DEPARTMENT OF THE ARMY PERMIT

Permittee Department of the Navy

Permit No. 20486

Issuing Office Galveston District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To dredge approximately 400,000 cubic yards of material for the construction of an entrance channel, turning basin and slip for Avenger and Osprey Class Naval Vessels. Dredged material will be placed in the Good Hope Disposal Area, directly north of the proposed dredging. Dredging will facilitate the construction of a Magnetic Silencing Facility (MSF) for use by the Mine Warfare Center of Excellence at Ingleside. This MSF is required to measure the magnetic signature of the mine warfare ships for utilization in mine warfare training.

The entrance channel will measure 150 feet wide and approximately 700 feet in length and will be dredged to -17 ft. mean low low water (mllw). The turning basin will measure 500 feet by 500 feet and will also be dredged to -17 ft. mllw. To allow for the placement of the MSF, a corridor measuring 520 feet by 270 feet will be dredged to -25 ft. mllw. The MSF will consist of piers and sensor tubes. Two piers 300 feet in length will be constructed parallel to one another 66 feet apart to allow docking of naval vessels between them. A proposed walkway measuring 800 feet in length will connect these piers to the shoreline.

An additional small craft pier will be constructed adjacent to Naval Station Ingleside and the Corpus Christi Ship Channel. The pier will measure 600 feet in length and will accommodate utility boats used to support the mine warfare exercises and existing boats assigned to the station.

Project Location: The dredging portion of the project will be performed at the confluence of the Jewell Fulton Canal and La Quinta Channel west of Ingleside, Texas. The small craft pier facilities proposed for construction are at Naval Station Ingleside in the city of Ingleside, San Patricio County, Texas.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on 31 December 1999. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

[signature] for LCDR, CEC, USN PWO — 10/7/96

(PERMITTEE) *(DATE)*
DEPARTMENT OF THE NAVY

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

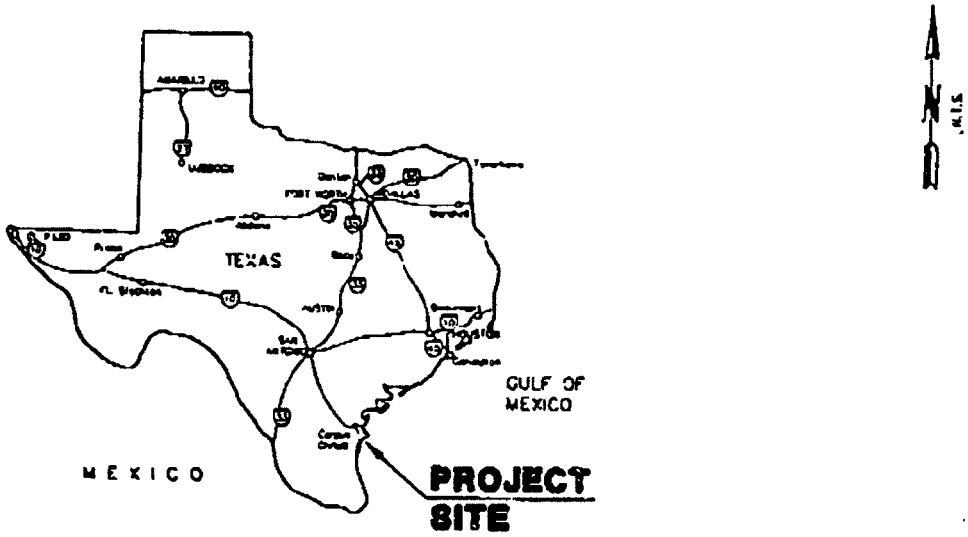
[signature] — 22 OCT 1996

(DISTRICT ENGINEER) *(DATE)*
ROBERT W. HEINLY, LEADER
SOUTH EVALUATION UNIT
FOR COLONEL ERIC R. POTTS

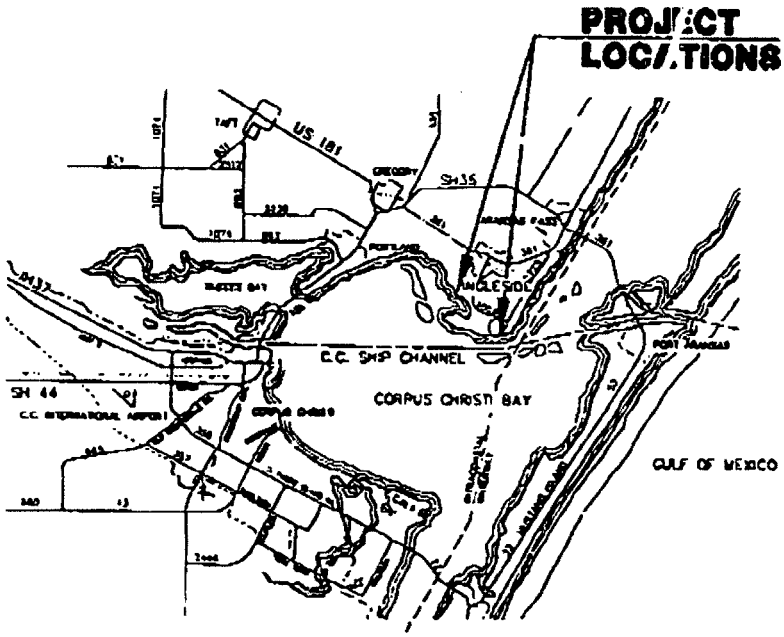
When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE) *(DATE)*

20486



MAP OF TEXAS

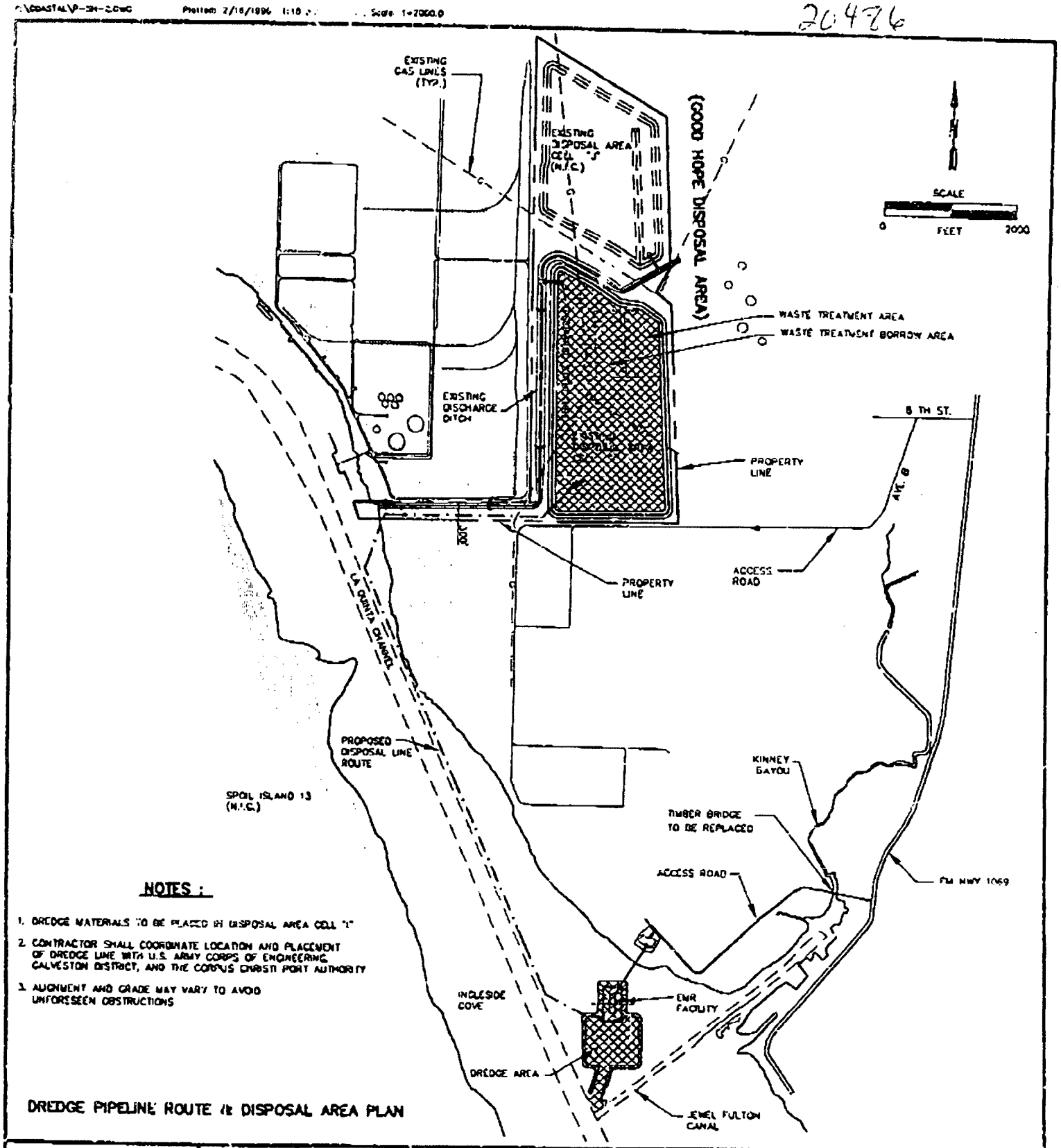


VICINITY MAP

GEE & JENSON	DESG. JSY	EMR FACILITY & SMALL CRAFT PIER				SCALE N.T.S.
	DRAW GOO	NAVAL STATION				JOB # 93-282.53
	CHKD JDM	INGLESIDE, TEXAS				SHEET
	APRV	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REVISION	1 OF 11
	DATE 2/16/98					

Sheet 1 of 15

20476



NOTES :

1. DREDGE MATERIALS TO BE PLACED IN DISPOSAL AREA CELL "S"
2. CONTRACTOR SHALL COORDINATE LOCATION AND PLACEMENT OF DREDGE LINE WITH U.S. ARMY CORPS OF ENGINEERING, GALVESTON DISTRICT, AND THE CORPUS CHRISTI PORT AUTHORITY
3. ALIGNMENT AND GRADE MAY VARY TO AVOID UNFORESEEN OBSTRUCTIONS

DREDGE PIPELINE ROUTE & DISPOSAL AREA PLAN

GEE & JENSON	DESG. JSY	EMR FACILITY				SCALE SHOWN
	DRAW NCP	NAVAL STATION				JOB # 93282.53
	CHKD.	INGLESIDE, TEXAS				SHEET
	APRV					2 OF 11
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REVISION	

Sheet 2 of 15

DASTAL\P-SH-3.DWG Plotted: 3/4/1998 3:52 pm Plot Scale: 1=300.0

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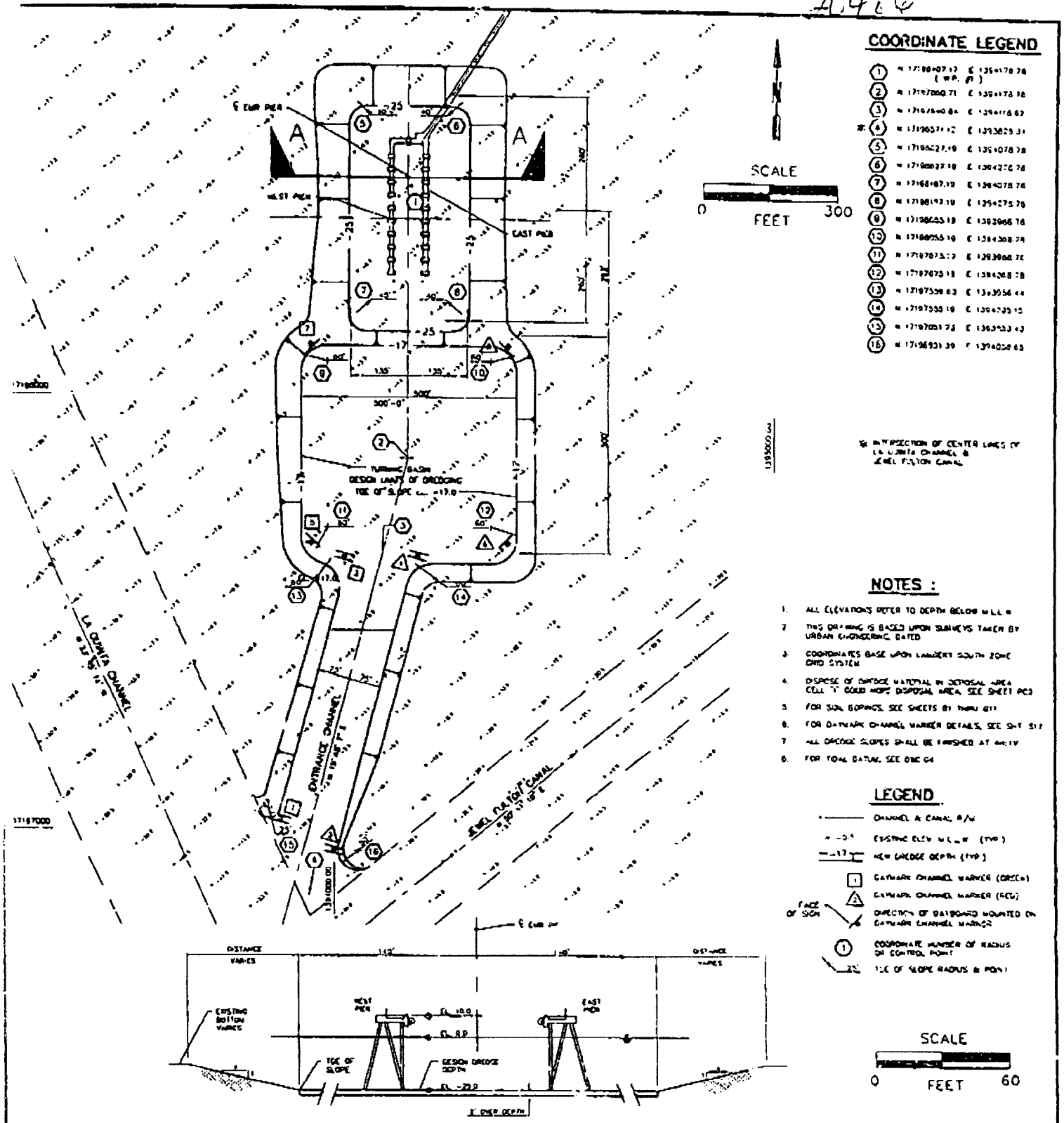

GEE & JENSON	DESG. JSY	EMR FACILITY NAVAL STATION INGLESIDE, TEXAS				SCALE SHOWN
	DRAW NCP					JOB # 93-282.55
	CHKD					SHEET
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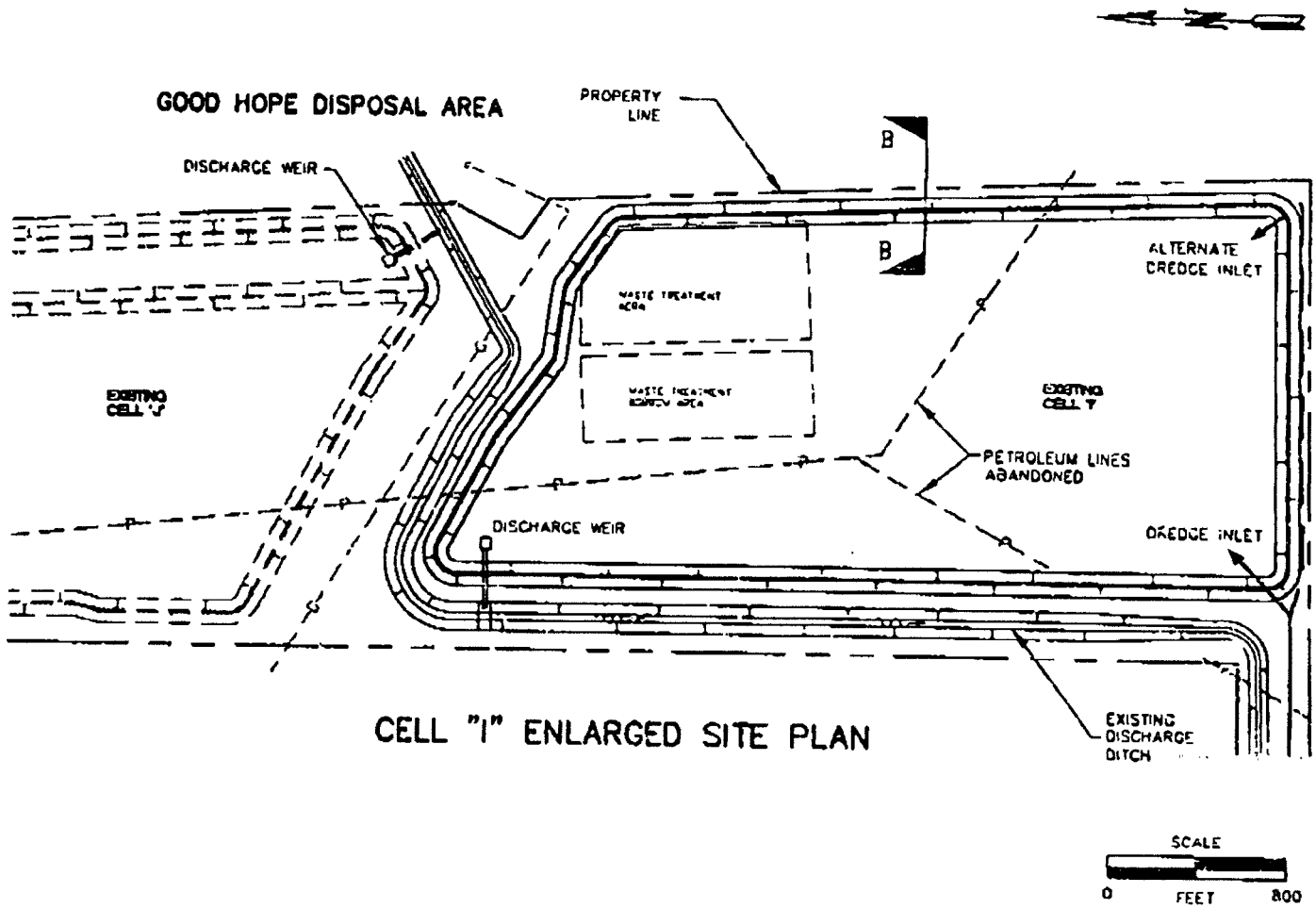
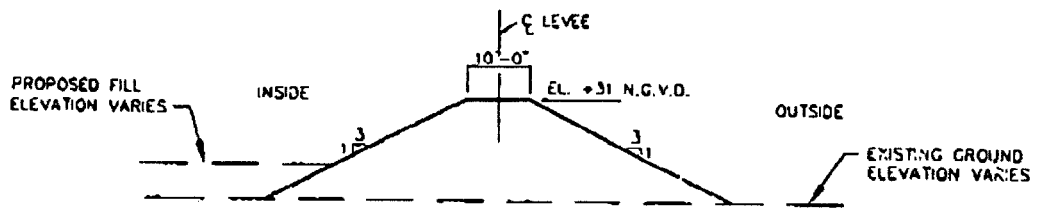
	DATE	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REV. LEGEND & SECTION REVISION	

Sheet 3 of 15

20486



CELL "I" ENLARGED SITE PLAN



SECTION B-B

TYPICAL SECTION – EXISTING PERIMETER LEVEE

N.T.S.

DISPOSAL AREA SITE PLAN & SECTION

GEE & JENSON	DESG. JSY	EMR FACILITY			SCALE SHOWN	
	DRAW NCP	NAVAL STATION			JOB # 93-282.53	
	CHK JDM	INGLESIDE, TEXAS			SHEET	
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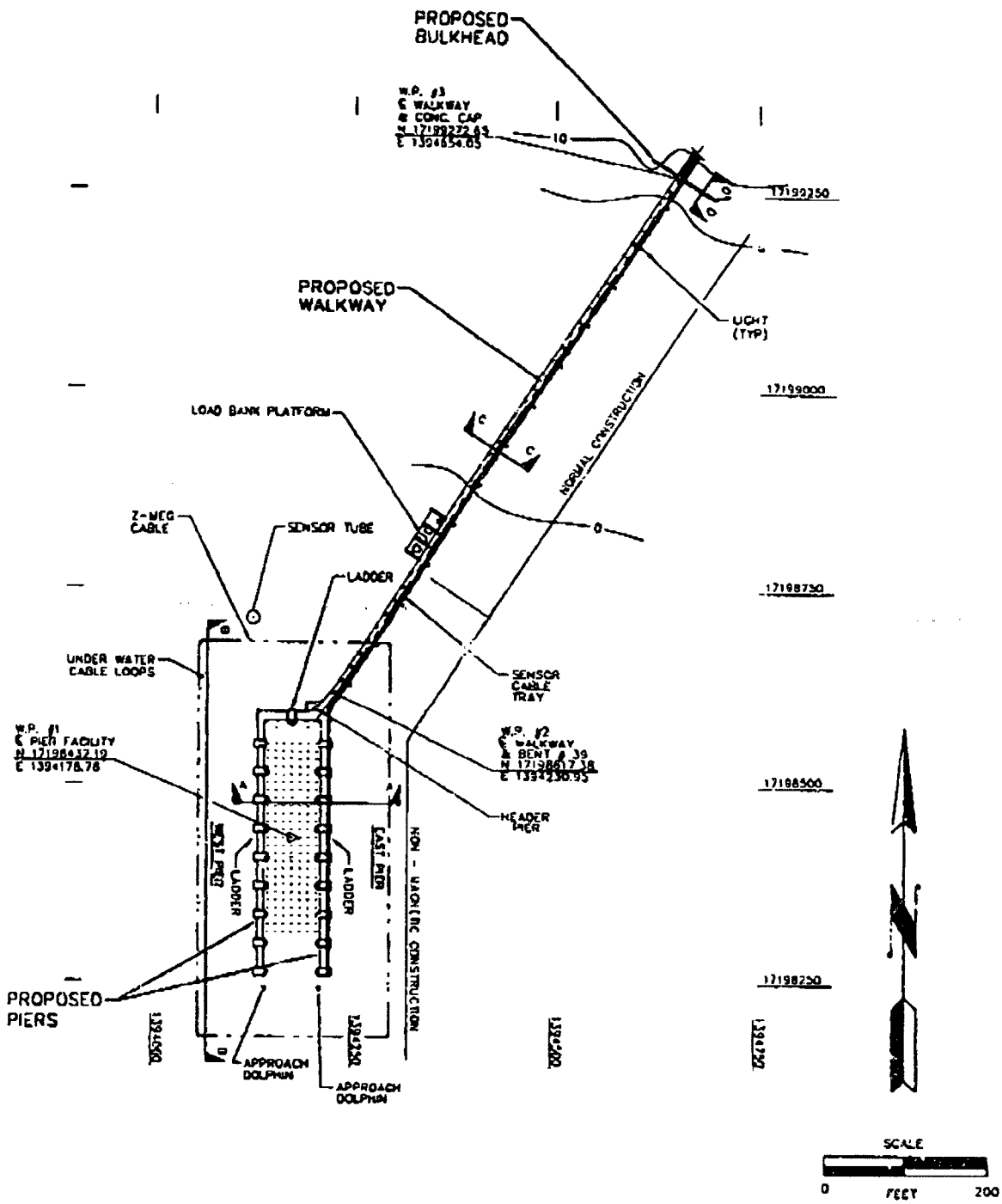
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REVISION	

Sheet 4 of 15

20426

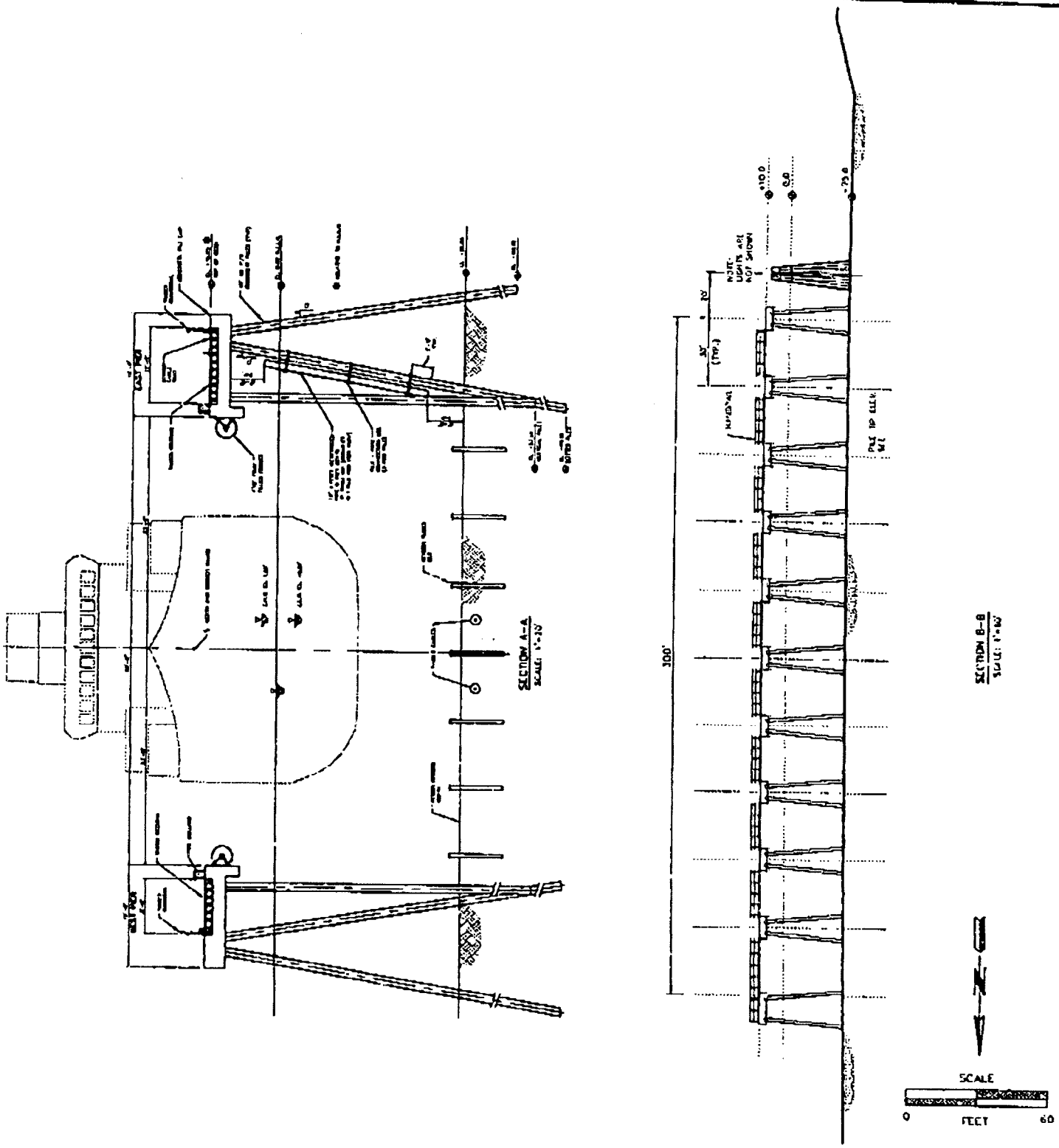


PIER SITE PLAN

GEE & JENSON	DESG. JSY	EMR FACILITY NAVAL STATION INGLESIDE, TEXAS				SCALE SHOWN
	DRAW GOO					JOB # 93-282.53
	CHKD.					SHEET
	APRV					5 OF 11
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REVISION	

COASTALVP-SH-6.DWG Plotted: 2/16/1996 2:00 pm Plot Scale: 1=30.0

20486



PIER SECTIONS

GEE & JENSON

DESC.	JSY
DRAW	GOO
CHKD.	JDM
APRV	
DATE	2/16/96

EMR FACILITY
NAVAL STATION
INGLESIDE, TEXAS

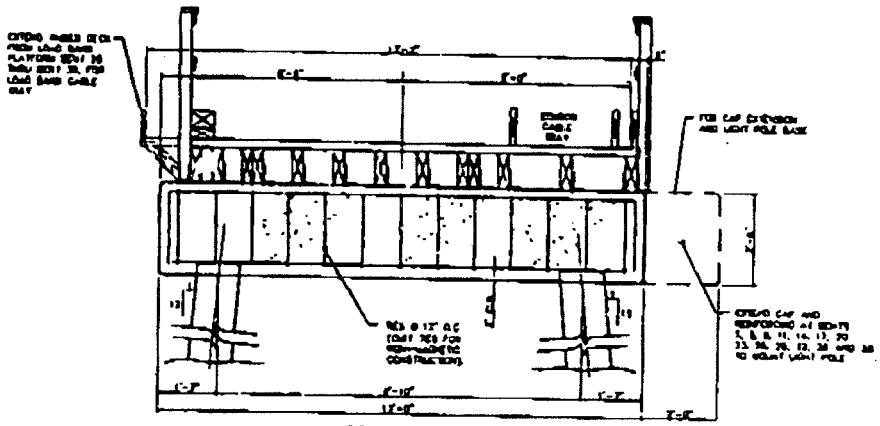
APPLICANT: DEPARTMENT OF THE NAVY

DATE	APRV	REVISION

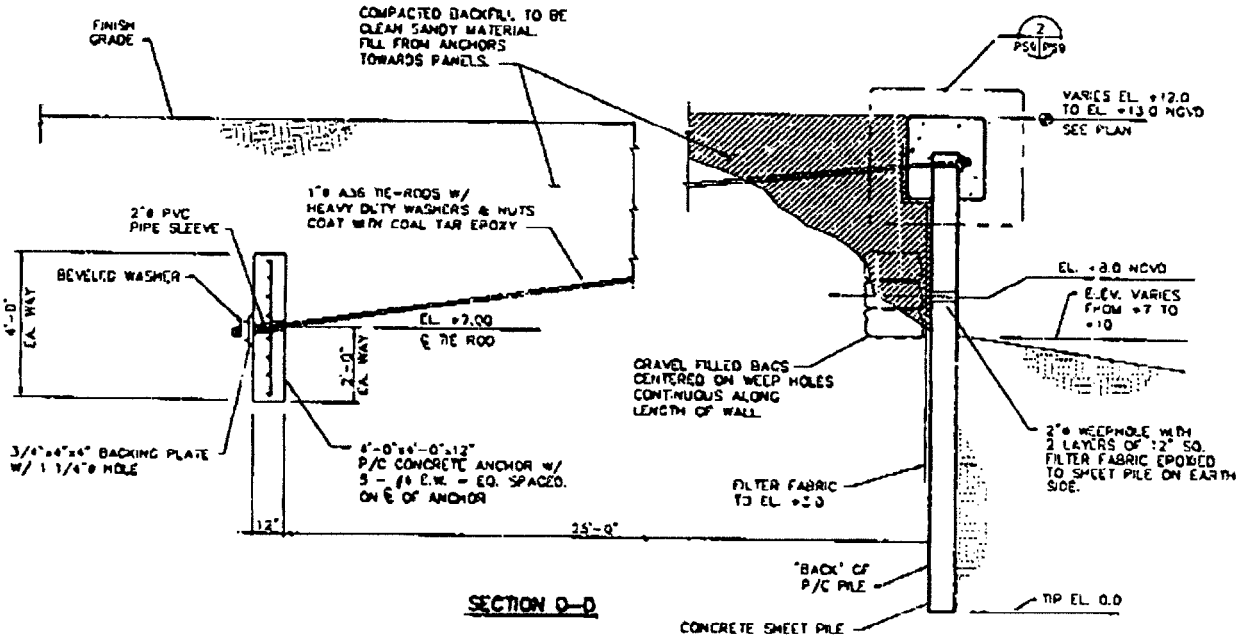
SCALE SHOWN
JOB # 93-282.53
SHEET 6 OF 11

Sheet 6 of 15

26476



SECTION C–C



SECTION D–D

SCALE

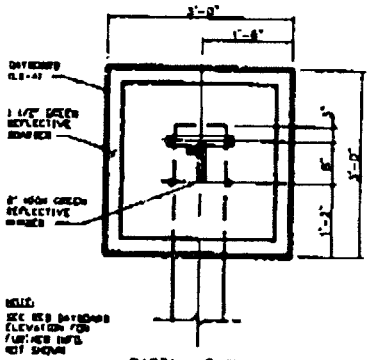
0 FEET 5

TYPICAL SECTIONS

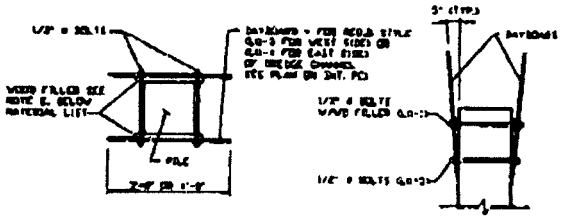
GEE & JENSON	DES. JSY	EMR FACILITY NAVAL STATION INGLESIDE, TEXAS				SCALE SHOWN
	DRAW GOO					JOB # 93282.53
	CHKD TDM					SHEET 7 OF 11
	APRV					
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REVISION	

Sheet 7 of 15

26476



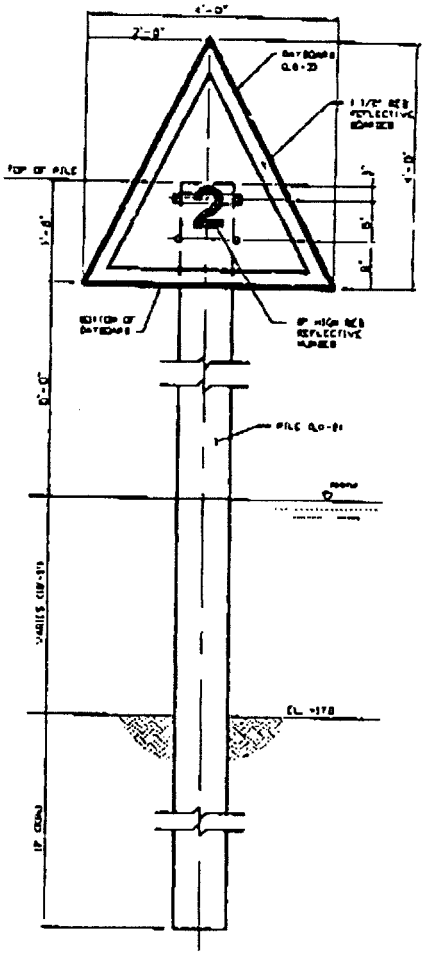
PARTIAL ELEVATION
GREEN DAYBOARD



TOP VIEW SIDE VIEW

DAYBOARD DETAILS

N.T.S.



ELEVATION
RED DAYBOARD

DAYMARK DETAILS

NOTE: JET, DRIVE OR PUNCH AS NECESSARY TO INSTALL DAYMARK PILES TO REQUIRED GRADE. SUBSTRATE MAY INCLUDE CEMENTED SAND.

MATERIAL LIST FOR DAYMARK INSTALLATION			
ITEM	QUANTITY	MATERIALS	SIZE
LII-1	16	6061 ALUMINUM ALLOY BOLTS, NUTS, & WASHERS	1/2" X 1'-3"
LII-2	8	PRESTRESSED CONCRETE PILE, LENGTH AS REQ'D	10" X 10"
LII-3	4	RED DAYBOARD (NUMBERS 2 THRU 8) 5052-H38 ALLODIZED ALUM.	48" TRIANGLE
LII-4	4	GREEN DAYBOARD (NUMBERS 1 THRU 7) 5052-H38 ALLODIZED ALUM.	36" SQUARE
LII-5	16	6061 ALUMINUM ALLOY BOLTS, NUTS, & WASHERS	1/2" X 1'-2"

NOTES:

1. ALL ALUMINUM BOLTS SHALL MEET ASTM STANDARDS FOR MARINE USE.
2. 2" X 4" PRESSURE TREATED WOOD FILLER PLACED BETWEEN THE DAYBOARD AND THE PILE AT THE UPPER BOLT CONNECTION TO PROVIDE A 5° OUT-BOARD TILT.
3. DAYBOARDS TO BE CONSTRUCTED OF 1/8 INCH, 5052-H38 ALLODIZED ALUMINUM, COVERED WITH 3M ENGINEER GRADE, REFLECTIVE SHEETING.
4. PRESSTRESSED PILES TO BE CONSTRUCTED W/ NITRONIC 33 STAINLESS STEEL PRESTRESS STRANDS & WIRE.

SCALE
0 FEET 30

DAYMARK CHANNEL MARKER

GEE & JENSON

DESG. JSY	EMR FACILITY NAVAL STATION INGLESIDE, TEXAS		SCALE 1" = 30'
DRAW NCP			JOB # 93-282.53
CHKD			SHEET
APRV	APPLICANT: DEPARTMENT OF THE NAVY		8 OF 11
DATE 2/16/96		DATE APRV REVISION	

Sheet 8 of 15

COASTAL\P-SH-8.DWG Plotted: 7/16/1996 2:07 pm Plot Scale: 1=200.0

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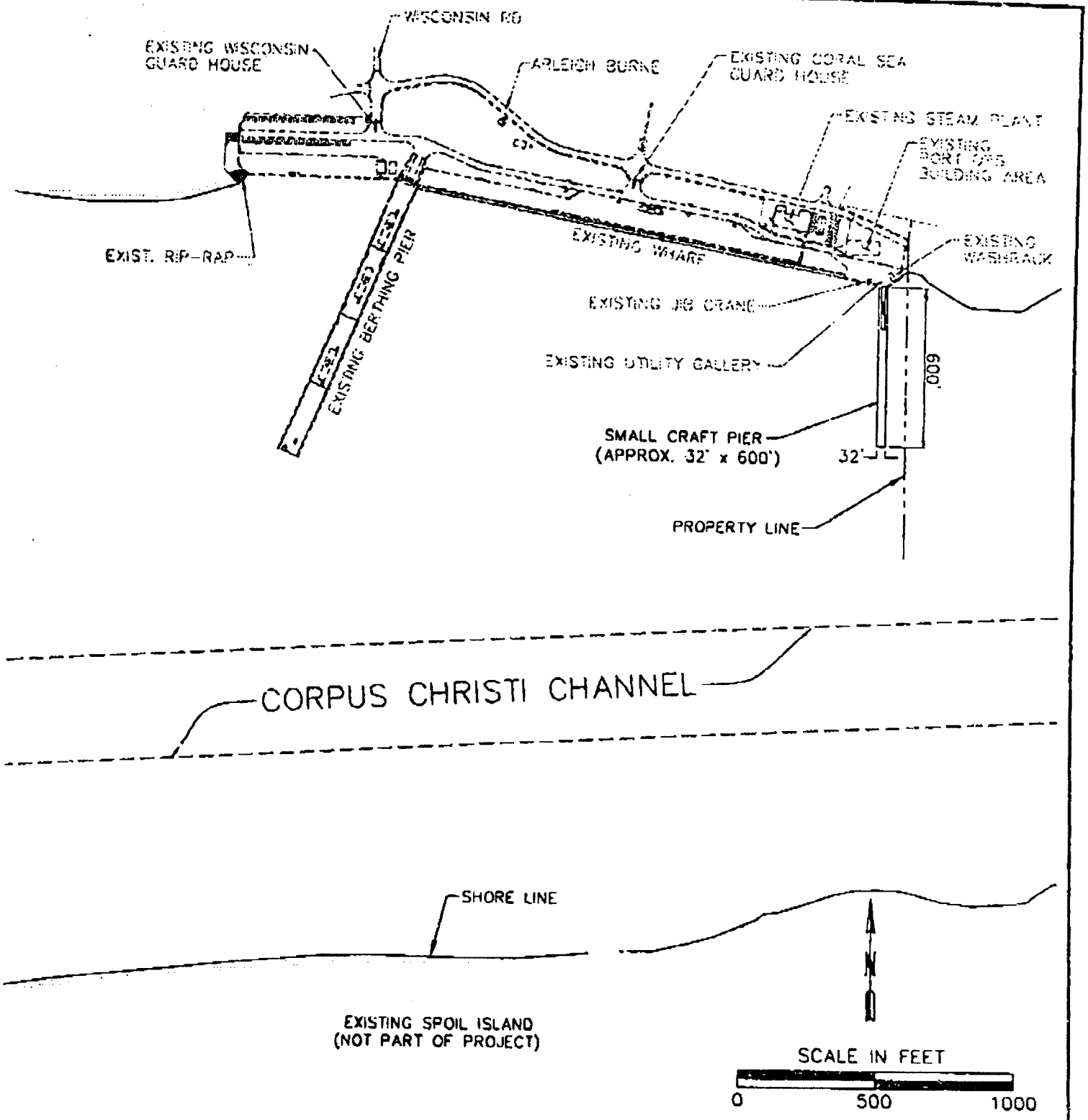


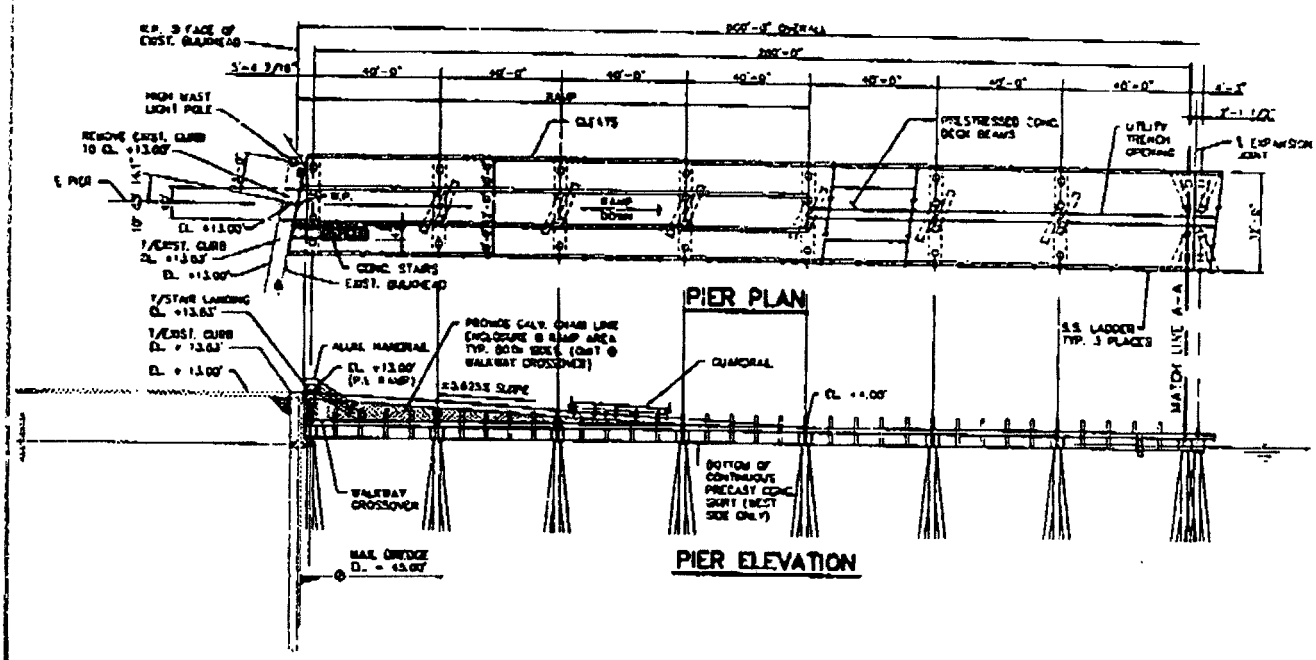
SITE PLAN

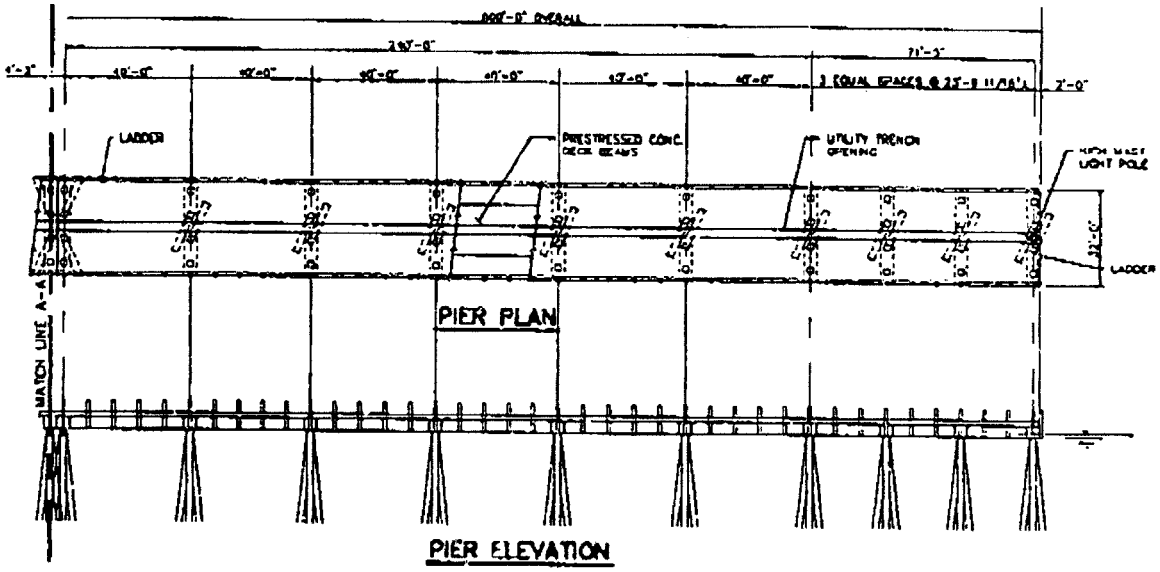
GEE & JENSON	DESG. JSY	SMALL CRAFT PIER NAVAL STATION INGLESIDE, TEXAS			SCALE SHOWN
	DRAW GOO				JOB # 93-282.53
	CHKD				SHEET 9 OF 11
	APRV				
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY	DATE / APRV	REVISION	

Sheet 9 of 15

\COASTAL\P-SH-10.DWG Plotted: 2/16/1996 2:15 pm Plot Scale: 1=30.0

24786





SCALE IN FEET

0 60 120

PIER PLANS & ELEVATIONS

GEE & JENSON	DESG. JSY	SMALL CRAFT PIER NAVAL STATION INGLESIDE, TEXAS	DATE	APRV	REVISION
	DRAW GOO				
	CHKD JDM				
	APRV				
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY			

SCALE SHOWN
JOB # 93-282.53
SHEET 10 OF 11

Sheet 10 of 15

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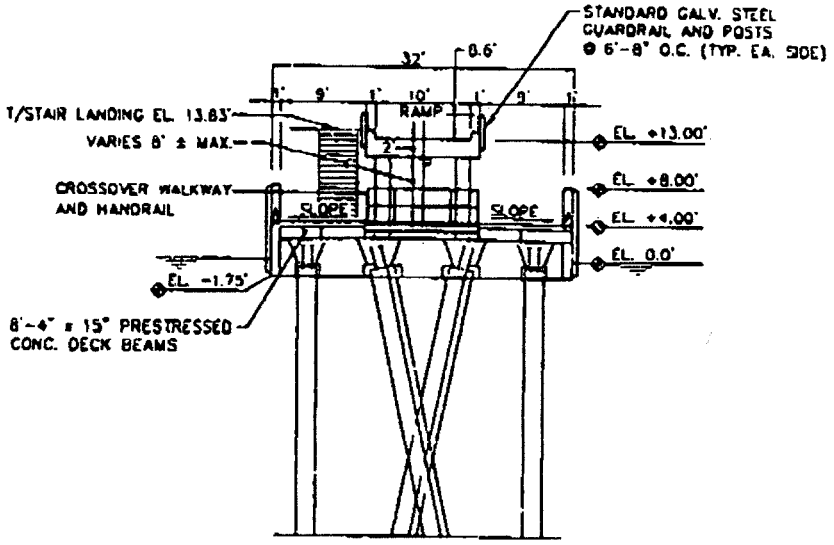
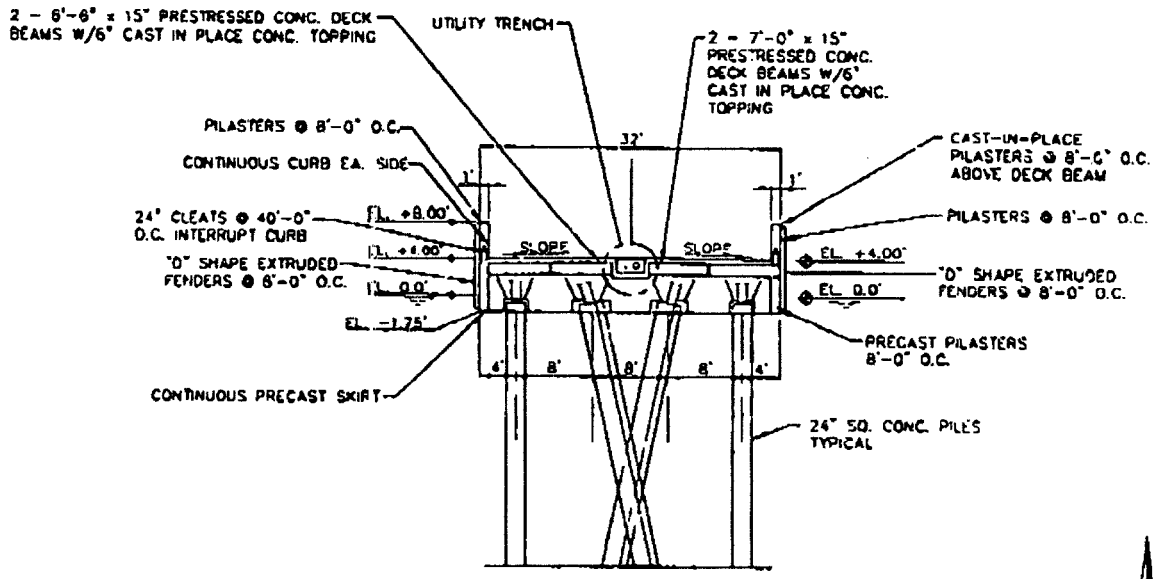


PIER SECTION @ RAMP

(SHOWING CONCRETE FENDER ALTERNATE)



TYPICAL PIER SECTION

(SHOWING TIMBER FENDER ALTERNATE)

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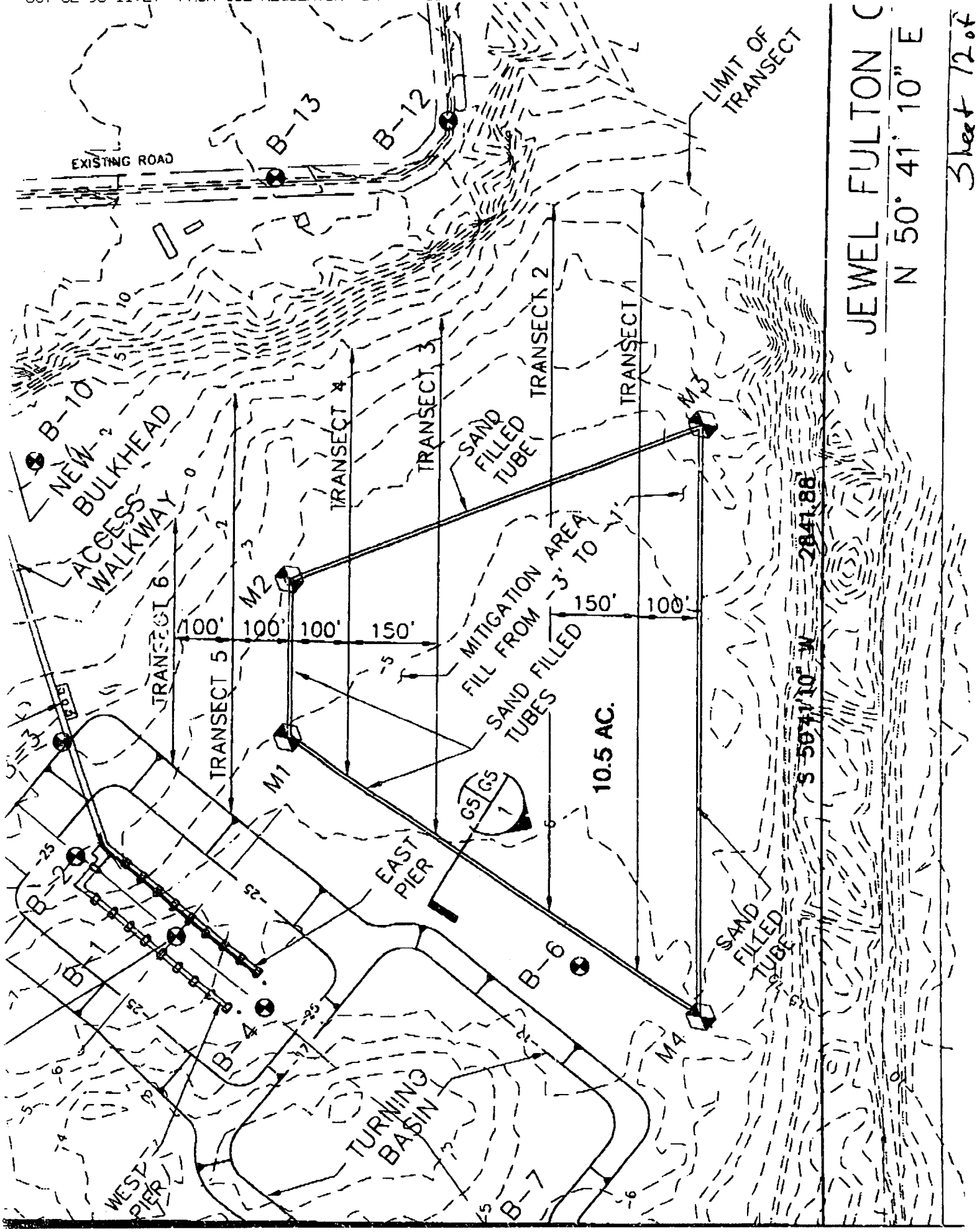
SCALE IN FEET

0 20 40

TYPICAL PIER & RAMP SECTION

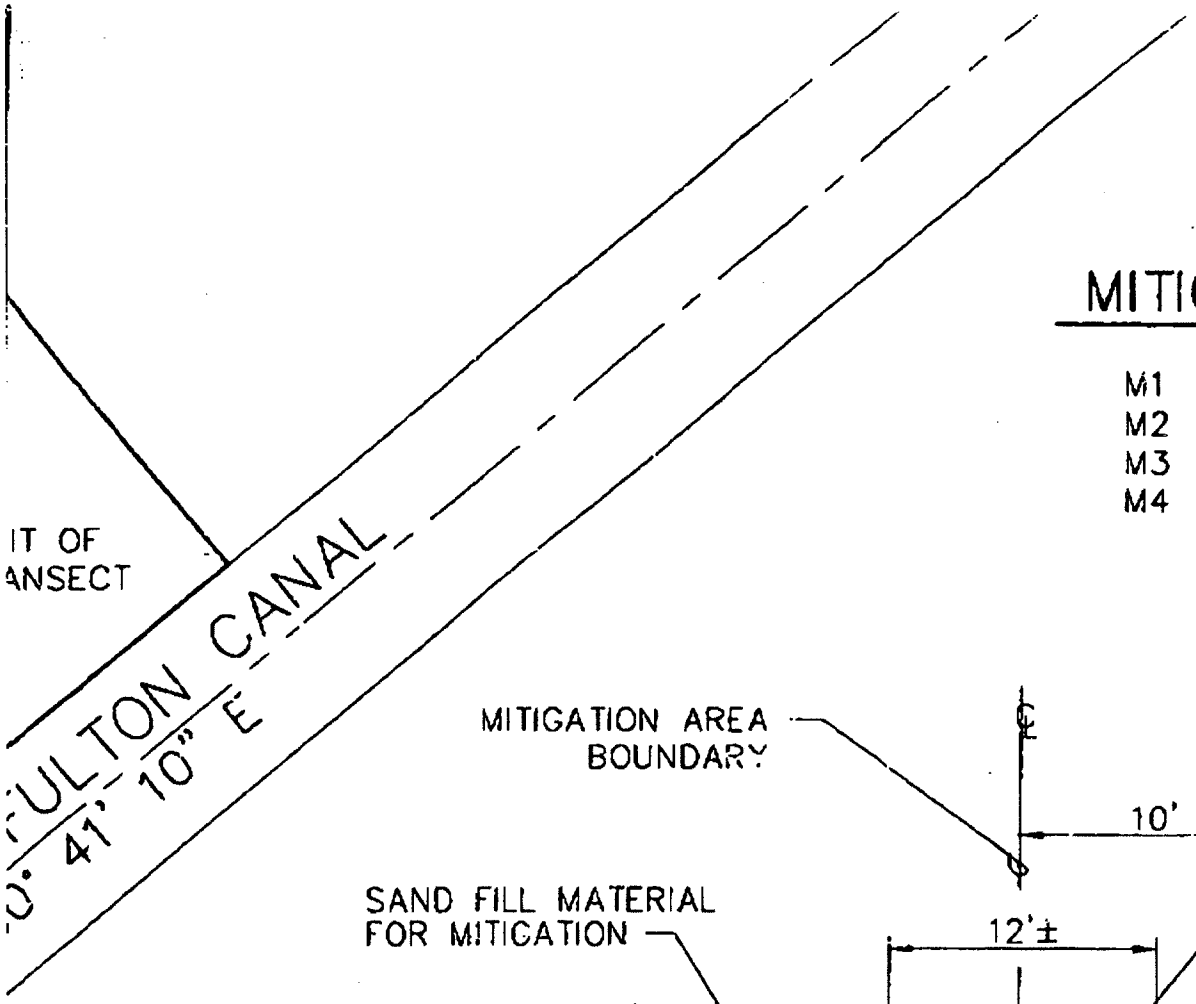
GEE & JENSON	DESG. JSY	SMALL CRAFT PIER				SCALE SHOWN
	DRAW GOO	NAVAL STATION				JOB # 93-282.53
	CHKD JSM	INGLESIDE, TEXAS				SHEET 11 OF 11
	APRV					
	DATE 2/16/96	APPLICANT: DEPARTMENT OF THE NAVY	DATE	APRV	REVISION	

Sheet 11 of 15


JEWEL FULTON C
N 50° 41' 10" E
Sheet 12 of
LIMIT OF TRANSECT
EXISTING ROAD
B-13
B-12
B-10
NEW BULKHEAD
ACCESS WALKWAY
TRANSECT 6
TRANSECT 5
TRANSECT 4
TRANSECT 3
TRANSECT 2
TRANSECT 1
SAND FILLED TUBE
M1
M2
M3
M4
100'
100'
100'
150'
150'
100'
MITIGATION AREA FILL FROM -3' TO -1'
SAND FILLED TUBES
10.5 AC.
G5
G5
EAST PIER
B-1
B-2
B-4
B-6
B-7
TURNING BASIN
WEST PIER
SAND FILLED TUBE
S 50°41'10" W 2841.88'

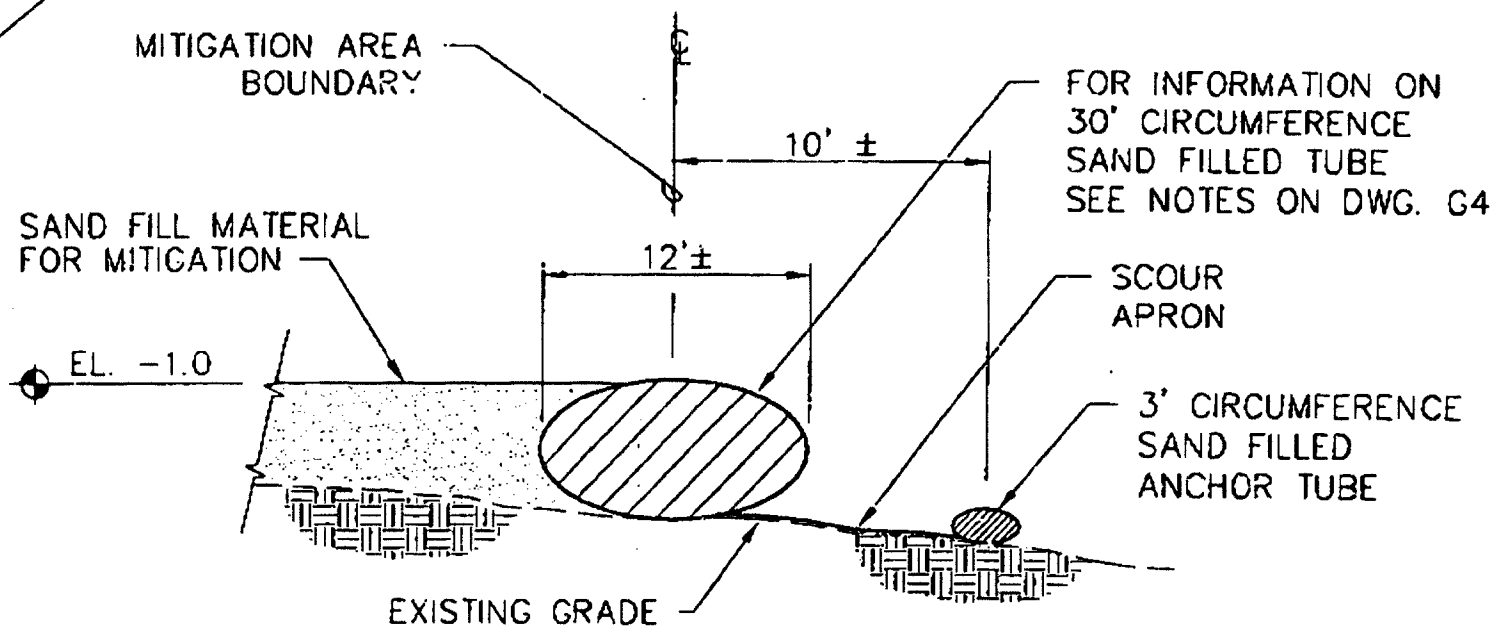
17195

17198



MITIGATION COORDINATES

M1	N 17198478.91	E 1394565.65
M2	N 17198650.53	E 1394775.68
M3	N 17198279.11	E 1395437.40
M4	N 17197632.77	E 1394642.81



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G5 G5

TYPICAL MITIGATION SECTION

N.T.S.

Sheet 13 of 15

MITIGATIVE PROCEDURES/CONDITIONS FOR SEAGRASS TRANSPLANTING EFFORTS

1. Material to be used for construction of the mitigation area shall be removed from the borrow area and placed in the mitigation site by mechanical means.

2. After placement of material in the mitigation area and following a sediment conditioning time of at least 90 days, the 10.5 acre mitigation area will be planted with locally harvested shoal grass. All shoal grass planting will be conducted between mid-March and mid-June, or between mid-September and mid-October. Harvest sites will be coordinated with the COE, NMFS, USFWS, and TPWD at least two weeks prior to commencement of transplanting activities. Initial planting shall be completed within one year of initiation of dredging associated with EMR construction.

3. No more than one 15 cm plug of source material per one square meter will be obtained from the designated seagrass borrow areas. Incidental damage to borrow areas will be strictly avoided.

4. Permittee will conduct a transplant survival survey of the planted area within 60 days following the initial planting effort. If 50% survival of transplant material is not achieved in this first 60 days, a second planting effort will be completed within the next 30 days. A written report detailing the results of this effort shall be submitted to the Corps within 60 days of survey completion.

5. Six transects will be established for the purposes of post-planting surveys: two transects outside of the mitigation area in adjacent seagrass beds; and four transects which cross the mitigation area and extend beyond the geo-textile tubes to the mean high water line. Surveys along these transects shall be performed at 6 months, 1 year, 2 years, and 3 years to determine success of mitigation. To determine success, three core samples will be taken at several points inside the mitigation area. These points will be located at 20-foot intervals along the four transects within the mitigation site. Coverage of seagrasses will be calculated using presence or absence of grass at each core sample. Similar methodology shall be followed on the transects located outside of the mitigation area but these sites will be examined only to determine if secondary impacts to existing grasses are occurring due to construction of the mitigation area.

6. If at least 70% coverage of the mitigation area is not achieved within 2 growing seasons following the initial planting, an additional planting effort will be made, and those areas not successfully vegetated will be replanted to original specifications.

7. The mitigation will be considered successful if 70% of the mitigation area is covered by seagrass within 3 years of the initial planting. If mitigation is determined to be unsuccessful at the end of the three year monitoring period the applicant will be required to take necessary corrective measures to insure success.

8. During the four surveys performed to determine success of seagrass planting and during the 5th, 7th, and 9th year after initial planting, surveys will be conducted along the geo-textile tubes. These geo tube surveys will be performed at 25-foot intervals along the entire length of the tubes and will include a bathymetric survey of the area outside the mitigation site to 50 feet from the outside of the tubes. These surveys will include notation of scouring/sediment accumulation at each bathymetric point, notation of condition of tubes (tears, slumping, etc.), and water depth. The applicant will be responsible for maintaining the integrity of the tubes based on information reported in the tube surveys.

9. The geo-textile tubes will be marked on-site by means of surveyed corner piles with signs.

10. The applicant will prepare monitoring reports detailing all required surveys. These monitoring reports will be submitted to the Corps, USFWS, TPWD, and NMFS within 60 days of survey completion.