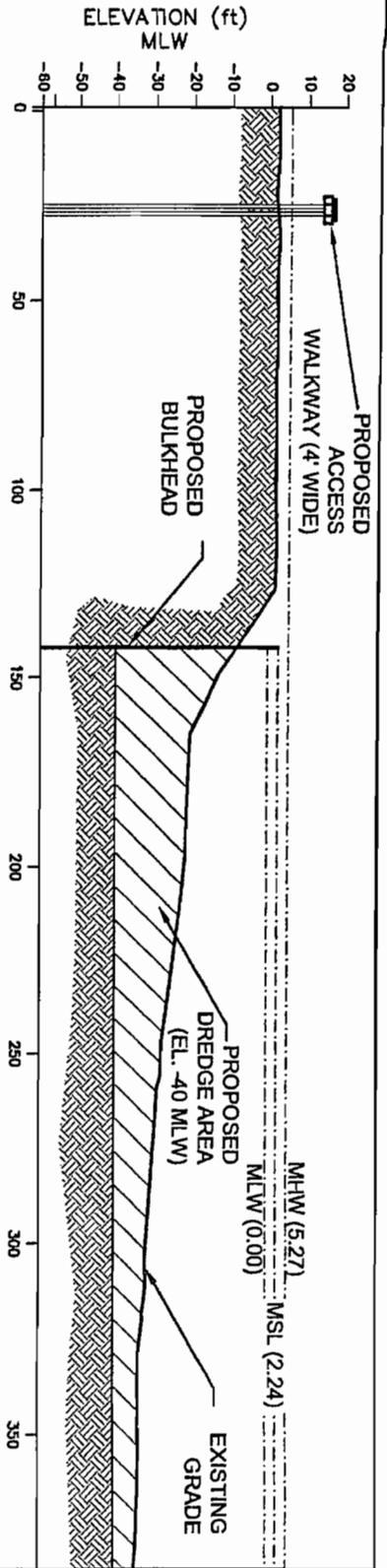


NOTES:  
 1. THIS SHEET ILLUSTRATES THE PROPOSED IMPROVEMENTS AT THE DOCK 4 CONVEYOR SITE.  
 2. SEE SHEET 25 FOR CROSS SECTION J-J.

PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

PROPOSED IMPROVEMENTS  
 DOCK 4 CONVEYOR  
 KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA

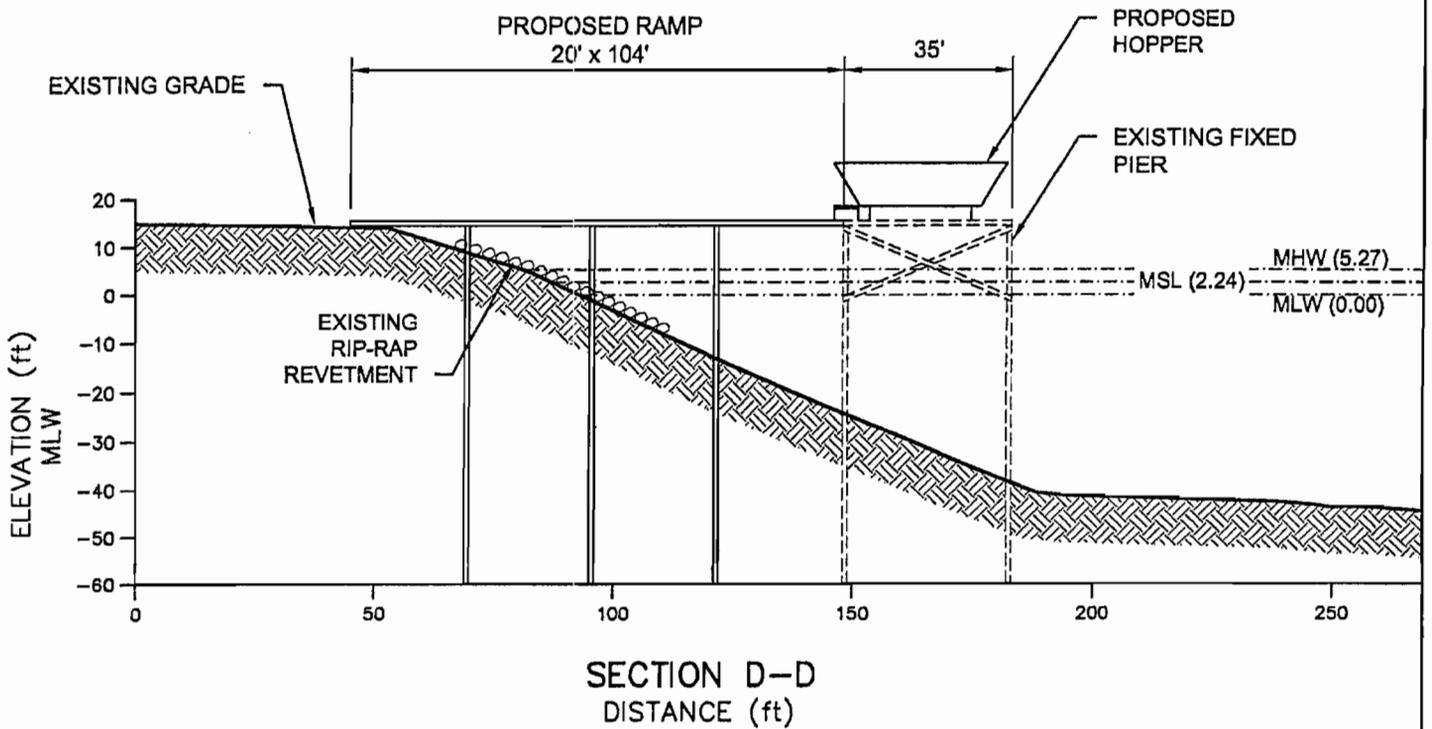


PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

DOCK 3/DREDGE SITE 1  
 SECTIONS A-A, B-B, C-C

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 20



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PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

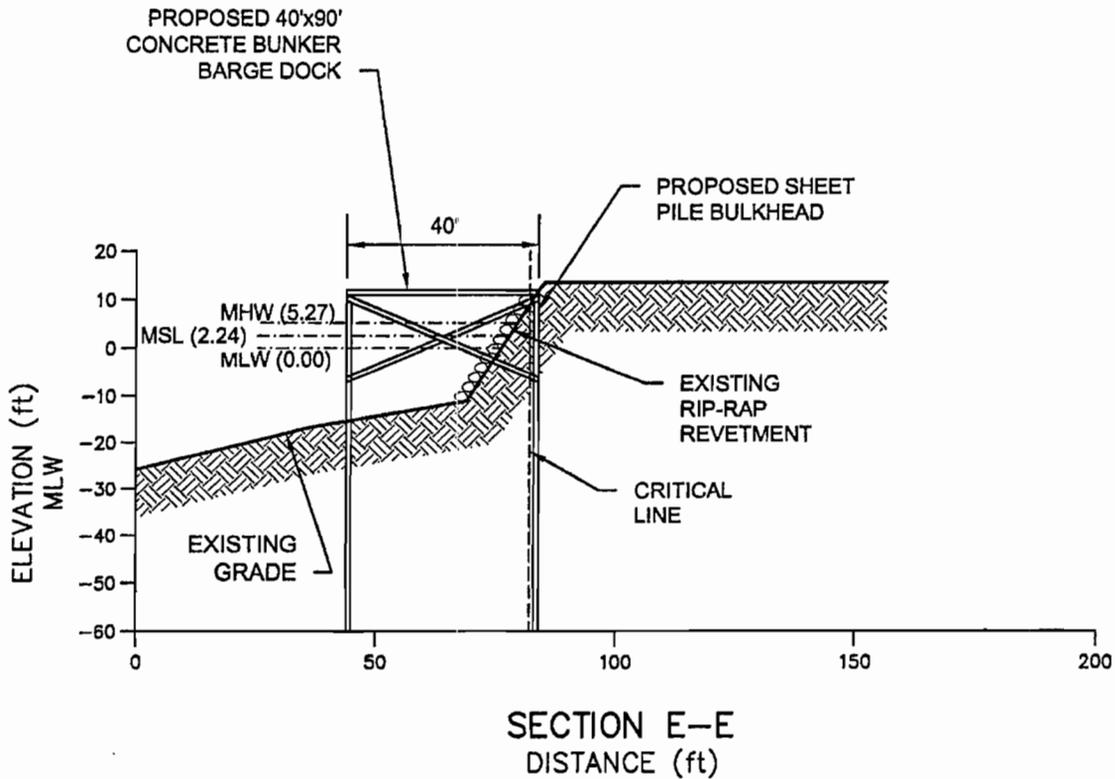
NOTE:  
BATHYMETRIC SURVEY PERFORMED BY  
COLLINS ENGINEERING IN JULY 2005, AND  
CHANNEL INFORMATION PROVIDED BY USACE.

PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

DOCK 2  
SECTION D-D

KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 21



FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

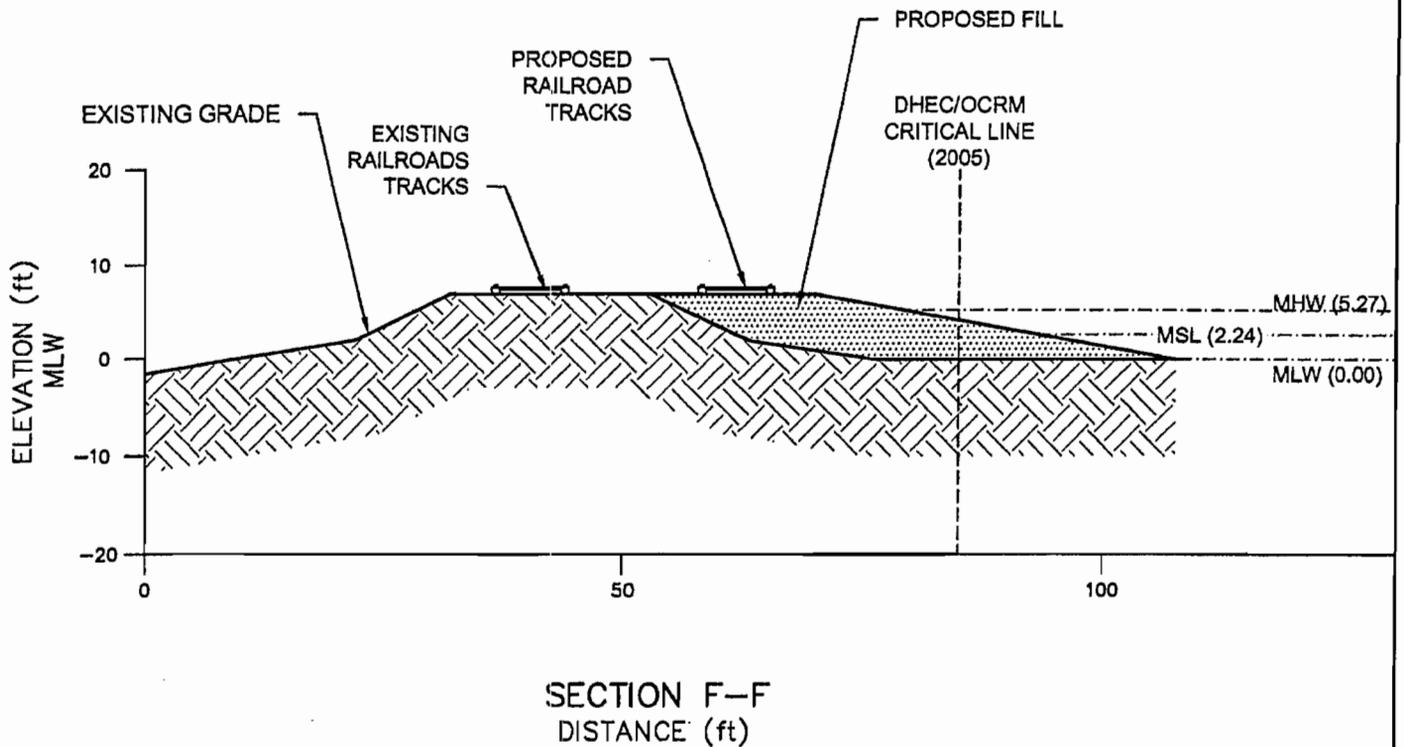
NOTE:  
BATHYMETRIC SURVEY PERFORMED BY  
COLLINS ENGINEERING IN JULY 2005, AND  
CHANNEL INFORMATION PROVIDED BY USACE.

PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

BUNKER BARGE DOCK  
SECTION E-E  
  
KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA SHEET 22

C:\107\05\1002\10021.DWG



NOTE:  
 CRITICAL LINE DELINEATED BY ATM,  
 IN JULY/AUGUST 2005 AND SURVEYED  
 BY GEORGE A.Z. JOHNSON IN  
 SEPTEMBER 2005.

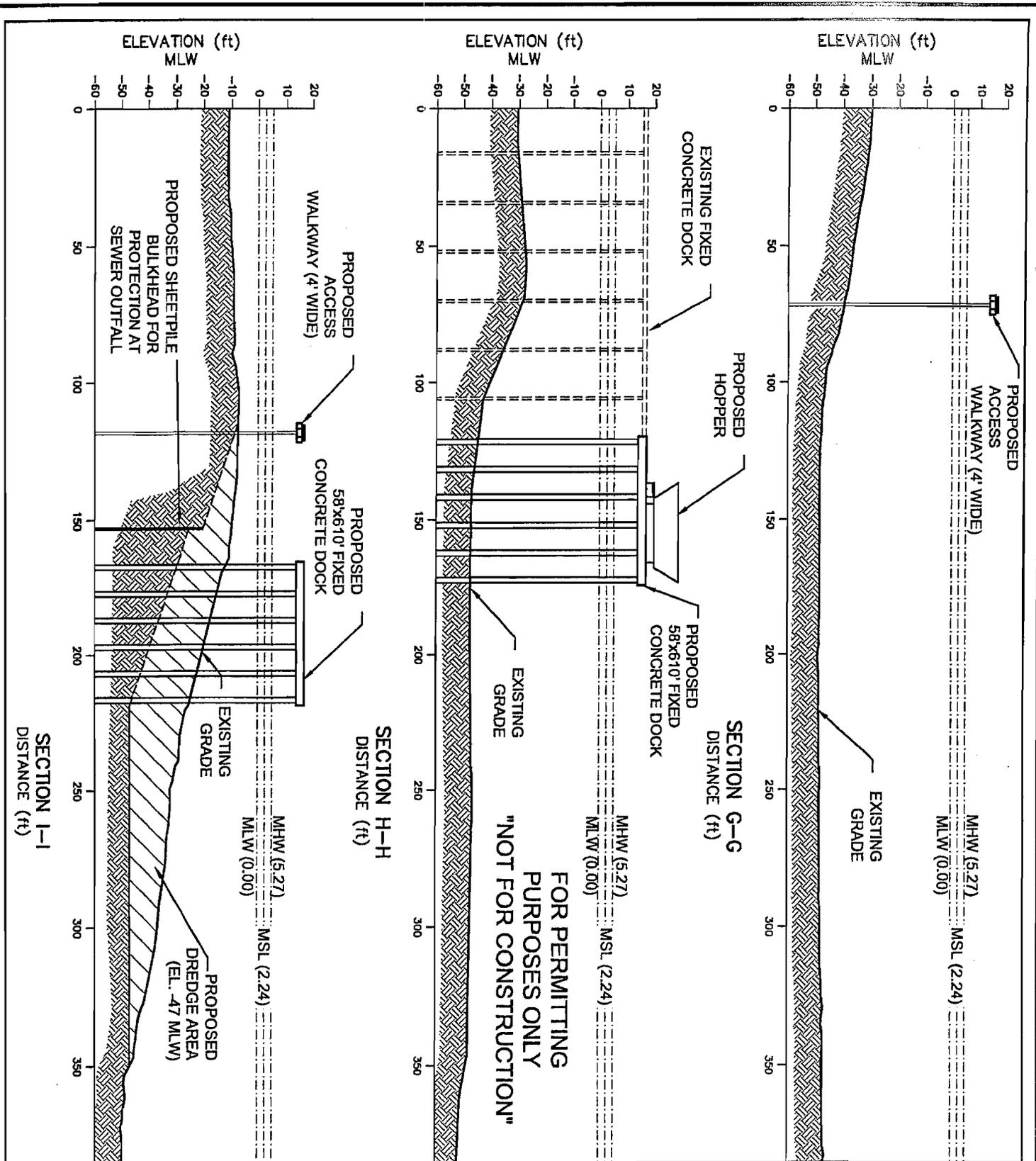
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PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

PHASE 1 RAILROAD  
 SECTION F-F

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS  
 IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA SHEET 23



PURPOSE: TERMINAL EXPANSION  
 DATUM: MLW  
 APPLICATION BY: KINDER MORGAN  
 USACE #  
 ADJACENT PROPERTY OWNERS:  
 SEE EXHIBIT B  
 DATE: 9/13/05

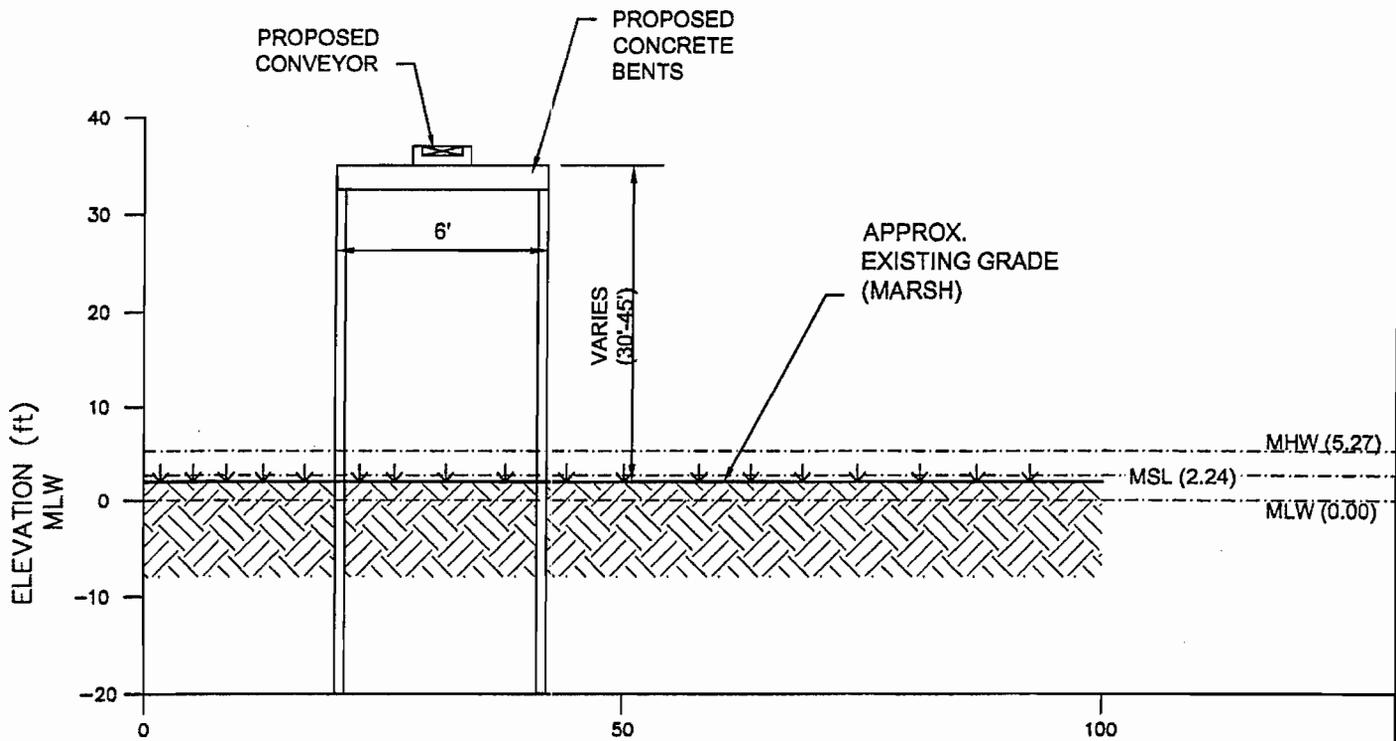
DOCK 4/DREDGE SITE 2  
 SECTIONS G-G, H-H, I-I

KINDER MORGAN  
 1801 MILFORD STREET  
 CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
 OF MOORING FACILITIES, IMPACTS TO  
 TIDAL WETLANDS

IN: SHIPYARD RIVER AND COOPER RIVER  
 AT: KINDER MORGAN SHIPYARD RIVER  
 TERMINAL, CITY OF CHARLESTON  
 COUNTY OF: CHARLESTON  
 STATE: SOUTH CAROLINA

SHEET 24



SECTION J-J  
DISTANCE (ft)

FOR PERMITTING  
PURPOSES ONLY  
"NOT FOR CONSTRUCTION"

PURPOSE: TERMINAL EXPANSION  
DATUM: MLW  
APPLICATION BY: KINDER MORGAN  
USACE #  
ADJACENT PROPERTY OWNERS:  
SEE EXHIBIT B  
DATE: 9/13/05

DOCK 4 CONVEYOR  
SECTION J-J

KINDER MORGAN  
1801 MILFORD STREET  
CHARLESTON, SC 29405

PROPOSED: DREDGING, REDEVELOPMENT  
OF MOORING FACILITIES, IMPACTS TO  
TIDAL WETLANDS  
IN: SHIPYARD RIVER AND COOPER RIVER  
AT: KINDER MORGAN SHIPYARD RIVER  
TERMINAL, CITY OF CHARLESTON  
COUNTY OF: CHARLESTON  
STATE: SOUTH CAROLINA