


UNITED STATES GOVERNMENT  
MEMORANDUM

November 14, 1997



To: Chief, Office of Structural and Technical Support, Field Operations, GOM OCS Region (MS 5210)

From: Chief, Environmental Operations, Leasing and Environment, GOM OCS Region (MS 5400)

Subject: Site-Specific Environmental Assessment (SEA) Prepared for Burlington Resources proposal to remove Caisson No. 1, Lease OCS-G 7219, Brazos Area, Block 435, No. ES/SR 98-004

Burlington Resources proposal to remove Caisson No. 1 in the subject block has been reviewed. Our SEA for the subject action is complete and results in a Finding of No Significant Impact. This Finding is conditioned on the imposition of the following mitigative measures to ensure environmental protection, consistent environmental policy, and safety as required by the National Environmental Policy Act, as amended. This Finding is valid only insofar as the following conditions are imposed.

Our review indicates that there are pipelines in the vicinity of Platform No. 1 that may pose a hazard to your proposed operations. Therefore, please be advised that you will take precautions in accordance with Notice to Lessees and Operators No. 83-3, Section IV.B, prior to performing operations.

Our review of your application indicates that flight paths of aircraft to be used in support of your proposed activities may be over lands located within San Bernard National Wildlife Area, and area containing wildlife which could be sensitive to noise. Accordingly, please be reminded of Advisory Circular AC No. 91-36C, issued by the Federal Aviation Administration on October 14, 1984, which recommends that, where avoidance of such a noise-sensitive area is not practical, pilots make every effort to fly aircraft not less than 2000 feet above the surface, weather permitting.

Our review of your application indicates that the routes to be taken by boats and aircraft in support of your proposed activities are located in or could traverse Military Warning Area W-147. Therefore, please be advised that you will contact the Houston ART C Center, Houston, Texas 77032 (contact Mr. Ron Lazano at (281) 230-5536 or (281) 230-5630) concerning the control of electromagnetic emissions and use of boats and aircraft in Military Warning Area W-147.

No hang sites have been reported to the MMS in West Cameron Area, Block 359 by the Fishermen's Contingency Fund Office.

(Orig. Sgd.) Nick Wetzel

Jerry Brashier

cc: 102-01a ENV 5-4b (MS 5440)  
Lease OCS-G 7219 POD File (MS 5032)  
Public Information (MS 5034)

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UNITED STATES DEPARTMENT OF THE INTERIOR  
MINERALS MANAGEMENT SERVICE  
Gulf of Mexico OCS Region  
New Orleans, Louisiana

FINAL  
SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT  
ENDANGERED SPECIES/STRUCTURE REMOVAL  
No. ES/SR 98-004

Assessment of the Environmental Impacts  
of the Proposal to remove Caisson No. 1 in  
Brazos Area, Block 435  
Lease OCS-G 7219  
by Burlington Resources

Date Submitted: November 14, 1997

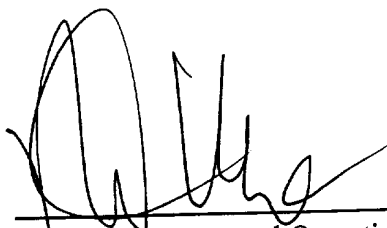
Commencement Date: November 15, 1997

Prepared by

Nick Wetzel

## SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT/FONSI/EIS DETERMINATION

Burlington Resources Offshore Inc.'s application to remove Caisson No. 1 in Brazos Area, Block 435, OCS-G 7219, has been reviewed. Our SEA on the subject action is complete and results in a Finding of No Significant Impact. Based on the conclusions of the SEA, there is no evidence to indicate that the proposed action will significantly (40 CFR 1508.27) affect the quality of the human environment. Preparation of an environmental impact statement is not required. Mitigation are recommended to ensure environmental protection, consistent environmental policy and safety as required by the National Environmental Policy Act, as amended; or measures needed for compliance with 40 CFR 1500.2(f) regarding the requirement for Federal agencies to avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.



Chief, Environmental Operations Section  
Leasing and Environment, GOM OCS Region

11-14-97  
Date

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## INTRODUCTION AND BACKGROUND

The purpose of this Site-Specific Environmental Assessment (SEA) is to assess the specific impacts associated with proposed structure-removal activities. The SEA is based on a Programmatic Environmental Assessment (PEA) (USDOJ, MMS, 1987) which evaluates a broader spectrum of potential impacts resulting from the removal of structures; e.g., platforms/caissons across the central and western planning areas of the Gulf of Mexico (GOM) Outer Continental Shelf. The PEA/SEA process is designed to simplify and reduce the size of environmental assessment documents by eliminating repetitive discussions of the same issues. This SEA conforms to the Minerals Management Service (MMS) and other appropriate guidelines for preparing environmental assessments by utilizing data presented in the PEA to complete the assessment. It presents site-specific data regarding the proposed structure removal activities and evaluates the removal's potential impacts. Mitigation measures are contained in this document to lessen potential impacts. Preparation of this SEA has allowed the determination of whether a Finding of No Significant Impact (FONSI) is appropriate or whether further assessment of the proposal(s) is necessary.

### I. DESCRIPTION AND NEED FOR THE PROPOSED ACTION

Burlington Resources proposes to remove Caisson No. 1 in Brazos Area, Block 435, Lease OCS-G 7219. The structure is located in a water depth of 69 ft and lies approximately 18 miles southeast of the shoreline of Matagorda County, Texas. According to the operator explosives will not be used for the structure removal. The operator plans to remove the structure by non-explosive cutting.

A discussion of the legal and regulatory mandates to remove abandoned oil and gas structures from Federal waters can be found in the PEA referenced in the Introduction. According to the operator, the well is depleted.

Since no explosives will be utilized during the proposed removal activities, the MMS has determined that sea turtles and marine mammals will not be affected. A Section 7 Consultation under the Endangered Species Act, as amended, will not be initiated.

Refer to Appendix A for structure specifications and additional information on the removal activities.

## II. ALTERNATIVES TO THE PROPOSED ACTION(S)

Alternatives to the proposed structure removal with mitigation originally submitted are:

### A. NON-REMOVAL OF THE STRUCTURE(S)

The alternative to the proposed structure removal as originally submitted is non-removal. Non-removal of the structure would represent a conflict with Federal legal and regulatory requirements, which mandate the timely removal of obsolete or abandoned structures within a period of one year after termination of the lease, or upon termination of a right-of-use and easement. Therefore, non-removal does not appear to be a valid alternative.

### B. REMOVAL OF THE STRUCTURE(S) AS PROPOSED WITH ADDED MITIGATION

Measures which Burlington Resources Offshore, Inc. proposes to implement to limit potential environmental effects are discussed in the structure removal application. Outer Continental Shelf Operating Regulations, Notices to Lessees and Operators, and other regulations and laws were identified throughout this assessment as existing mitigation for potential environmental effects associated with the proposed structure removal application. Additional information can be found in the Programmatic Environmental Assessment mentioned in the Introduction.

The following mitigative measures will be included in MMS' approval of the proposed <sup>ACTION</sup> pipeline to ensure environmental protection, consistent environmental policy, and safety as required by the NEPA:

1. Our review indicates that there are pipelines in the vicinity of Platform No. 1 that may pose a hazard to your proposed operations. Therefore, please be advised that you will take precautions in accordance with Notice to Lessees and Operators No. 83-3, Section IV.B, prior to performing operations.
2. Our review of your application indicates that flight paths of air crate to be used in support of your proposed activities may be over lands located within San Bernard National Wildlife Area, and area containing wildlife which could be sensitive to noise. Accordingly, please be reminded of Advisory Circular AC No. 91-36C, issued by the Federal Aviation Administration on October 14, 1984, which recommends that, where avoidance of such a noise-sensitive area is not practical, pilots make every effort to fly aircraft not less than 2000 feet above the surface, weather permitting.

### III. ENVIRONMENTAL EFFECTS

In accord with *The National Environmental Policy Act (NEPA) of 1969, as amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982)* and the Council on Environmental Quality (CEQ) implementing regulations 40 CFR Sec. 1502.15 *Affected Environment*, the following potential environmental effects were identified from the proposed action. Mitigative measures are included to eliminate or reduce the potential effect from the proposed activities to a level of insignificance as described in 40 CFR Sec. 1508.27

#### A. PHYSICAL ENVIRONMENT

A discussion of environmental geology, geologic hazards, meteorological conditions, physical and chemical oceanography, water quality and air quality can be found in the PEA referenced in the Introduction. Core analyses showed very soft silty clay (0-9 feet) and silty fine clay (9-27 feet). The proposed structure-removal activities are not in an area of sediment instability (mud flows, slumps, or slides). Environmental effects to the physical environment have been considered, but potential impacts from the proposed activities were deemed insignificant (40CFR 1508.27) and are not discussed in this SEA.

#### B. BIOLOGICAL ENVIRONMENT

A discussion of coastal habitats, protected, endangered and threatened species (birds, marine mammals, and sea turtles), and sensitive marine habitats are discussed in the PEA referenced in the Introduction. The PEA referenced in the Introduction delineates sensitive areas along the Texas coastline where whooping cranes and brown pelicans could be adversely impacted by structure-removal support activities.

The operator has indicated that helicopter flights and boat traffic would utilize a shore base in Freeport, Texas and flight paths of aircraft to be used in support of the proposed activities may be over lands located within San Bernard National Wildlife Area, and area containing wildlife which could be sensitive to noise. Accordingly, the operator will be reminded of Advisory Circular AC No. 91-36C, issued by the Federal Aviation Administration on October 14, 1984, which recommends that, where avoidance of such a noise-sensitive area is not practical, pilots make every effort to fly aircraft not less than 2000 feet above the surface, weather permitting.

A discussion of marine mammals occurring across the GOM and an assessment of the potential impacts of structure-removal activities on marine mammals can be found in the PEA (USDOJ, MMS, 1987). Fritts et al. (1983) conducted aerial surveys across a 9,514 sq mi area of waters lying in the central GOM. Results of these surveys indicate that the bottlenose dolphin is by far the most likely marine mammal to be encountered at the proposed structure removal. Since the proposed structure removal will utilize no explosives, no impacts are expected on marine mammals.



A discussion of sea turtles occurring across the central and western GOM and an assessment of the potential impacts of structure-removal activities on sea turtles can be found in the PEA referenced in the Introduction (USDOJ, MMS, 1987). Studies by Fritts et al. (1983) and Fuller and Tappan (1986) as well as stranding data from the Sea Turtle Stranding and Salvage Network (Teas, 1995) indicate that sea turtles may occur in the vicinity of the proposed activities. Definitive information on the probability of encountering sea turtles at the removal site during removal operations is scarce. Since the proposed structure removal will utilize no explosives, no impacts are expected on sea turtles.

Other environmental effects to the biologic environment have been considered, but potential impacts from the proposed activities were deemed insignificant (40CFR 1508.27) and are not discussed further in this SEA.

### C. OTHER CONSIDERATIONS

A discussion of socioeconomic, commercial and recreations fisheries, archaeological resources, military warning areas, explosive dumping areas, navigation and shipping areas, pipelines, cables, other minerals uses, and health and human safety can be found in the PEA referenced in the Introduction.

The proposed structure-removal application indicates that the routes to be taken by boats and aircraft in support of your proposed activities are located in or could traverse Military Warning Area W-147. Therefore, the operator will be advised to contact the Houston ARTC Center, Houston, Texas 77032 (contact Mr. Ron Laesione at (281) 230-5536 or (281) 230-5630) concerning the control of electromagnetic emissions and use of boats and aircraft in Military Warning Area W-147.

The proposed structure-removal activities will take place near a vessel safety fairway or anchorage area. Structures located near shore may serve as "landmarks" to vessels or helicopter operating in the area on a regular basis. The overall impacts of the proposed work on navigation and shipping are expected to be very low.

There are existing pipelines within 150 m (490 ft) of the proposed structure-removal activities. Since the operator must adhere to existing laws and regulations for abandonment of structures (including procedures required by Notice to Lessees and Operators No. 83-3), the proposed work will not pose a hazard to pipelines and cables in the area.

Other environmental effects to the socioeconomic concerns have been considered, but potential impacts from the proposed activities were deemed insignificant (40CFR 1508.27) and are not discussed further in this SEA.

### D. UNAVOIDABLE ADVERSE IMPACTS

A discussion of unavoidable adverse impacts can be found in the PEA referenced in the Introduction. One area of primary concern is the potential loss of habitat to the marine

environment. This topic is discussed in the PEA and a low level of impact is expected. Other unavoidable adverse impacts are considered to be minor.

#### IV. PUBLIC OPINION

A discussion of public concerns regarding structure removals can be found in the PEA referenced in the Introduction. No public comments have been received regarding the proposed structure-removal operations.

#### V. CONSULTATION AND COORDINATION

In accordance with the provisions of Section 7 of the Endangered Species Act, as amended, this proposed structure removal does not require coordination with the National Marine Fisheries Service.

## VI. BIBLIOGRAPHY AND SPECIAL REFERENCE(S)

- Federal Register*. 1995. Incidental take of marine mammals; bottlenose dolphins and spotted dolphins. 60 FR 197, October 12, 1995. pp. 53139-53147.
- Fritts, T.H., A.B. Irvine, R.D. Jennings, L.A. Collum, W. Hoffman, and M.A. McGehee. 1983. Turtles, birds, and mammals in the northern Gulf of Mexico and nearby Atlantic waters. U.S. Fish and Wildlife Service, Division of Biological Services, Washington, D.C.
- Fuller, D.A. and A.M. Tappan. 1986. The occurrence of sea turtles in Louisiana coastal waters. Coastal Fisheries Institute. Center for Wetland Resources. Louisiana State University. Baton Rouge, LA.
- Teas, Wendy, G. 1995. 1994 Semi-annual Report of the Sea Turtle Stranding and Salvage Network. Atlantic and Gulf Coasts of the United States. January - June 1994. National Marine Fisheries Service. Southeast Fisheries Center, Miami Laboratory, 75 Virginia Beach Drive, Miami, FL.
- U.S. Department of the Interior. Minerals Management Service. 1995. Final Environmental Impact Statement. Gulf of Mexico Sales 157 and 161: Central and Western Planning Areas. OCS EIS/EA MMS 95-0058. Washington, D.C. Available from NTIS, Springfield, VA. Volume I, and Volume II.
- U.S. Department of the Interior. Minerals Management Service. 1988. Final Environmental Impact Statement. Proposed OCS Oil and Gas Lease Sales 118 and 122 (Central and Western Gulf of Mexico). OCS EIS/MMS 88-0044. Washington, D.C. Available from NTIS, Springfield, VA: PB89-114185/AS.
- U.S. Department of the Interior. Minerals Management Service. 1987. Programmatic Environmental Assessment. Structure-removal activities Central and Western Gulf of Mexico Planning Areas. OCS/EA 87-0002. Gulf of Mexico OCS Region, New Orleans, LA.

VII. PREPARERS

Author:

Nick Wetzel - Supervisory Environmental Protection Specialist

Typist:

Elaine Clark - Secretary

VIII. APPENDICES

A. BURLINGTON RESOURCES OFFSHORE INC. CORRESPONDENCE

APPENDIX A

BURLINGTON RESOURCES OFFSHORE INC CORRESPONDENCE

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NONEXPLOSIVE

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UNITED STATES GOVERNMENT  
MEMORANDUM

Nw 10, 97

To: Chief, Environmental Operations Section, Leasing and Environment, Gulf of Mexico Region (MS 5440)

From: Chief, Office of Structural and Technical Support, Field Operations, Gulf of Mexico Region (MS 5210)

Subject: Platform Removal

OPERATOR: Burlington

Control No. 98-004

PLATFORM	AREA/BLOCK	LEASE
<u>BA 435</u>	<u>Platform No. 1</u>	<u>OCS 67219</u>
_____	_____	_____
_____	_____	_____

Shore Base: Freeport, LA

The attached application is forwarded to your office so that the finding of no significant impact can be prepared. Since explosives will not be used in this removal operation, an Endangered Species Act Section 7 Consultation Documentation is not required. There are ~~are~~ no existing pipeline(s) within 500 feet of the proposed removal location. Should you require any additional information please contact Mr. Arvind Shah at Extension 2894.

Arvind Shah  
Felix Dyhrkopp

Enclosure

cc:

Scheduled for removal  
Nov. 15, 97.

# BURLINGTON RESOURCES

GULF COAST DIVISION  
November 7, 1997

FAXED 11-7-97 ✓  
FEDERAL EXPRESS

United States Department of the Interior  
Minerals Management Service  
Gulf of Mexico - OCS Region  
1201 Elmwood Park Boulevard  
New Orleans LA 70123-2394

Attention: Mr. Arvind Shah, OSTs  
Re: Brazos Block 435  
OCS-G-7219, No.1 Well-Protector



Gentlemen:

**BURLINGTON RESOURCES OFFSHORE INC.** (Burlington) plans to remove the above referenced structure on or about **November 15, 1997**. Burlington will remove the inner casing strings, piles, caisson and deck with a lift boat and/or derrick barge. The four (4) casings, (2) piles and caisson will be severed with abrasive cutting equipment at least 15 feet below the mudline.

Enclosed are two (2) copies of our Platform Removal Application for your review and approval.

Our site clearance trawling application will be submitted under a separate cover letter.

Should you require any additional information in regard to this application, please call me at 281/878-1161.

Sincerely,

**BURLINGTON RESOURCES OFFSHORE INC.**

A handwritten signature in cursive script that reads "Thomas G. Becnel".

Thomas G. Becnel  
Senior Staff Regulatory Compliance Representative  
Offshore Division

TGB

enclosure

cc:	T. Becnel	Well File	Partner(s)
	J. Fox	TB.RF	
	C. Turner	G. Ries	

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# PROPOSED OCS PLATFORM/STRUCTURE REMOVAL

## I. Responsible Party

A. Lease Operator Name Burlington Resources Offshore Inc. (Burlington)

B. Address 400 N. Sam Houston Parkway E., Suite 1200

Houston TX 77060-3593

C. Contact Person and Telephone Number Tom Becnel

281/878-1161

D. Support Base Freeport, Louisiana

## II. Identification of Structure to be Removed

A. Platform Name BRI-BA-435-1

B. Location (Lease, Area, Block, and Block Coordinates) OCS-G-7219, Brazos 435

X=3,099,057', Y=276,592'

C. Dated Installed (Year) 1990

D. Proposed Date of Removal (Month/Year) 11/97

E. Water Depth 69'

## III. Description of Structure to be Removed

A. Configuration (Attached a Photograph or a Diagram)

B. Size The platform is a braced 48" caisson(Guardian Structure), 1-slot well protector, with a 21' X 21' deck and a helideck.)

C. Number of Legs/Casings/Pilings 1 caisson/2 piles / 4 casing strings

NOTE: The well will be P&A'd, the pipeline abandoned and the casings, piles and caisson severed prior to salvaging the structure.

D. Diameter and Wall Thickness of Legs/Casings/Pilings Caisson (48"x 2" W.T.),

Piles: 36" x 1.25" W.T.

Casings: 30" x 1" W.T. ; 16" ,65# ; 10 3/4" , 51# ; 7 5/8" , 33.7#.

E. Are Piles Grouted? No Inside or Outside? N/A

F. Brief description of soil composition and condition Core analyses showed very soft silty clay (0-9') and silty fine sand (9-27').

## IV. Purpose

Brief description of the reason for removing the structure. This well

is depleted. MMS requires that structures be removed within one year of lease



expiration. The lease was terminated September 27, 1997.

V. Removal Method

A. Brief description of method to be used Lift Boat / Derrick Barge  
Lifting operations - sever casings , piles and caisson with sand cutter at least 15-25' BML.

B. If explosives are used, provide the following:

1. Kind of Explosives: n/a

2. Number and sizes of Charges: n/a

a. Single Shot or Multiple Shots? n/a

b. If multiple shots, sequence and timing of detonations: n/a

3. Bulk or Shaped Charge: n/a

a. Depth of Detonation Below Mud Line n/a

b. Inside or Outside Piling? n/a

C. Pre-Removal Monitoring Techniques

1. Is the use of scare charges or acoustic devices proposed? n/a

If yes, provide the following:

a. Number and Kind \_\_\_\_\_

b. Size of Charges \_\_\_\_\_

c. Brief description of flow, where, and when scare charges or acoustic devices will be used \_\_\_\_\_

2. Will divers or acoustic devices be used to conduct a pre-removal survey to detect presence of turtles and marine mammals? n/a

If yes, briefly describe the proposed detection method. n/a

D. Post-Removal Monitoring Techniques

1. Will transducers be used to measure the pressure and impulse of the detonations? n/a

2. Will divers be used to survey the area after removal to determine any effects on marine

life? n/a

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VI. Biological Information

If available, provide the results of any recent biological surveys conducted in the vicinity of the structure. If available, describe any recent observations of turtles or marine mammals at the structure site.

n/a

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HELIDECK T.O. DK. R  
EL. (+) 70'-3 3/8"

PRODUCTION DK. T.O.G.  
EL. (+) 53'-10 1/2"

CONDUCTOR CUT-OFF  
EL. (+) 55'-0"

48" Ø CONDUCTOR  
(EXISTING)

INTERMEDIATE LANDING  
EL. (+) 23'-10 1/2"

SWING ROPE

DESIGN LOA

BOAT LANDING T.O.G.  
EL. (+) 6'-1 1/2"

36" Ø PILES

M.L.W. EL. 0'-0"

MUD LINE  
EL. (-) 69'-0"

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ASSEMBLY ELEVATION

SCALE — 3/16" = 1'-0"

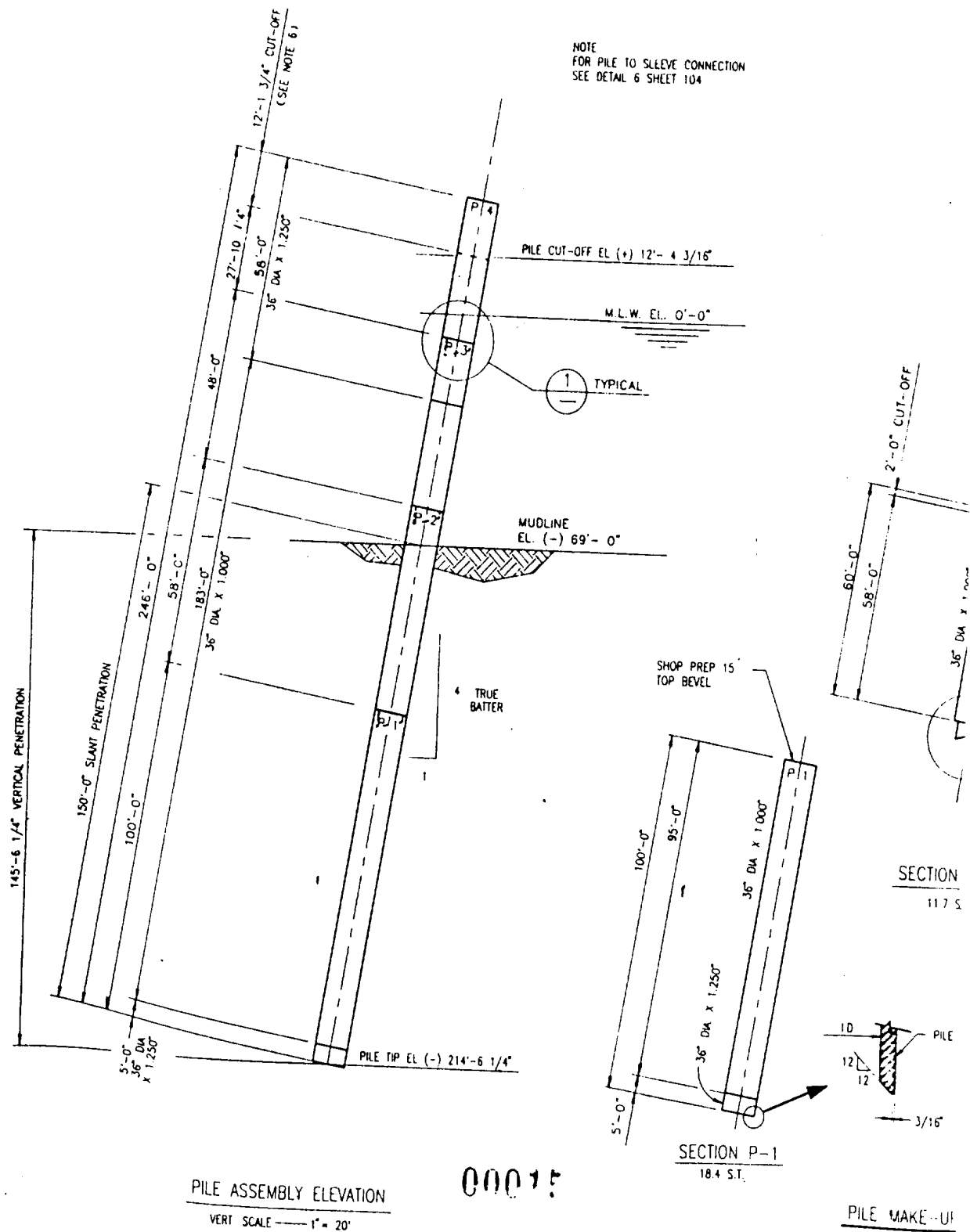
**NOTES:**

1. ALL STRUCTURAL SHAPES AND PLATES SHALL CONFORM TO ASTM A-36 EXCEPT WHERE SHOWN OTHERWISE. ALL MILL MANUFACTURED PIPES SHALL CONFORM TO API-5L GRADE B OR ASTM -53 EXCEPT WHERE SHOWN OTHERWISE.
2. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 LATEST REVISION, FULL PENETRATION UNLESS OTHERWISE NOTED.
3. ALL TUBULAR CONNECTIONS SHALL BE IN ACCORDANCE WITH API RP-2A.
4. ALL REMOVABLE HANDRAILS, STAIRS, LADDERS, GRATING & MISCELLANEOUS HARDWARE SHALL BE HOT-DIP GALV.

5. ALL FABRICATION SHALL BE IN ACCORDANCE WITH DIAMOND SHAMROCK SPECIFICATIONS.
6. ALL PAINTING AND GALVANIZING SHALL BE IN ACCORDANCE WITH DIAMOND SHAMROCK SPECIFICATIONS.
7. ALL FAYING SURFACES SHALL BE CONTINUOUSLY SEAL WELDED.
8. GRATING SHALL BE WELDED A LENGTH OF 4" AT 12" ON CENTER AT PERIMETER SUPPORTS AND AT EVERY THIRD BAR ON TRANSVERSE SUPPORTS, UNLESS NOTED OTHERWISE.
9. BAND ALL EXPOSED EDGES OF GRATING WITH BAR 1 1/2" X 1/4".

10. TRIM EXISTING CONDUCTOR BASE PLATE AS REQ'D TO ALL 49" I.D. SLEEVE TO BE INSTALLED.
11. INSTALLATION CONTRACTOR TO SCRAPE BARNACLES FROM EXISTING 48" Ø CONDUCTOR FOR BOATLANDING SLEEVE, RIG CLAMPS AND ANODE CLAMPS INSTALLATION.
12. INSTALLATION CONTRACTOR SHALL CHECK ADEQUACY, LOCATION AND ORIENTATION ALL LIFTING EYES FOR PROPER INSTALLATION.

# BEST AVAILABLE COPY



PILE ASSEMBLY ELEVATION

VERT SCALE --- 1" = 20'

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**NOTES:**

FOR GENERAL NOTES SEE SHEET 101  
 INSTALLATION CONTRACTOR TO PROVIDE 35 FT. OF 36" DIA X 1.000" (MIN.) FOLLOWER FOR SECTION P-4.  
 PAINT TOP OF P-1 THRU P-4 WITH 6" HIGH LETTERS, INSIDE & OUTSIDE OF EACH PILE SECTION AS SHOWN.  
 ERECTOR TO PROVIDE ALL LIFTING AIDS AND CONFIRM ADDITIONS FOR HIS EQUIPMENT.  
 PILE SECTIONS ARE DESIGNED FOR DRIVING WITH DELMAG D46-32 HAMMER OR EQUAL.

6. PILE IS DESIGNED FOR 10'-0" UNDERDRIVE AND 10'-0" OVERDRIVE.  
 7. PILE SECTION P-4 CAN BE DRIVEN WITH D-62 DIESEL HAMMER IF REQ'D.