

CEL MN-CT-CC


14. NAME AND ADDRESS OF OFFEROR (include ZIP Code) Pittman Construction Co., Inc. 10 Veterans Blvd., Suite 325 Metairie, LA 70005 DUNS NO. 008200768		15. TELEPHONE NO. (include area code) (504) 835-0747
CODE		16. REMITTANCE ADDRESS (include only if different than item 14) P. O. Box 8116 New Orleans, LA 70182
17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirement stated in item 13D. Failure to insert any number means the offeror accepts the minimum in item 13D.)		

AMOUNTS ▶

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS
 (The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)

AMENDMENT NO.	1	2							
DATE	5/18/93	5/28/93							

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) A. E. Pittman, President	20B. SIGNATURE 	20C. OFFER DATE 6/9/93
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AWARD (To be completed by Government)

21. ITEMS ACCEPTED:

CONTRACT NO. DACW29-93-C-0081
 Bidding Schedule: Items 0001 thru 0008

22. AMOUNT \$2,564,264.00	23. ACCOUNTING AND APPROPRIATION DATA 96x3122 "Lake Pont N.O. East Unit"
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24. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM 26	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()
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26. ADMINISTERED BY CODE	27. PAYMENT WILL BE MADE BY
New Orleans Area Office P.O. Box 60267 Foot of Prytania Street, Rm. 186 New Orleans, LA 70160-0267	Disbursing Officer U.S. Army Engineer District, New Orleans P.O. Box 60267 New Orleans, LA 70160-0267

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

<input type="checkbox"/> 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.	<input type="checkbox"/> 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.
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28A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)	29A. NAME OF CONTRACTING OFFICER (Type or print) Diane K. Pecoul
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28B. SIGNATURE	29B. DATE	31B. UNITED STATES OF AMERICA BY 	31C. AWARD DATE 28 June 1993
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SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)	1. SOLICITATION NO. DACW29-93-B-0025	2. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 04/21/93	PAGE OF PAGES 1 / 2
	IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.			

4. CONTRACT NO. DACW29-93-C-0081	5. REQUISITION/PURCHASE REQUEST NO. ED0000-3336-0063	6. PROJECT NO. DACW29-93-B-0025
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7. ISSUED BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267	CODE ISSUE1	8. ADDRESS OFFER TO US ARMY ENGR DIST NEW ORLEANS ATTN CELMN-CT PO BOX 60267 NEW ORLEANS LA 70160-0267
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9. FOR INFORMATION CALL:	A. NAME Molly M. Block	SC2	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (504)862-2879
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SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".
 10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, identifying no., date):

11. The Contractor shall begin performance within 10 calendar days and complete it within 400 calendar days after receiving
 award, notice to proceed. This performance period is mandatory, negotiable. (See _____.)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	12B. CALENDAR DAYS 007
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13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 0 copies to perform the work required are due at the place specified in Item 8 by 1400 (hour) local time 05/25/93 (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee is, is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than 30 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

SOLICITATION NO. DACW29-
 BIDDING SCHEDULE
 (To be attached to Bid Form)
 LAKE PONTCHARTRAIN LA. & VICINITY, HURRICANE PROTECTION PROJECT,
 HIGH LEVEL PLAN, 17TH ST. OUTFALL CANAL, FLOOD PROTECTION
 IMPROVEMENT PROJECT, CAPPING OF FLOODWALLS, EAST SIDE
 IMPROVEMENTS, ORLEANS PARISH, LA

Item No.	Description	Estimated Quantity	Unit	Unit Price	Est. Amt.
0001.	Mobilization and Demobilization	Lump Sum	LS		
0002.	Clearing	Lump Sum	LS		
0003.	Structural Excavation and Backfill	Lump Sum	LS		
0004.	Fertilizing, Seeding and Mulching	Lump Sum	LS		
0005.	Driving Existing Sheet Piles in Place	Lump Sum	LS		
0006.	Reinforced Concrete Cap	Lump Sum	LS		
* 0007.	Erosion Control				
0007AA.	First 11,600 LF	11,600	LF		
0007AB.	All Over 11,600 LF	2,300	LF		
0008.	Cofferdam	Lump Sum	LS		
TOTAL					<u>\$ 2,564,264.⁰⁰</u>

Award will be made as a whole to one bidder.

NOTE: Bidders shall furnish unit prices for all items listed on schedule of bid items which require unit prices. If the bidder fails to insert a unit price in the appropriate blank for required items but does furnish an extended total or an estimated amount for such items, the Government will deem his unit price to be the quotient obtained by dividing the extended estimated amount for that line item by the quantity. IF THE BIDDER OMITTS BOTH THE UNIT PRICE AND THE EXTENDED ESTIMATED AMOUNT FOR ANY REQUIRED ITEM, HIS BID WILL BE DECLARED NON-RESPONSIVE. Quantities shown on Bid Item 0007 are for evaluation purposes. Payment for these items will be made on the basis of actual quantities used.

VARIATIONS IN ESTIMATED QUANTITIES - SUBDIVIDED ITEMS. EFARS 12.402(100)--JUL 89. The Variations in Estimated Quantities clause is applicable only to Item No. 0007.

- a. Variation from the estimated quantity in the actual work performed under any second or subsequent sub-item or elimination of all work under such a second or subsequent sub-item will not be the basis for an adjustment in contract unit price.
- b. Where the actual quantity of work performed for Item No. 0007 is less than 85% of the quantity of the first sub-item listed under such items, the Contractor will be paid at the contract unit price for that sub-item for the actual quantity of work Performed and, in addition, an equitable adjustment in contract price shall be made in accordance with the clause FAR 52.212-11, "Variations In Estimated Quantities".
- c. If the quantity of work performed under Item No. 0007 exceeds 115% or is less than 85% of the total estimated quantity of the sub-items under that item, and/or if the quantity of work performed under the second sub-item or any subsequent sub-item under Item No. NONE exceeds 115% or is less than 85% of the estimated quantity of any such sub-item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with the clause FAR 52.212-11, "Variations in Estimated Quantities".

SECTION K
REPRESENTATIONS, CERTIFICATIONS AND
OTHER STATEMENTS OF OFFERORS

K.1

DEFINITION OF SMALL BUSINESS CONCERN.

A. EXPLANATION OF TERM. "Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria and size standards in 13 C FAR 121. (FAR 19-101)

B. SIZE STANDARDS FOR CONSTRUCTION AND SPECIAL TRADES.

1. CONSTRUCTION. A concern is small if its average annual receipts for its preceding 3 fiscal years did not exceed \$17 million. However, if 75 percent or more of the work (in terms of dollar value) called for by the contract is classified in one of the industries, subindustries, or classes of products listed in this paragraph, the concern is small if its average annual receipts for its preceding 3 fiscal years did not exceed the size standard for that industry, subindustry, or class of products. (See Division C, "Contract Construction", of the SIC Manual.)

2. DREDGING. A concern is small if (1) its average annual receipts for its preceding 3 fiscal years did not exceed \$13.5 million, and (2) at least 40 percent of the yardage in the contract's plans and specifications is dredged with equipment owned by the concern or obtained from another small business dredging concern. (FAR 19.102-1)

K.2

DEBARRED OR SUSPENDED BIDDERS.

By entering into this contract, the Contractor certifies that neither he nor any person or firm who has an interest in the Contractor's firm is a person ineligible to be awarded Government contracts by virtue of being suspended or debarred in accordance with FAR subpart 9.4.

K.3

NONDOMESTIC CONSTRUCTION MATERIALS

As required by the contract clause entitled "BUY AMERICAN ACT - CONSTRUCTION MATERIALS (APR 1984)", the following is a list of items of Nondomestic Construction Materials the bidder proposes to use, showing quantity, unit price, and intended use of each item:

Item	Quantity	Unit Price	Intended Use
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K.4

CONTRACTOR ESTABLISHMENT CODE (AUG 1989)(52.204-4)

In the block with its name and address, the offeror should supply the Contractor Establishment Code applicable to that name and address, if known, to the offeror. The number should be preceded by "CEC:" Offerors should take care to report the correct CEC and not a similar number assigned to the Offeror in a different system.

The CEC is a 9-digit code assigned to a contractor establishment that contracts with a federal executive agency. The CEC system is a contractor identification coding system which is currently the Dun and Bradstreet Data Universal Numbering System (DUNS). The CEC system is distinct from the Federal Taxpayer Identification Number (TIN) system.

The Government will obtain a Contractor Establishment Code for any awardee that does not have or does not know its CEC.

K.5

REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY (NOV 1990)

(a) Definitions. The definitions at FAR 3.104-4 are hereby incorporated in this provision.

(b) Certifications. As required in paragraph (c) of this provision, the officer or employee responsible for this offer shall execute the following certification:

CERTIFICATE OF PROCUREMENT INTEGRITY

(1) I, A. E. Pittman, am the officer or employee responsible for the preparation of this offer and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certificate, I have no information concerning a violation or possible violation of subsection 27(a), (b), or (f) of the Office of Federal Procurement Policy Act, as amended (41.U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement.

(2) As required by subsection 27(e)(1)(B) of the Act, I further certify that, to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of _____

personally and substantially in the preparation or submission of this offer has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsections 27 (a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.

(3) Violations or possible violations: NONE

(Continue on plain bond paper if necessary and label Certificate of Procurement Integrity (Continuation Sheet), ENTER NONE IF NONE EXIST)

(4) I agree that, if awarded a contract under this solicitation, the certifications required by subsection 27(e)(1)(B) of the Act shall be maintained in accordance with paragraph (f) of this provision.

 6/9/93
(Signature of the officer or employee responsible for the offer & date)

A. E. Pittman

6/9/93

(Typed name of the officer or employee responsible for the offer)

+Subsections 27 (a), (b), and (d) are effective on December 1, 1990.
Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

(End of certification)

(c)(1) For procurement using sealed bidding procedures, the signed certifications shall be submitted by each bidder with the bid submission except for procurements using two-step sealed bidding procedure (see subpart 14.5). For those procurements, the certifications shall be submitted with submission of the step two sealed bids. A certificate is not required for indefinite delivery contracts (see Subpart 16.5) unless the total estimated value of all orders eventually to be placed under the contract is expected to exceed \$100,000.

(2) For contracts and contract modifications which include

options, a certificate is required when the aggregate value of the contract or contract modification and all options (see 3.104-4(e)) exceeds \$100,000.

(3) Failure of a bidder to submit the signed certificate with its bid shall render the bid nonresponsive.

(d) Pursuant to FAR 3.104-9(d), the Offeror may be requested to execute additional certifications at the request of the Government. Failure of an Offeror to submit the additional certifications shall cause its offer to be rejected.

(e) A certification containing a disclosure of a violation or possible violation will not necessarily result in the withholding of award under this solicitation. However, the Government, after evaluation of the disclosure, may cancel this procurement or take any other appropriate actions in the interests of the Government, such as disqualification of the Offeror.

(f) In making the certification in paragraph (2) of the certificate, the officer or employee of the competing contractor responsible for the offer may rely upon a one-time certification from each individual required to submit a certification to the competing contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the contractor. If a contractor decides to rely on a certification executed prior to the suspension of section 27 (i.e., prior to December 1, 1989), the Contractor shall ensure that an individual who has so certified is notified that section 27 has been reinstated. These certifications shall be maintained by the Contractor for 6 years from the date a certifying employee's employment with the company ends or, for an agent, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.

(g) Certifications under paragraphs (b) and (d) of this provision are material representations of fact upon which reliance will be placed in awarding a contract.

(End of provision)

Contracting Division

SMALL BUSINESS AND SMALL DISADVANTAGED
BUSINESS SUBCONTRACTING PLAN

DATE: June 23, 1993

CONTRACTOR Pittman Construction Co., Inc.

ADDRESS 110 Veterans Blvd., Suite 325, Metairie, LA 70005

SOLICITATION NO. DACW29-93-B-0025 CONTRACT NO. _____

ITEM/SERVICE General Construction

The following, together with any attachments, is hereby submitted as a Subcontracting Plan to satisfy the applicable requirements of Public Law 95-5007 as implemented by OFPP Policy Letter 80-2, and FAR 19.702.

1. The following goals (expressed in terms of dollar values and percentage of total planned subcontracting dollars) are applicable to the contract cited above or to the contract awarded under the solicitation cited.

(a) Total Estimate Contract Cost *Total Estimated Dollars
Planned to be Subcontracted

\$ 2,564,264.00 \$ 834,000.00

*(b) Of the Total Estimated Dollar Planned to be Subcontracted the following breakdown is established:

<u>49</u> %	(i) To Large Business	\$ <u>406,000.00</u>
<u>25</u> %	(ii) To Small Business	\$ <u>209,000.00</u>
<u>26</u> %	(iii) To Small Disadvantaged	\$ <u>219,000.00</u>

_____ 3

(c) The following principal products and/or services will be under this contract, and the distribution among large (LB), small (SB) and small disadvantaged (SDB) business concerns is as follows:

(LB) Concrete (Material), Steel Sheet Piling (Material)

(SB) Landscaping, Lab. Testing, Temp. Road (Materials), Re-steel (Material)

(SDB) Reinforcing Steel Erection, Hauling Materials, Painting

(Attachment May Be Used if Additional Space is Required).

(d) the following method was used in developing sub-contract goals (i.e., Statement explaining how the product and how the areas to be sub-contracted were established, how the areas to be sub-contracted to small and small disadvantaged business concerns were determined, and, how small and small disadvantaged business concerns capabilities were determined, to include identification of source lists utilized in making those determinations),

(e) Indirect and overhead costs (check one below):

_____ have been have not been

included in the goals specified in 1(a) and 1(b).

(f) If "have been" is checked, explain the method used in determining the proportionate share of indirect and overhead costs to be allocated as sub-contracts to small business concerns and small disadvantaged business concerns.

2. The following individual will administer the sub-contracting program.

Name: Sandy Boudreaux

Address & Telephone: 110 Veterans Blvd., Suite 325, Metairie, LA 70005
(504) 835-0747

Title: Minority Coordinator

This individual's specific duties, as they relate to the firm's sub-contracting program, are as follows:

General overall responsibility for this company's Small Business Program, the development, preparation and execution of individual sub-contracting plans and for monitoring performance relative to contractual sub-contracting requirements contained in this plan, including but not limited to:

- (a) Developing and maintaining bidders lists of small and small disadvantaged business concerns from all possible sources.
- (b) Ensuring that procurement packages are structured to permit small and small disadvantaged business concerns to participate to the maximum extent possible.
- (c) Assuring inclusion of small and SDB concerns in all solicitations for products or services which they are capable of providing.
- (d) Reviewing solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit SB and SDB participation.
- (e) Ensuring periodic rotation of potential sub-contractors on bidder's list.
- (f) Ensuring that the bid proposal review board documents its reasons for not selecting low bids submitted by small and small disadvantaged business concerns.
- (g) Ensuring the establishment and maintenance of records of solicitations and subcontract award activity.
- (h) Attending or arranging for attendance of company counselors at Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, etc.
- (i) Conducting or arranging for conduct of motivational training for purchasing personnel pursuant to the intent of P.L. 95-507.
- (j) Monitoring attainment of proposed goals.
- (k) Preparing and submitting periodic sub-contracting reports (SF-294, SF-295, etc.) as required.
- (l) Coordinating contractor's activities during the conduct of compliance reviews by Federal agencies.

(m) Coordinating the conduct of contractor's activities involving its small and small disadvantaged business sub-contracting program.

(n) Additions to (or deletions from) the duties specified above are as follows:

3. The following efforts will be taken to assure that small disadvantaged business concerns will have an equitable opportunity to compete for sub-contract:

(a) Outreach efforts will be made as follows:

(i) Contacts with minority and small business trade associations.

(ii) Contacts with business development organizations.

(iii) Attendance at small and minority business procurement conferences and trade fairs.

(iv) Source will be requested from SBA's PASS System.

(b) The following internal efforts will be made to guide and encourage buyers:

(i) Workshops, seminars and training programs will be conducted.

(ii) Activities will be monitored to evaluate compliance with this sub-contracting plan.

(c) Small and small disadvantaged business concern source lists, guides and other data identifying small disadvantaged business concerns will be maintained and utilized by buyers in soliciting sub-contracts.

(d) Additions to (or deletions from) the above listed efforts are as follows:

4. The bidder (contractor) agrees that the clause entitled Utilization of Small Business Concerns and Small Business Concerns Owned and Controlled Socially and Economically Disadvantaged Individuals will be included in all sub-contracts which offer further sub-contracting opportunities, and all sub-contractors except small business concerns who received sub-contracts in excess of \$500,000 will be required to adopt and comply with a sub-contracting plan similar to this one. Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable sub-contracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies /services involved, the availability of potential small and small disadvantaged sub-contractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to sub-contractors facilities to review applicable records and sub-contracting program progress.

5. The bidder (contractor) agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the bidder with the sub-contracting plan and with the clause entitled Utilization of Small Business Concerns and Small Business Concerns Owned and Controlled by Socially and Economically Disadvantaged Individuals, contained in the contract.

6. The bidder (contractor) agrees that he will maintain at least the following types of records to document compliance with

this sub-contracting plan:

(a) Small and small disadvantaged business concern source lists, guides and other data identifying SB/SDBC vendors.

(b) Organizations contracted for small and disadvantaged business sources.

(c) On a contract-by contract basis, records on all sub-contract solicitations over \$100,000 indicating on each solicitation (1) whether small business concerns were solicited, and if not, why not; (2) whether small disadvantaged business concerns were solicited, and if not, why not; and (3) reasons for the failure of solicited small or small disadvantaged business concerns to receive the sub-contract award.

(d) Records to support other outreach efforts: Contacts with Minority and Small Business Trade Associations, etc. Attendance at small and minority business procurement conferences and trade fairs.

(e) Records to support internal activities to guide and encourage buyers: workshops, seminars, training programs, etc. Monitoring activities to evaluate compliance.

(f) On a contract-by contract basis, records to support sub-contract award data to include name and address of sub-contractor.

(g) Records to be maintained in addition to the above are as follows:

Signed: 

Typed Name: A. E. Pittman

Title: President


(FOR GOVERNMENT USE ONLY)

Contract

No. DACW29-93-C-0081

I. Recommend approval. The Contractor's subcontracting plan is in compliance with FAR Subpart 19.7 and DFAR Subpart 219.7 "Subcontracting with Small Business and Small Disadvantaged Business Concerns."

25 Jun 93
Date


K. J. Enclade
Small and Disadvantaged Business
Utilization Advisor

II. Plan Approved by: 

28 June 1993
Date

Diane K. Pecoul
Contracting Officer

NOTICE TO CONTRACTOR

This solicitation contains two sets of goals for minority participation in construction crafts on this contract. They are the New Orleans Hometown Plan and the New Orleans Standard Metropolitan Statistical Area (SMSA).

Contractor will determine the goals applicable to him by the following:

Hometown Plan applies only to those contractors who are signatory to the Hometown Plan and utilizing crafts signatory to the plan.

New Orleans Standard Metropolitan Statistical Area (SMSA) applies to all contractors in the New Orleans SMSA area not signatory to the Hometown Plan, or utilizing crafts not signatory to the plan.

Federal Register/Vol. 45, No. 194/Friday, October 3, 1980

**SOLICITATION PROVISION
NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY**

The Bidder's attention is called to the "EQUAL OPPORTUNITY" and "LOCAL AFFIRMATIVE ACTION PLAN" clauses of the contract.

The acceptable ranges of minority manpower utilization, expressed in percentage terms, are as follows:

<u>Timetables</u>	<u>Goals for Minority Participation for Each Trade</u>	<u>Goals for Female Participation in Each Trade</u>
Indefinitely	20% - 23%	6.9%

The Bidder shall, within 5 days after a request therefor by the Contracting Officer of his duly authorized representative, submit the following information.

- (a) A list of the construction trades he intends to use, either directly or through subcontractors at any tier, in the performance of work covered by this solicitation;
- (b) A list of the labor organizations with which he has collective bargaining agreements and which are signatories to the Hometown Plan with respect to trades for which specific commitments to goals of minority manpower utilization are set forth in the Hometown Plan;
- (c) A list of the labor organizations with which he has collective bargaining agreements and which are not signatories to the Hometown Plan or which are signatories thereto but with respect to trades for which no specific commitments to goals of minority manpower utilization are set forth in the Hometown Plan, and
- (d) A list of all current construction work or contracts to which he is a party in any capacity in the covered area.

As used in this NOTICE and the contract to result from this solicitation:

- (a) "Hometown Plan" or "Plan" means the NEW ORLEANS Plan, consisting of "An Agreement for Implementation of Employment of Minorities in the New Orleans Building Construction Industry."
- (b) "The covered area" means Orleans, Jefferson, St. Bernard, St. Tammany, St. Charles, St. John, Lafourche, Plaquemines, Washington, Terrebonne, Tangipahoa*, Livingston** and St. James*** Parishes, Louisiana.
- (c) "Director, OFCC" means the Director, Office of Federal Contract Compliance, United States Department of Labor, or any person to whom he delegates authority; and
- (d) "Minority" means Negro, Spanish-surnamed American, Oriental, and American Indian, and includes both men and women.

*Area covered is east of the Illinois Central Railroad.

**Area covered is southeast of the line from a point of the Livingston & Tangipahoa Parish line adjacent from New Orleans and Baton Rouge.

***Area covered is southeast of a line drawn from the town of Gramercy to the point of intersection of St. James, Lafourche and Assumption Parishes.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (APRIL 1984)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade		Goals for Female Participi for Each Trade
SMSA Counties MS	19.2%	6.9%
SMSA Counties LA	31.0%	6.9%
NON-SMSA Counties	27.7%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Program office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals; The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goal shall be a violation of the contract. Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Director, Office of Federal Contract Compliance Programs, within 10 working days following award of a construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notifications shall list the-

- (1) Name, address, and telephone number of the subcontractor;
 - (i) Employer identification number of the subcontractor;
- (2) Estimated dollar amount of the subcontract;
- (3) Estimated starting and completion dates of the subcontract; and

(4) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation the "covered area" is (FAR 52.222-23) Economic Area 113, New Orleans, LA as follows:

Standard Metropolitan Statistical Area

(SMSA) Counties

0920 Biloxi - Gulfport, MS ----- 19.2%

MS Hancock: MS Harrison: MS Stone

5560 New Orleans, LA ----- 31.0%

LA Jefferson: LA Orleans: LA St. Bernard; LA St. Tammany

Non-Standard Metropolitan Statistical Area

(NON-SMSA) Counties: ----- 27.7%

LA Assumption: LA Lafourche; LA Plaquemines; LA St. Charles;

LA St. James; LA St. John the Baptist; LA Tangipahoa;

LA Terrebonne; LA Washington; MS Forrest; MS Lamar; MS Marion;

MS Pearl River; MS Perry; MS Pike; MS Walthall

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SECTION C2A - ENVIRONMENT PROTECTION

PART 1 - GENERAL

C2A-1. SCOPE. The work covered by this section consists of furnishing all labor, materials and equipment and performing all work required for the prevention of environmental pollution during and as the result of construction operations under this contract except for those measures set forth in other provisions of these specifications. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to man; or degrade the utility of the environment for esthetic and recreational purposes. The control of environmental pollution requires consideration of air, water, and land, and involves noise, solid waste-management and management of radiant energy and radioactive materials, as well as other pollutants.

C2A-2. QUALITY CONTROL.

C2A-2.1 General. The Contractor shall establish and maintain quality control for environment protection to assure compliance with contract specifications and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Submit plan of Environmental Pollution Control.
- (2) Procure applicable Federal, State, and Local regulations on pollution control.
- (3) Air Pollution - Checks made on dust, smoke, noise.
- (4) Water Pollution - Checks made on disposal of water, oil, etc.
- (5) Land Pollution - Checks made on disposal of debris, restoration of construction sites, etc.
- (6) Training Course for Employees.

C2A-2.2 Reporting. The original and two copies of these records, as well as the records of corrective action taken, shall be furnished the Government daily. Format of report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C2A-3. APPLICABLE REGULATIONS. In order to prevent, and to provide for abatement and control of any environmental pollution arising from construction activities in the performance of this contract, the Contractor and his subcontractors shall comply with

the National Pollution Discharge Elimination System (NPDES) General Permit requirements, all applicable Federal, State, and Local laws, and regulations concerning environmental pollution control and abatement.

C2A-4. NOTIFICATION. The Contracting Officer will notify the Contractor in writing of any non-compliance with the foregoing provisions and the action to be taken. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor.

C2A-5. NPDES STORM WATER DISCHARGE RULE. The Contractor and/or subcontractor(s) shall review the Pollution Prevention Plan for compliance. The Pollution Prevention Plan is as follows:

(1) The project is located in Jefferson Parish, Louisiana, at latitude 30°01'15" and longitude 90°07'30". The work consists of constructing 11,200 linear feet of capped I-wall, driving and trimming 585 linear feet of existing sheet piling. The work includes temporary access roads and travel on local streets. The work also includes clearing, grubbing, fertilizing and seeding and other incidental work.

(2) The total project area is 36.15 acres. Approximately 2.7 acres are expected to undergo excavation during the construction contract.

(3) The project site consists of existing levees. The floodside of the existing levee drains storm water runoff into the 17th Street Outfall Canal, which drains into Lake Pontchartrain. Floodside drainage is covered under our Lake Pontchartrain and Vic. EIS and Section 404 of the Clean Water Act (CWA). On the protected side of the existing levee, storm water drains into the New Orleans Sewerage and Water Board drainage system to existing pumping stations. These pumping stations discharge into outfall canals which drain into Lake Pontchartrain. The contractor will construct erosion control as shown in the contract plans and specifications to provide for abatement and control of any environmental pollution arising from construction activities in the performance of this contract. The erosion protection consists of hay bales and windrow material resulting from clearing of grass and other small vegetation during foundation preparation. The hay bales and windrow will be adjacent to the construction safety fence connecting at each end to the existing levee to provide a closed system of protection. There are no state or local storm water management controls.

(4) Upon completion of the earth embankment, it shall be fertilized, seeded and mulched.

(5) The estimate of runoff coefficient for the project site is 0.3. There is no increase in impervious area after construction is completed.

(6) Lake Pontchartrain is the receiving water.

C2A-6. SUBCONTRACTORS. Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

C2A-7. IMPLEMENTATION. Within 10 days after receipt of notice to proceed, the Contractor shall:

(1) submit in writing his proposals for implementing this section for environmental pollution control and disposal of debris.

(2) meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with this provision and administration of the environmental pollution control program.

(3) Provide minimum 1,000 gallon capacity water truck to control dust during construction.

(4) Submit in writing a plan to protect trees, etc. during construction.

(5) Special attention shall be given to dust control from Station 92+00 to Station 102+00 West baseline due to close proximity of residential property fronting on General Haig Street. In this area the Contracting Officer will require frequent use of the water truck and may order work to be stopped if dust control is not effective. Clean-up of excessive deposits of dust on the residential property may be ordered by the Contracting Officer.

(6) Submit a signed copy of the NPDES Certification before conducting any professional service identified in the storm water pollution prevention plan.

PART 2 - PRODUCTS (NOT USED)
PART 3 - EXECUTION

C2A-8. PROTECTION OF LAND RESOURCES.

C2A-8.1 General. The land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction that will appear to be natural and not detract from the appearance

of the project. The Contractor shall confine his construction activities to areas defined by the plans and specifications including borrow areas to be cleared. The following additional requirements are intended to supplement and clarify the requirements of Contract Clauses for "Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements," "Operations and Storage Areas" and "Cleaning Up".

C2A-8.2 Prevention of Landscape Defacement. Except in areas where clearing is required, the Contractor shall not deface, injure, or destroy trees or shrubs, nor remove or cut them without the approval of the Contracting Officer. Felling of trees shall be performed in such a manner as to avoid damage to trees to be left standing. Where trees may possibly be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or operations; he shall protect adequately such trees. Earth that is displaced into uncleared areas shall be removed. All monuments and markers shall be protected before beginning operations near them. Any trees or other landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the Contractor's expense. Trees that are scarred shall be immediately painted with an acceptable tree wound paint. Any trees which are damaged beyond restoration shall be removed and disposed of in accordance with C2B-6. Any trees damaged beyond restoration shall be replaced in accordance with Section C2J.

C2A-8.3 Temporary Excavation and Embankments. If the Contractor proposes to construct temporary roads or embankments and excavation for plant and/or work areas, he shall obtain approval of the Contracting Officer prior to start of such temporary work.

C2A-8.4 Post-Construction Cleanup or Obliteration. The Contractor shall obliterate all signs of temporary construction facilities such as work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials upon completion of construction. The Contractor will be required to restore the construction area to near natural conditions which will permit the growth of vegetation.

C2A-8.5 Recording and Preserving Historical and Archeological Finds. All items having any apparent historical or archeological interest which are discovered in the course of any construction activities shall be carefully preserved. The Contractor shall leave the archeological find undisturbed and shall immediately report the find to the Contracting Officer so that the proper authorities may be notified.

C2A-9. PROTECTION OF WATER RESOURCES.

C2A-9.1 Contamination of Water. The Contractor shall not pollute lakes, ditches, rivers, bayous, canals, groundwater, or waterways, with fuels, oils, bitumens, calcium chloride, insecticides, herbicides, or other similar materials harmful to fish, shellfish, or wildlife, or materials which may be a detriment to outdoor recreation. In the event that pollution of canal occurs, contractor will be responsible for cleaning the canal and lake in a manner satisfactory to the Contracting Officer. The entire cost of cleaning will be borne by the contractor.

C2A-9.2 Disposal of Materials. The methods and locations of disposal of materials, wastes, effluents, trash, garbage, oil, grease, chemicals, etc., within the right-of-way limits shall be such that harmful debris will not enter lakes, ditches, rivers, bayous, canals, waterways, or reservoirs by erosion, and thus prevent the use of the area for recreation or present a hazard to wildlife.

C2A-9.3 Erosion Control. Surface drainage from cuts and fills within the construction limits, whether or not completed, and from borrow and waste disposal areas, shall, if turbidity producing materials are present, be held in suitable sedimentation ponds or shall be graded to control erosion within acceptable limits. Temporary erosion and sediment control measures such as berms, dikes, drains, or sedimentation basins, if required to meet the above standards, shall be provided and maintained until permanent drainage and erosion control facilities are completed and operative. The area of bare soil exposed at any one time by construction operations shall not exceed that necessary to perform the work. Stream crossing by fording with equipment shall be limited to control turbidity and in areas of frequent crossings temporary culverts or bridges shall be installed. Any temporary culverts or bridges shall be removed upon completion of the project. Fills and waste areas shall be constructed by selective placement to eliminate silts or clays on the surface that will erode and contaminate adjacent streams.

C2A-10. RESERVED.

C2A-11. PROTECTION OF FISH AND WILDLIFE. The Contractor shall at all times perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The Contractor will not be permitted to alter water flows or otherwise disturb native habitat adjacent to the project area which are critical to fish and wildlife.

C2A-12. JANITOR SERVICES. The Contractor shall furnish daily janitorial services for all the offices, shops, laboratories, or other buildings, being used by the Contractor or Government employees, whether existing or Contractor furnished,

and perform any required maintenance of the facilities and grounds during the life of the contract. Toilet facilities shall be kept clean and sanitary at all times. Services shall be performed at such a time and in such a manner to least interfere with the operations but will be accomplished only when the buildings are in daily use. Services shall be accomplished to the satisfaction of the Contracting Officer. The Contractor shall also provide daily trash collection and cleanup of the buildings and adjacent outside areas, snow removal as required, and shall dispose of all discarded debris in a manner approved by the Contracting Officer.

C2A-13. RESERVED.

C2A-14. MAINTENANCE OF POLLUTION CONTROL FACILITIES DURING CONSTRUCTION. During the life of this contract the Contractor shall maintain all facilities constructed for pollution control under this contract as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created. Early in the construction period the Contractor shall conduct a training course that will emphasize all phases of environmental protection.

C2A-15. REPORTING OF POLLUTION SPILLS. In the event that an oil spill or chemical release occurs during the performance of this contract, the Contractor is required to contact the National Response Center, telephone number 1-800-424-8802 as soon as possible, or if telephone communication is not possible, the nearest U.S. Coast Guard office may be contacted by radio to report the spill, (33 CFR 153.203). The Contractor shall comply with any instructions from the responding agency concerning containment and/or cleanup of the spill.

C2A-16. MEASUREMENT AND PAYMENT. No separate measurement or payment will be made for environment protection. Payment for the work covered under this section will be distributed throughout the existing bid items.

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SECTION C2B - CLEARING

PART 1 - GENERAL

C2B-1. SCOPE. The work covered by this section consists of furnishing all plant, labor, equipment, and materials, and performing all operations necessary for the clearing of the areas specified herein, for the removal and disposal of all cleared materials, and for placement of erosion control, as specified herein.

C2B-2. QUALITY CONTROL. The Contractor shall establish and maintain quality control for clearing operations to assure compliance with contract requirements, and maintain records of his quality control for all construction operations including but not limited to the following:

(1) Clearing. Station to station limits, transverse clearing limits from applicable centerline; percentage of area complete; type of material.

(2) Disposition of Cleared Materials. Method and location of disposition; damage to timber or improvements which are not to be cleared.

C2B-2.1 The original and two copies of these records of inspections and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C2B-3. GENERAL REQUIREMENTS. All clearing work for construction of the concrete cap shall be completed at least 500 feet in advance of concrete cap construction. If regrowth of vegetation occurs after clearing and before placement of fill, the Contractor will be required to clear the area again prior to concrete cap construction, and no additional payment will be made for this additional clearing.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

C2B-4. CLEARING.

C2B-4.1 General. Clearing, unless otherwise specified, shall consist of the complete removal above the ground surface of brush, vegetation, and similar debris.

C2B-4.2 Vegetation. Vegetation to be removed shall consist of crops, bushes, and weeds. Removal of vegetation from the sides of existing levees shall be limited to 1,000 feet in advance of the construction of the concrete cap.

C2B-4.3 Areas to be Cleared. An area 5 feet east and west of the centerline of the sheet pile wall shall be cleared prior to construction of the concrete cap.

C2B-5. EROSION CONTROL. Prior to the beginning of construction, the Contractor shall provide erosion control by placing bales of hay, weighing at least 50 pounds minimum, end to end, parallel and adjacent to the safety fence. The bales of hay should be placed and anchored with steel hooks to keep them from moving. After fertilizing, seeding and mulching, but prior to final acceptance, the Contractor shall spread uniformly over the protected side any remaining material trapped by hay bales and fertilize, seed and mulch the disturbed areas. Other erosion control methods, if approved by the Contracting Officer, will be allowed. The Contractor shall maintain the erosion protection (hay bales) throughout the life of the contract or until requirements are met such that the hay bales may be removed. The hay bales shall be removed by the Contractor only after growth has reached the point of maturity specified in C2D-14. Additional hay bales shall be placed as directed by the Contracting Officer's representative should they become necessary during the construction period.

C2B-6. DISPOSAL OF DEBRIS.

C2B-6.1 General. All debris resulting from clearing operations shall be disposed of by removal from the site. The Contractor shall make a reasonable effort to channel merchantable material into the commercial market to make beneficial use of materials resulting from clearing operations.

C2B-6.2 Removal from Site of Work. The Contractor will remove all of the debris from the site of the work. Such disposal shall comply with all applicable Federal, State, and Local laws. The Contractor shall, at his option, either retain for his own use or dispose of by sale or otherwise, such materials of value. The Government is not responsible for the protection and safekeeping of any materials retained by the Contractor. Such materials shall be removed from the site of the work before the date of completion of the work. If debris from clearing operations is placed on adjacent property, the Contractor shall obtain, without cost to the Government, additional right-of-way for such purposes. Such material shall be so placed as not to interfere with roads, drainage or other improvements and in such a manner as to eliminate the possibility of its entering into channels, ditches, or streams. The Contractor shall submit written evidence to the Contracting Officer that he has obtained from the property owner permission for disposal of material on the owner's property. The written evidence shall consist of an authenticated copy of the conveyance under which the Contractor acquired the property rights and access thereto, prepared and executed in accordance with the laws of the

State of Louisiana. If temporary rights are obtained by the Contractor, then the period of time shall coincide with the Special Clause entitled "COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK" hereof, plus any extension authorized under Contract Clause entitled DEFAULT (Fixed-Price Construction), subparagraph (b) (1). However, delay resulting from acquisition of additional rights-of-way for alternate disposal areas will not qualify as excusable delays.

C2B-7. MEASUREMENT AND PAYMENT.

C2B-7.1 Clearing. No separate measurement will be made for clearing. Payment for all items of work specified for clearing shall be made under the contract lump sum price for "Clearing". Price and payment shall constitute full compensation for furnishing all plant, labor, materials, and equipment to accomplish the work as specified herein.

C2B-7.2 Erosion Control. Erosion control will be measured for payment on the basis of length along the centerline of the erosion control material. The erosion control length will be measured to the nearest foot. Payment for erosion control as specified herein will be made at the contract unit price per linear foot for "Erosion Control." Price and payment shall constitute full compensation for furnishing all plant, labor, materials and equipment and performing all operations necessary for erosion control, including the placement and maintenance of hay bales throughout the contract period, final dressing and cleanup.

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SECTION C2C - STRUCTURAL EXCAVATION AND BACKFILL

PART 1 - GENERAL

C2C-1. SCOPE. The work covered by this section consists of furnishing all plant, labor, materials, equipment, and performing all operations necessary for structural excavation, structural backfill, stockpiling materials, and all incidental work to construction of concrete cap as specified or as shown on the drawings.

C2C-2. QUALITY CONTROL. The Contractor shall establish and maintain quality control for excavation operations to assure compliance with contract requirements and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Equipment. Type, size, and suitability for construction of the prescribed work.
- (2) Construction. Layout, maintaining a dry excavation, moisture control, thickness of layers, spreading and compacting.
- (3) Placing and compacting of structural backfill.
- (4) Grade Tolerances. Check fills to determine if placement conforms to prescribed grade and design section.
- (5) Compaction Test. One density test shall be performed in accordance with ASTM D 698, per 200 linear feet per layer of structural backfill along the floodwall. Recompanction which previously failed to meet the test results in C2C-4.2 shall be required. The Contractor shall furnish control compaction curves for each type of source of backfill soil used.

C2C-2.1 Reporting. The original and two copies of these records of inspections and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C2C-2.2 Applicable Publications. The following publication of the American Society of Testing Materials (ASTM), referred to thereafter by basic designation only, form a part of this specification to the extent indicated.

D 698-78

Standard Test Method For Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5-lb (2.49-kg) Hammer and 12-in. (305-mm) Drop

PART 2 - PRODUCTS

C2C-3. EQUIPMENT.

C2C-3.1 Hand Tampers. Hand tamping or other approved methods shall be used for compaction of fill and backfill near structures where vehicular equipment cannot be used. These hand tampers should be power driven, hand operated type.

C2C-3.2 Miscellaneous Equipment. Scarifiers, disks, spring-tooth or spike-tooth harrows, spreaders, power tampers and other equipment shall be of types suitable for the required construction.

C2C-3.3 Sprinkling Equipment. Sprinkling equipment shall be designed to apply water uniformly and in controlled quantities to variable widths of surface.

C2C-3.4 Alternative Compaction Equipment. The Contractor may propose for use alternative types of compaction equipment not included in these specifications. The suitability of the alternative equipment must be demonstrated to the Contracting Officer by a field test conducted by and at the expense of the Contractor. The alternative compaction equipment must be capable of properly compacting the soil so that no planes of weakness or laminations are formed in the fill. The field test shall consist of compacting a minimum of three layers of an area of embankment with the alternative equipment. Testing and inspection of the area shall then be performed by the Contractor at no additional expense to the Government. Procedures for constructing and testing the area will be provided by the Contracting Officer. Each proposed alternative type of equipment must be capable of fully compacting a layer of soil not less than 8 inches thick to 95 percent maximum density as determined by ASTM D 698. If sufficient previous testing has been performed on the alternative compaction equipment proposed by the Contractor to verify the suitability of the equipment to the Contracting Officer, he may determine that the above-specified field test is not required.

PART 3 - EXECUTION

C2C-4. STRUCTURAL EXCAVATION AND BACKFILL.

C2C-4.1 Structural Excavation. The Contractor shall make all excavations required for the construction of the concrete cap. The Contractor shall design and provide all necessary shoring, bracing, sheeting, underpinning, and supports as may be required for the work. The Contractor shall also provide, as necessary, such sumps, pumps, or ditches which may be required to dewater the excavations. Suitable material from required structural excavation shall be used in the structural backfill. Material determined to be unsuitable by the Contracting Officer shall be ordered wasted.

C2C-4.2 Structural Backfill. The Contractor shall backfill all excavations to final grades in accordance with the Levee Typical Sections of the contract drawings. The levee crown and the horizontal shelf shall be graded such that they drain away from the required concrete cap. Structural backfill shall be placed adjacent to the I-wall lower section. Structural backfill shall be placed in successive layers not to exceed 8 inches and fully compacted to 95 percent maximum density as determined by ASTM D 698-78. Material for structural backfill, shall be obtained from the structural excavation and shall be suitable material. Backfill shall not be placed against any concrete which is less than 21 days old.

C2C-4.3 Unsuitable Materials. Unsuitable structural backfill is defined as material containing organic matter, sticks, branches, roots, brick, concrete, rock, gravel sand and other debris.

C2C-4.3.1 Frozen Materials. Under no circumstances shall frozen earth, snow or ice be placed in the fill. The Contracting Officer may require the wasting of frozen material.

C2C-4.3.2 Disposal of Unsuitable Materials. Materials from required excavation which are unsuitable for embankment, fill, or backfill material will be ordered wasted and shall be disposed of as specified in C2B-6.

C2C-4.4 Dressing. The backfill shall be brought to not less than the prescribed design cross section at all points. Unreasonable roughness of surface shall be dressed out to permit fertilizing and seeding operations.

C2C-4.5 Shoring. The Contractor shall provide shoring as required. A design and the method of installing the proposed shoring shall be submitted to the Contracting Officer for approval at least 30 days prior to its actual intended use. Upon completion of the structure, the Contractor shall remove the shoring prior to commencing his backfill operation. The void created by the shoring removal shall be backed and the surface area shall be treated to match the existing surface prior to the installation of the shoring. Excavations more than 5 feet deep shall be shored unless shown otherwise on the drawings. Additional requirements for shoring shall be in accordance with Section 23 "Excavations" of EM 385-1, the Corps of Engineers Safety Manual.

C2C-4.6 Inspection Trench.

C2C-4.6.1 The purpose of the inspection trench is to (1) accurately locate existing utilities; (2) discover undetected utilities; (3) and locate any cultural resources. The Contractor shall cease work and notify the Contracting Officer if buried cultural remains are uncovered during construction. Further

requirements regarding cultural resources investigations are stated in the Special Clause entitled "CULTURAL RESOURCES INVESTIGATIONS". The Contractor shall remove all unsuitable timbers, rocks, trash, debris, etc., encountered during the excavation of the inspection trench at no cost to the Government. The Contractor shall notify the Contracting Officer 7 days in advance of beginning excavation on the inspection trench.

C2C-4.6.2 The inspection trench shall be excavated along the floodwall alignment to sufficient depth to allow for reinforced cap installation. The Contractor shall keep the inspection trench operations at least 100 feet ahead of the steel sheet pile driving operations. The Contractor may encroach on the distance only with approval from the Contracting Officer.

C2C-4.6.3 The Contractor shall shore the inspection trench around all uncovered utilities so that work can be performed. The same requirements for compaction and material used for structural backfill shall be used for the trench fill. Safety guards shall be provided around all open trenches, in accordance with paragraph 23.A.09 of EM-385-1-1. A maximum of 20 linear feet of open inspection trench is allowed at any time. If no utilities are found, the Contractor shall immediately backfill the trench and compact to final grades as specified in accordance with C2C-4.2.

C2C-4.6.4 U.S. Sprint Fiber Optic Line. The Contractor shall, before driving any sheet pile within 200 feet of the U.S. Sprint fiber optic line passing through the sheet pile at approximately Station 99+71, contact U.S. Sprint personnel (504-847-0515) and expose the line in the presence of the U.S. Sprint personnel.

C2C-4.7 Seepage Control Plan. The Contractor shall provide sumps, pumps, ditches, sheeting, or dikes as a means of keeping the structural excavation dry. The Contractor shall submit for review and approval his plan for keeping the structural excavation dry.

C2C-4.8 Excess Material. All excess suitable materials taken from structural excavation above elevation 2.0 NGVD that are not used in structural backfill shall be distributed evenly over the levee as shown on the contract drawings.

C2C-4.9 Muck Excavation. Muck is hereby defined as excess material removed from below elevation 2.0 NGVD on the flood side of the sheet pile wall. This material exists from Station 9+25.80 to Station 79+87.69. Excess muck shall become the property of the Contractor and shall be hauled from the job site in water-tight trucks with secured binders to a site acceptable to the Government.

C2C-4.10 Riprap. From Station 0+71.23 to Station 7+00.00, riprap is on the floodside of the sheet pile wall and shall be moved to accommodate cap installation and then shall be replaced adjacent to the installed cap as shown in the contract drawings.

C2C-4.11 Degrading of Levee for Temporary Access Road. The Contractor will be permitted to degrade the levee for temporary access as described in the Special Clause "ACCESS AND TRUCKING REQUIREMENTS".

C2C-5. STOCKPILING. On-site storage areas are shown on the contract drawings. Off-site storage shall be in accordance with the Special Clause "OFF-SITE STORAGE". All material stored shall be maintained properly to allow for re-use after construction.

C2C-6. MEASUREMENT AND PAYMENT. No measurement will be made for structural excavation and backfill. Payment for structural excavation and backfill will be included in the contract lump sum price for "Structural Excavation and Backfill". Price and payment shall constitute full compensation for providing all plant, labor, materials, and equipment for excavation and backfill, spreading, hauling, compaction, removal of muck, stockpiling, moving of riprap, shoring, storage of material off-site, and all other work incidental thereto.

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SECTION C2D - FERTILIZING, SEEDING AND MULCHING

PART 1 - GENERAL

C2D-1. SCOPE. The work provided for herein consists of furnishing all plant, labor, equipment, and materials, and performing all operations necessary for finished dressing, fertilizing, seeding and mulching of areas as specified herein and as indicated on the drawings. Fertilizing, seeding and mulching the new embankment shall be performed upon completion of backfilling adjacent to the reinforced concrete cap in minimum lengths of 500 feet. The applicable seeding specifications as specified in Table I shall be determined by the period of the year in which fertilizing, seeding and mulching is done. Only one of the seeding specifications listed in Table I will be required for each particular area.

C2D-2. QUALITY CONTROL.

C2D-2.1 General. The Contractor shall establish and maintain quality control for finished dressing, fertilizing, seeding and mulching operations and shall maintain records of his quality control for all construction operations including, but not limited to, the following:

(1) Preparation of Ground Surface. Location and quality of finished dressing, including necessary clearing, filling, or dressing out of washes, smoothness and uniformity of surfaces, and time of year.

(2) Fertilizing. Quality of materials. Areas fertilized, quantity applied, and method of application.

(3) Seeding. Quality and type of seed, area covered, rate of application, quantity of seed used, and method of distribution.

(4) Mulching. Quality of materials, area mulched, quantity applied, method of application.

(5) Maintenance and Repair. Location and type of maintenance problems and remedial treatment performed.

(6) Watering. Quality of water, area watered, quantity applied, and method of application.

C2D-2.2 Reporting. The original and two copies of these records of inspections and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C2D-3. AREAS TO BE FERTILIZED AND SEEDED. Fertilizing, seeding and mulching shall be performed on all areas within the rights-of-way disturbed by the Contractor's operations and any other associated areas as directed by the Contracting Officer.

C2D-4. COMMENCEMENT, PROSECUTION, AND COMPLETION.

C2D-4.1 General. Preparation of the ground surface, fertilizing, seeding and mulching operations shall be accomplished during the applicable growing season as specified in Table I. Mulching shall be applied to areas as indicated in C2D-11.

C2D-4.2 Sequence of Work. The sequence of operations for work prescribed in this section, except mowing, shall be as follows:

C2D-4.2.1 Fertilizing, Seeding and Mulching. This sequence of operations shall apply to the following areas described herein and in the contract drawings:

- (a) Areas of structural excavation for concrete cap installation.
- (b) Areas of the levee degraded for access.
- (c) On-site storage areas.
- (d) Areas where excess excavated material has been spread.
- (e) Access ramps.

The following sequence shall apply:

- (a) Preparation of ground surface.
- (b) Preparation of slurry consisting of fertilizer, seed and wood cellulose fiber mulch.
- (c) Application of slurry.
- (d) Fertilizer and post-planting.

Fertilizing, seeding and mulching operations shall commence upon completion of backfill and compaction adjacent to the concrete cap in minimum lengths of 500 feet. Operations at access and storage areas shall commence upon termination of storage or access operations in that area.

C2D-4.2.2 Fertilizing and Seeding. This sequence shall apply to all areas described in C2D-3 except those described in C2D-4.2.1:

- (a) Preparation of ground surface.
- (b) Fertilizing.
- (c) Seeding.

Fertilizing and seeding operations shall commence as described in C2D-4.2.1.

PART 2 - PRODUCTS

C2D-5. MATERIALS.

C2D-5.1 Fertilizer. Fertilizer shall be uniform in composition and free-flowing. The fertilizer shall be delivered to the site in bags or other convenient containers or delivered in bulk. If delivered in bags or containers, the fertilizer shall be fully labeled in accordance with the applicable state fertilizer laws and shall bear the name, tradename or trademark, and warranty of the producer. The fertilizer shall meet the requirements for commercial fertilizer and shall contain a minimum of 60 pounds of available nitrogen per acre, 60 pounds of available phosphorous per acre and 60 pounds of available potash per acre. Should the commercial fertilizer be furnished in bulk, the Contractor shall furnish certified weight tickets and a certified quantitative analysis report, in triplicate, from a recognized testing laboratory certifying the nutrient ratio of the materials. In the event the commercial mixture is delivered to the site in the original containers, unopened, the analysis report will not be required.

C2C-5.2 Fertilizer and Postplanting. The fertilizer shall meet all of the requirements of C2C-5.1, except it shall contain a minimum of 150 pounds of available nitrate per acre.

C2D-5.3 Soil for Repairs. For fill of areas to be repaired, soil shall be of a quality at least equal to that which exists in areas adjacent to the area to be repaired. Soil used shall be relatively free from roots, stones, and other materials that hinder grading, planting, and maintenance operations and shall be free from objectionable weed seeds and toxic substances.

C2D-5.4 Seed. Seed labeled in accordance with U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act shall be furnished by the Contractor. Seed shall be furnished in sealed, standard containers unless written exception is granted. Seed that is wet or moldy or that has been otherwise damaged in transit or storage will not be acceptable. The specifications for seeds shall conform to the following and be seeded at the following rates:

Table I.

<u>Seeding Period and Grasses to be Used</u>	<u>Minimum Purity%</u>	<u>Minimum Germination%</u>	<u>Minimum Rate Lbs/Acre</u>
2 March - 14 September Hulled common Bermuda grass	95	87	50
15 September - 1 March Unhulled common Bermuda grass	95	87	50
Ryegrass	97	82	35

C2D-5.5 Water. Water shall be free from oil, acid, alkali, sugar, salt, and other substances harmful to growth of grass. The water for the hydraulic slurry shall be furnished from a potable water source only.

C2D-5.6 Wood Cellulose Fiber Mulch. The wood cellulose fiber mulch for use with hydraulic application equipment shall consist of specially-prepared wood cellulose fiber mixed with a non-toxic organic tackifier. The mulch shall be processed to contain no growth or germination inhibiting factors, and dyed an appropriate color to facilitate visual metering of application of the materials. The mulch material shall be supplied in packages having a net weight not in excess of 100 pounds. The wood cellulose fiber shall contain not in excess of 10 percent moisture, air dry weight basis. The wood cellulose fiber shall be manufactured so that after addition and agitation in slurry tanks, with water, and any other additives, the fibers in the material will become uniformly suspended to form a homogeneous slurry, and that when hydraulically sprayed on the ground, the material will form a blotter like ground cover which, after application, will allow the absorption of moisture and allow rainfall or mechanical watering to percolate to the underlying soil. The Contractor shall be prepared to submit, on request, certification from the supplier that laboratory and field testing of the product has been accomplished, and that the product meets the foregoing requirements.

PART 3 - EXECUTION

C2D-6. SAMPLING AND TESTING.

C2D-6.1 General. Sampling and testing shall be the responsibility of the Contractor and shall be performed at no additional cost to the government. Sampling and testing shall be performed by a recognized commercial testing laboratory or may be performed by the Contractor. Tests shall be performed in sufficient number to insure that materials meet the specified requirements. Signed copies of the test results shall be furnished to the Contracting Officer.

C2D-6.2 Material Testing.

C2D-6.2.1 Fertilizer. Duplicate signed copies of invoices from suppliers shall be furnished. Invoices shall show quantities and percentage of nitrogen, phosphorus, potash and ammonium nitrate. Upon completion of the project, a final check of the total quantity of fertilizer used will be made against total area treated, and if minimum rates of application have not been met, an additional quantity of material sufficient to make up the minimum application rate shall be distributed as directed.

C2D-6.2.2 Seed. The Contracting Officer shall be furnished duplicate signed copies of statements certifying that each container of seed delivered is labeled in accordance with the Federal Seed Act and is at least equal to the requirements specified in C2D-5.4. This certification shall be obtained from the supplier and shall be furnished on or with all copies of seed invoices.

C2D-6.2.3 Mulch. Representative samples of the materials proposed for use shall be submitted for approval.

C2D-7. SPECIAL EQUIPMENT.

C2D-7.1 Wood Cellulose Fiber Mulch Spreader. Hydraulic equipment used for the application of slurry of prepared wood pulp shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend, and homogeneously mix a slurry containing up to 300 pounds of fiber for each 1,000 gallons of water. The slurry distribution lines shall be large enough to prevent stoppage. The discharge line shall be equipped with hydraulic spray nozzles that will provide even distribution of the slurry on the various slopes to be mulched. The slurry tank shall have a minimum capacity of 1,000 gallons and shall be mounted on a traveling unit, which may be either self-propelled or drawn by a separate unit, that will place the slurry tank and spray nozzles near the areas to be mulched so as to provide uniform distribution without waste. The Contracting Officer may authorize equipment with a smaller tank capacity provided that the equipment has the necessary agitation system and sufficient pump capacity to spray the slurry in a uniform seat over the surface of the area to be mulched.

C2D-8. PREPARATION OF GROUND SURFACE.

C2D-8.1 General. Equipment, in good condition, shall be provided for the proper preparation of the ground and for handling and placing all materials. Equipment shall be approved by the Contracting Officer before work is started.

C2D-8.2 Clearing. Prior to grading and tilling, vegetation and debris that may interfere with fertilizing, seeding and mulching operations shall be cleared in accordance with C2B-4; and shall be disposed of satisfactorily, as specified in C2B-6.

C2D-8.3 Grading. Previously established grades and slopes shall be maintained in a true and even condition on the areas to be fertilized and seeded. Necessary repairs to previously graded areas shall be repaired with material as described in C2D-5.3. The material shall be placed and compacted in accordance with C2C. Where grades have not been established, the areas shall be graded as shown, or as directed by the Contracting Officer, and all surfaces shall be left in a true and even condition.

C2D-8.4 Tillage. After the areas required to be fertilized, seeded and mulched have been brought to the specified grades, the soil shall be tilled to a depth of at least 2 inches by plowing, disking, harrowing, or other approved method until the condition of the soil is acceptable. The work shall be performed only during periods when, in the opinion of the Contracting Officer, beneficial results are likely to be obtained. When drought, excessive moisture, or other unsatisfactory conditions prevail, the work shall be stopped when directed. Undulations or irregularities in the surface to be fertilized, seeded and mulched shall be dressed before the next specified operation.

C2D-9. APPLICATION OF FERTILIZER.

C2D-9.1 Fertilization of Areas to be Mulched. Fertilizer, as specified in C2D-5.1, shall be distributed uniformly over areas to be fertilized and seeded specified in C2D-4.2.2 or shall be applied simultaneously with the grass seed and wood cellulose fiber mulch in areas to be fertilized, seeded and mulched specified in C2D-4.2.1.

C2D-9.2 Postplanting Fertilization. From 30 to 60 days after fertilizing, seeding and mulching, fertilizer meeting the requirements of C2D-5.2 shall be applied uniformly over areas previously fertilized, seeded and mulched. Fertilizer shall be applied when grass glades are dry to minimize burning.

C2D-10. SEEDING.

C2D-10.1 General. The applicable seed shall be sown at the rate and time as indicated in Table I, unless otherwise directed in writing. A satisfactory method of sowing shall be employed, using approved mechanical power-drawn drills or seeders, mechanical hand-seeders, broadcast-seeders, or other approved methods. When drills are used, markers or other means shall be provided to ensure that the successive seeded strips will either overlap or be separated by a space no greater than the equipment row spacings. When delays in operations extend the work beyond the most favorable planting season for the species designated, or when conditions are such by reason of drought, high winds, excessive moisture, or other factors that satisfactory results are not likely to be obtained, work shall be halted as directed by the Contracting Officer and resumed only when conditions are favorable or when approved alternative or corrective measures and procedures have been effected. If inspection either during seeding operations or after there is a show of green indicates that areas have been left unplanted or other areas have been skipped, additional fertilizer, seed and/or mulch shall be applied if so directed by the Contracting Officer.

C2D-10.2 Hydraulic Seeding. Seeding shall be combined with water, fertilizer, and wood cellulose fiber mulch and applied uniformly with equipment capable of meeting the requirements of C2D-7.

C2D-10.3 Damage To Seeding. The Contractor shall be fully responsible for any damage to the seeded areas caused by his operations. Areas that become damaged as a result of poor workmanship or failure to meet the requirements of the specifications may be ordered repaired and reseeded to specification requirements, without additional cost to the Government.

C2D-11. APPLYING MULCH. The application of the wood cellulose fiber mulch slurry shall be made with hydraulic equipment specified in C2D-7.1. The mulch shall be applied at the rate of 1,800 pounds per acre in combination with water, fertilizer and seed and shall be sprayed uniformly over the areas to be mulched and seeded.

C2D-12. MOWING. The seeded areas shall be mowed with approved mowing equipment to a height of 3 to 4 inches whenever the height of vegetation becomes 6 to 8 inches. This includes the newly seeded areas and all existing vegetation undisturbed by construction. When the amount of cut grass is heavy, it shall be removed to prevent destruction of the underlying turf. The Contractor shall be responsible for mowing until the physical completion of all items of the contract. Immediately prior to final acceptance of work, the Contractor shall mow all seeded areas.

C2D-13. REPAIR. When the surface to be fertilized, seeded and mulched becomes gullied or otherwise damaged or when previously placed turfing is damaged, the affected area shall be repaired to establish the condition prior to the damage, as directed. Repair work required because of faulty operations or negligence on the part of the Contractor shall be performed without additional cost to the Government.

C2D-14. INSPECTION AND ACCEPTANCE. The Contractor shall fertilize, seed and mulch the completed portion of the levee embankment. Acceptance of established growth will be determined by visual inspection. Establishment of growth will be considered to be complete when the area to be fertilized, seeded and mulched and indicates that growth has reached a point of maturity such that it has produced stems or runners which overlap adjacent similar growth over 85 percent of the entire area as determined by random sampling on a square-yard basis with no bare spot exceeding 36 square inches. Existence of erosion problems will not be acceptable. Any area disturbed or damaged by the Contractor's operations outside the fertilizing, seeding and mulching limits will be repaired by the Contractor at no expense to the Government.

C2D-15. MEASUREMENT AND PAYMENT. No measurement will be made for fertilizing, seeding and mulching. Payment for fertilizing, seeding and mulching will be made at the contract lump sum price for "Fertilizing, Seeding and Mulching". Prices and payments shall constitute full compensation for furnishing all plant, labor, materials and equipment and performing the work in accordance with these specifications.

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SECTION C2E -
STEEL SHEET PILING

PART 1 - GENERAL

C2E-1. SCOPE. The work covered by this section consists of furnishing all plant, equipment, labor and materials and performing all operations in connection with driving existing steel sheet pile to the required grade, constructing a cofferdam on the floodside of the sheet pile wall from W/L Sta. 69+93.33 to W/L Sta. 9+25.80 during installation of the concrete cap between those stations, and removing coal tar epoxy paint from the sheet pile in accordance with these specifications and contract drawings.

C2E-2. APPLICABLE PUBLICATIONS.

C2E-2.1 American Conference of Governmental Industrial Hygienists (ACGIH) Publications.

Guidelines to the Selection of Chemical Protective Clothing, Volumes I and II.

Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environmental and Biological Exposure Indices.

C2E-2.2 American National Standards Institute (ANSI) Standards.

Z87.1-79 Practice for Occupational and Educational Eye and Face Protection

Z358.1-81 Emergency Eyewash and Shower Equipment

C2E-2.3 Code of Federal Regulations (CFR).

29 CFR 1910 General Industry Standards

29 CFR 1926 Construction Industry Standards

C2E-2.4 Federal Acquisition Regulations (FAR).

52.236-13 (Apr 1984) Accident Prevention

C2E-2.5 National Institute for Occupational Safety and Health (NOISHA) Publications.

87-108 Respirator Decision Logic

HE 20.7108 Manual of Analytical Methods

C2E-2.6 Steel Structures Painting Council Specifications (SSPC).

SSPC-SP 6 Commercial Blast Cleaning
Available from: Steel Structures Painting
Council, 4400 Fifth Avenue, Pittsburgh, PA
15213

C2E-2.7 U.S. Army Corps of Engineer Publications.

EM 385-1-1 Safety and Health Requirements Manuals

C2E-3. SUBMITTALS. The Contractor shall submit descriptions of sheet driving equipment, sheet piling driving records and other submittals to the Contracting Officer for approval as required. Submittals and associated work not satisfactory to the Contracting Officer will be rejected.

C2E-3.1 Equipment Descriptions. Complete descriptions of sheet piling driving equipment including hammers, extractors, protection caps and other installation appurtenances shall be submitted for approval prior to commencement of work.

C2E-3.2 Driving Records. Records of the sheet piling driving operations shall be submitted after driving is completed. These records shall comply with the requirements of C2E-3.

C2E-3.3 Paint Removal Equipment. Complete descriptions of all equipment used to remove the coal tar epoxy paint from the existing sheet pile shall be submitted prior to the commencement of work.

C2E-3.4 Containment of Debris Generated by Paint Removal. A written plan describing the Contractor's plan to contain debris generated by paint removal operations specified in C2E-5 shall be submitted prior to the commencement of work. This shall include, but not be limited to: requirements for ventilation of the containment if necessary, handling of debris, and air monitoring at the project site.

C2E-3.5 Safety and Health Submittal. The following is a listing of Safety and Health submittal items required during paint removal operations. The submittals shall be provided as required in the Safety and Health Provisions of C2E-6.

- a. Qualifications and Experience Statement.
- b. Accident Prevention Plan.
 - (1) Administrative Requirements
 - (2) Activity Hazard Analysis Procedures

- (3) Confined Space Procedures
- (4) Respiratory Protection Program
- (5) Material Safety Data Sheet
- (6) Airborne Sampling Plan
- (7) Worker Hazard Communication Program
- (8) Medical Surveillance Program
- (9) Other Safety and Health Submittal Items as required in EM 385-1-1 Appendix Z.

c. Results of Airborne Sampling:

- (1) Laboratory Conducted-within 5 working days after taking samples.
- (2) Direct Reading Instrumentation - same day as taken.

C2E-3.6 Cofferdam Submittals. The Contractor shall submit the following to the Contracting Officer in accordance with C2E-10 prior to commencement of work.

(1) A plan for cofferdam installation and details of the Contractor's plan for maintaining a dry working area on the floodside of the sheet pile wall during construction from W/L Sta. 69+93.33 to W/L Sta. 9+25.80.

(2) The design for the cofferdam, including an elevation view of the location of the cofferdam relative to the existing sheet pile wall, the type of sheeting used for the cofferdam, and the top and tip elevations of the sheets.

C2E-4. QUALITY CONTROL.

C2E-4.1 General. The Contractor shall establish and maintain quality control for pile driving operations to assure compliance with contract specifications and maintain records of his quality control for all construction operations including, but not limited to, the following:

- (1) Driving (pile hammer and rate of operation).
- (2) Final position; depth of penetration; tip and cut-off elevations.
- (3) Uplift and vertical tolerances after driving.
- (4) Cutting and Splicing (Welding).

- (5) Removal and disposal of cut-offs or damaged piles.
- (6) Removal of existing coal tar epoxy paint on existing sheet pile.
- (7) Safety and Industrial Hygiene monitoring.

C2E-4.2 Reporting. The original and two copies of these records and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C2E-5. REMOVAL OF COAL TAR EPOXY PAINT.

C2E-5.1 Scope. The Contractor shall remove the existing coal tar epoxy paint from the surface of all existing sheet pile to be capped from the top the top of the sheet pile to an elevation of 6 inches below the required bottom of concrete.

C2E-5.2 Removal of Paint. The areas from which the existing 16 mils coating of coal tar epoxy polyamide paint is to be removed shall be cleaned in accordance with SSPC-SP6. Relaxation of the Commercial grade cleanliness shall be permitted within one inch of the sheet pile interlocks on the vertical surface of the sheet pile. All abrasives used in sand blasting shall contain less than 1 percent silica, unless otherwise approved in writing by the Contracting Officer.

C2E-5.3.1 Containment System. The Contractor shall design a containment system for the paint removal area that will contain debris as required herein. The Contractor shall bear the sole responsibility for protecting adjacent air, soil, and water from fugitive debris. Any damage to adjacent property shall be promptly repaired at the Contractor's expense.

C2E-5.3.2 Control of Emissions.

C2E-5.3.2.1 Monitoring Air Emissions. The Contractor shall monitor for emissions of dust in accordance with C2E-6.2.2.6.

C2E-5.3.2.2 Emissions on Soil. Paint debris shall not be placed or allowed to fall on unprotected ground and shall be shielded adequately to prevent dispersion of the debris by wind or rain water. Any evidence of improper storage or protection shall be cause for immediate shutdown of the project until corrective action is taken.

C2E-5.3.2.3 Emissions into Canal. Should paint debris become visible on the surface o t the canal downstream from removal operations, it shall be removed promptly by the Contractor.

C2E-6. SAFETY AND HEALTH PROVISIONS DURING PAINT REMOVAL.

C2E-6.1 General. The Contractor shall comply with the safety and health provisions contained herein in addition to those provisions contained in the clause entitled "Accident Prevention", FAR 52.236-13. These additional provisions are intended to amplify those contained in the aforementioned clause. In any conflict between the "Accident Prevention" clause and this section, the provisions of this section shall govern. The Contractor shall develop all required safety and health plans and procedures consistent with current Federal regulations as described in 29 CFR 1910, Occupational Safety and Health Standards; 29 CFR 1926, Safety and Health Regulations for Construction; EM 385-1-1, US Army Corps of Engineers Safety and Health Requirements Manual; the permissible exposure limits (PELs) contained in the latest edition of the American Conference of Governmental Industrial Hygienist's (ACGIH) booklet entitled, "Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment and Biological Indices with Intended Changes"; and the provisions of these specifications. The Contractor shall comply with the more stringent PELs contained in either 29 CFR Part 1910 or the ACGIH booklet. In order to comply with these specifications, the Contractor shall prepare for review and approval, specific safety and exceptional health submittal items identified in C2E-3.3 and as further described in C2E-6.2 below.

C2E-6.2 Safety and Health Submittal Requirements.

C2E-6.2.1 Qualifications and Experience Statement. The contractor shall submit for approval, a written Qualification(s) and Experience statement signed and dated by the Contractor and the "Qualified and Competent person(s)" as defined in EM 385-1-1, that the Contractor has selected to develop the required safety and health submittal items and who will act as the Contractor's on-site safety and health representative(s) during paint removal. Approval of this submission must be obtained prior to the submission of other required safety and health submittal items.

C2E-6.2.2 Accident Prevention Plan. The criteria included in EM 385-1- 1, Appendix Y, "Suggested Contractor's Accident Prevention Plan Format", as amplified below, shall be followed by the Contractor when preparing his Accident Prevention Plan. The plan at a minimum shall include each of the topic areas listed below but, may include other safety and health criteria as deemed necessary. Each topic shall be developed in a concise manner to include management and operational aspects.

C2E-6.2.2.1 Administrative Requirements.

(1) Administrative responsibilities for effecting the Accident Prevention Plan (i.e. identification and accountability of Contractor personnel responsible for accident prevention).

(2) Local requirement, if any, which must be complied with (i.e. noise control, traffic problems, parking and other similar items).

(3) Methods proposed to control and coordinate the work of Subcontractors, including list of Subcontractors.

(4) Plans for layout and use of temporary construction buildings, facilities and equipment including how the Contractor plans to control those of Subcontractors.

(5) Plans for initial indoctrination, continued safety education, and training for the Contractor's and Subcontractor's employees. The Safety Indoctrination Plan shall include, but may not be limited to, the following:

(a) General policy and pertinent provisions of EM 385-1-1, the Contractor's Accident Prevention Plan, and Activity Hazard analyses.

(b) General safety and occupational health rules.

(c) Responsibilities and authorities of employees during the contract including accident reporting, protection of property and safety of others.

(d) Procedure for reporting and correcting unsafe conditions or practices.

(e) Identification of specific hazards of the tasks (assignments) employees are to perform and the administrative (standard operating procedures), engineering and personal protective controls to mitigate those hazards.

(f) Procedures and schedules of safety meetings for indoctrination and training of supervisor and employees. Requirements for employee indoctrination and continued training by project safety officer shall include the following and as further defined in C2E-6.2.2.2 to C2E-6.2.2.9.

(i) Training of Contractor's employees for compliance to the Contractor Activity Hazard Analyses of the Accident Prevention Plan.

(ii) Material handling.

(iii) Heavy equipment.

(iv) Electrical (including temporary electrical)

(v) Safe clearance procedures.

(vi) Fire and explosion protection and prevention.

- (vii) Confined space standard operating procedures.
 - (viii) Respiratory protection equipment (selection, fit, use, inspection, maintenance, storage, training, and other criteria in accordance with EM 385-1-1, Section .07.B.).
 - (ix) Hazard communication for employees to include identification of potential hazards, effects of exposure and control measures to be used for chemical products and physical agents that may be encountered during the performance of work on this contract, and other criteria in accordance with 29 CFR Part 1910.1200.
 - (x) Training in the use and understanding of material safety data sheets and chemical product hazard warning labels.
 - (xi) Selection, use, inspection, maintenance, and storage of personal protective clothing and equipment.
 - (xii) Communication methods and systems to be used (i.e., voice, hand signals, radios or other means).
 - (xiii) Safe work procedures on or around water areas (water safety).
 - (xiv) Personal hygiene (washing and cleaning facilities, sanitation, eating, smoking and drinking requirements).
 - (xv) Training in types, use of, and safety features of portable and fixed mechanical supply and exhaust ventilation systems.
 - (xvi) Hearing protection.
 - (xvii) Training in Contractor substance abuse control.
 - (xviii) Medical surveillance.
 - (xix) Emergency Medical and first aid requirement per EM 385-1-1, Section 4.
 - (xx) Fire fighting and other emergency plans and procedures.
 - (xxi) Emergency equipment and supplies (i.e. emergency eyewash/shower and absorbent media for cleaning up spills and other equipment and supplies).
- (6) Plans for continuous job clean up, and safe access and egress at the job site.

(7) Plans for emergency procedures (i.e. ambulance service, fire protection, water-related accidents and other site specific emergencies that could occur).

(8) Plans for job site safety inspection, industrial hygiene, and worker and environmental monitoring of hazardous chemical and physical agents.

(9) Record keeping procedures. Provide detailed description of methods and procedures proposed for collecting and maintaining required records such as medical monitoring, industrial hygiene, environmental sampling and analysis, safety inspections, safety meetings, and other records required by Federal, state and local regulations.

(10) Procedures for accident investigations and reporting (See EM 385-1-1, Section 2).

(11) Description and sketch of temporary power distribution system.

(12) Procedures and details of fall protection systems.

(13) Description of safe clearance procedures.

C2E-6.2.2.2 Activity Hazard Analysis Procedures. The Contractor shall develop Activities Hazard Analysis Procedures as part of the Accident Prevention Plan. The procedures shall define how the Contractor will implement the Activity Hazard Analysis in accordance with the criteria in EM 385-1-1 as further described below:

(1) In accordance with the requirements of EM 385-1-1 Section 1, paragraph 01.A.05, the Contractor shall, prior to the beginning of each major phase of work, prepare an Activity Hazard Analysis (phase plan) for that work phase. This analysis shall address the hazards for each activity to be performed in that work phase and shall detail procedures and safeguards necessary to eliminate the hazards or reduce the risks to an acceptable level.

(2) The Contractor shall develop this Analysis to identify the sequence of work, the specific safety and health hazards anticipated, and the control measures to be implemented to minimize or eliminate each hazard. The Activity Hazard Analysis shall be job specific and shall address the following major points:

(a) Activity being performed (i.e. identify major phase).

(b) Sequence of work.

(c) Hazards to be controlled.

(d) Control measure(s) to mitigate the hazards.

(3) A work phase in the analysis is defined as a major operation involving a type of work which presents hazards that must be abated or controlled and which has not been experienced in previous operations, or when a new Subcontractor or work crew is to perform work.

(4) The Analysis for each major work phase will be discussed by the Contractor and Construction Officer's representative. Work shall not proceed on that phase until the Contractor's Activity Hazards Analysis Procedures has been approved by the Contracting Officer's Representative.

C2E-6.2.2.3 Confined Space Procedures. Confined space is defined in EM 385-1-1, Section 27. The Contractor shall develop detailed written standard operating procedures for confined space monitoring, training, entry, work and emergency actions in accordance with EM 385-1-1 Section 27 and as further described below. The procedures shall include the items listed below as minimum, and may consider additional factors as identified by the Contractor.

(1) Equipment and procedures to be used for testing the air in confined spaces prior to entry and during work, to determine oxygen content and to detect combustible and toxic atmospheres. Include equipment approvals for use in Immediately Dangerous to Life or Health (IDLH) environments (example, Factory Mutual, Underwriters Laboratory), certificated of calibration, which include type of equipment, model number, date of calibration, firm conducting calibration and signature of individual certifying calibration.

(2) Detailed emergency procedures for each type of confined work space including appropriate methods of communication (i.e. visual, voice, hand signal, radio or other method) and escape or rescue methods. Communication procedures must be established for personnel working in high noise environments or toxic atmospheres to ensure that such workers do not void the effectiveness of personal protective equipment in order to communicate with others.

(3) A decision-tree diagram identifying the individual(s) by name, their qualifications and detailing their responsibilities for administering the Contractors Confined space program to include issuance of confined space permits, confined space monitoring, communication and standby responsibilities.

(4) A detailed discussion of the confined space permit system to be used. Specifically, provide a copy of the permit which will be utilized with instructions for completion and issuance.

(5) Detail of the procedures to be utilized for conducting simulated drills prior to initiating work in confined spaces to ensure that the emergency procedures developed are feasible. For example, entrance and exit openings to the confined space must be large enough for a rescue worker wearing a Self-Contained Breathing Apparatus (SCBA) to get himself and the victim out.

(6) Safe Entry Procedures under emergency conditions.

(7) Full description of how stand-by personnel will be trained, and used for all confined space operations. Standby personnel used for all confined space operations shall be equipped with SCBA with a minimum breathing air supply of 30 minutes. Individuals selected to act as standby personnel shall be medically evaluated to ensure that they are psychologically able to perform rescue duties while wearing a SCBA. In addition, they shall be thoroughly trained in confined space monitoring techniques, communications to be used, and emergency rescue techniques. Communications (i.e. visual, voice, signal line, radio or other means) shall be maintained between workers inside confined space and standby personnel at all times.

(8) Methods of Inspection of personal protective equipment prior to use in confined space.

(9) Work practices and other engineering controls designed to reduce airborne hazardous chemicals and sandblasting dust exposures to a minimum.

(10) Specification of the design and installation of ventilation systems for confined work spaces to ensure that an adequate amount of makeup air is moving through the confined space. All air moving devices shall be located and affixed to an opening of the confined space in a manner that assures that the airflow is not restricted or short circuited and is supplied in the proper direction. Dust collection shall be provided at the exhaust to reduce emissions. Means of egress shall not be blocked.

(11) Full description of how all affected workers will be trained in confined space emergency procedures including space entry (i.e. oxygen deficiency and enrichment and combustible and toxic gases and vapors); methods of evaluation confined space environment (i.e. use of oxygen meters, combustible gas meters, detector tubes, and any other chemical or physical agent sampling detecting devices to be used); entry procedures; isolation and lockout; air monitoring; work in confined space; stand-by personnel; respiratory protection procedures; communication procedures; safety equipment; smoking policy; use of entry permits and appropriate escape of rescue procedures.

C2E-6.2.2.4 Respiratory Protection Program. As part of the Accident Prevention Plan, the Contractor shall develop a comprehensive written respiratory protection program in accordance with OSHA regulation 29 CFR Part 1910.134 and EM 385-1-1, Section 07.B and consistent with the guidance contained in the National Institute for Occupational Safety and Health (NIOSH) document entitled Respirator Decision Logic (NIOSH) Publication No. 87-108). Copies of this document may be obtained by Contacting NIOSH Publications in Cincinnati, Ohio at (513) 533-8280. The program shall define policies and procedures for the selection, fit-testing, use, training, maintenance, cleaning, storage, recordkeeping, and medical requirements for users. The program shall include a listing of the type of respirators to be worn and their National Institute for Occupational Safety and Health and/or Mine Safety and Health Administration (NIOSH/MSHA) approval statements and numbers.

C2E-6.2.2.5 Material Safety Data Sheets. The Contractor shall fully detail procedures for obtaining and providing material safety data sheets (MSDSs) for hazardous materials that will be brought onto the job-site. For the purpose of the Contract, hazardous materials are those described by Federal Standard 313 (latest version) and the OSHA Hazard Communication Standard 29 CFR Para 1910.1200. MSDSs for hazardous materials furnished by the Government are appended to this Contract document. MSDSs for Contractor furnished hazardous materials must be obtained from the product manufacturer, importer, distributor, or supplier and a copy shall be provided to the government's on-site representative prior to use.

C2E-6.2.2.6 Airborne Sampling Plan. The Contractor shall develop and submit an air sampling plan as part of the Accident Prevention Plan detailing the NIOSH, Factory Mutual, or Underwriters Laboratories approved equipment, equipment calibration procedures, sampling methods and analytical procedures to be used based on the type of work to be performed, confined space air monitoring procedures required in accordance with C2E-5.2.2.3 and anticipated toxic contaminants to be generated. The Contractor shall review the constituents of the abrasive media as well as confined spaces to be entered to determine the scope of the sampling plan. The sampling plan shall provide for approved methods of sampling and analysis by NIOSH sampling and analytical methods. The Contractor shall submit the name of the Laboratory to be used to conduct the analysis of any collected air samples. The Laboratory shall be accredited by American Industrial Hygiene Association (AIHA) and shall have demonstrated proficiency in the analysis to be performed as evidenced by successful passing participation in the joint NIOSH/AIHA Analytical Testing Proficiency Program (PAT). A listing of AIHA approved laboratories and PAT participants may be obtained by calling AIHA in Akron, Ohio (216) 762-7294. The Plan shall note procedures to provide detail of how the Contractor will provide to the Contracting Officer Representative the laboratory conducted

analysis of air sampling within 5 working days of the sample date, and the results from direct-reading instrumentation on the same day the samples were collected.

C2E-6.2.2.7 Ventilation Assessment. The Contractor shall submit for approval the method to be used to provide ventilation control. See C2E-6.2.2.3(10).

C2E-6.2.2.8 Worker Hazard Communication Program. The Contractor shall submit a worker hazard communication program for his employees consistent with 29 CFR 1910.1200 and state and local worker "right-to-know" rules and regulations. The program shall detail how the Contractor's employees will be informed of the constituents of the abrasive blasting media, and other materials used, as well as their potential hazards and toxic effects; how they will be informed of control measures that may be taken to prevent or minimize exposure; how they will also be informed of any exposure hazards associated with removal of surface coatings materials. This submittal shall show how the hazardous materials to be used or generated during work operations are to be identified, and how employees will be informed of the hazards prior to beginning the work task(s). In addition, the program shall detail how the Contractor will ensure, prior to usage, that all Government and Contractor furnished containers of paints, thinners or other hazardous materials are labeled in accordance with the requirements of the OSHA Hazard Communication Standard 29 CFR Para 1910.1200. The program shall describe procedures to ensure that workers will not open any chemical product containers which are improperly labeled and how the Government's on-site representative will be informed of any chemical product containers furnished by the Government that are properly labeled. The program shall also detail the requirements for labeling a product after it has been transferred from a labeled shipping container to a secondary container to ensure that information required by the OSHA Hazard Communication standard is placed on the secondary container.

C2E-6.2.2.9 Medical Surveillance. The Contractor shall describe how he will provide medical surveillance to his workforce as required in paragraph C2E-6.4.1, and provide a statement from the examining physician indicating the name of each employee who has been medically evaluated as described in C2E-6.4.1 and cleared to perform the work required by the Contractor. The statement shall detail any physical limitations, the employee's physical and psychological capability to wear respiratory protective equipment and perform job related tasks, and bear the date of the medical evaluation, the physician's name, signature and telephone number. The Contractor shall state how he will make potential employees fully aware that facial hair cannot interfere with the sealing surface or valve function of respirators required to be worn.

C2E-6.3 Abrasive Blasting.

C2E-6.3.1 Hoses and Nozzles. Hoses and hose connections of a type to prevent shock from static electricity shall be used. Hose lengths shall be joined together by approved couplings of a material and type designed to prevent erosion and weakening of the couplings. The couplings and nozzle attachments shall fit on the outside of the hose and shall be designed to prevent accidental disengagement. A deadman type control device shall be provided at the nozzle end of the blasting hose to cut off the flow in the event the blaster loses control of the hose.

C2E-6.3.2 Blasting Helmets. Blasting operators shall be protected by MSHA/NIOSH approved air-line fed abrasive blasting helmets of a continuous flow, positive pressure type. Breathing air, source of supply and other respirator criteria shall conform to the requirements EM 385-1- 1, Section 07.B.

C2E-6.3.3 Protective Clothing. Blasting operators shall be protected against injury from impact of blast abrasives by wearing appropriate protective equipment, including heavy canvas or leather gloves and aprons or equivalent protection. Safety shoes or boots shall be worn. Hearing protectors shall be worn during all blasting operations.

C2E-6.3.4 Workers Other Than Blasters. Workers other than blasting operators working in close proximity to abrasive blasting operations, shall be protected by utilizing MSHA/NIOSH approved half face or full face air purifying respirators equipped with high efficiency particulate air (HEPA) filters, eye protection meeting or exceeding ANSI Standard Z87.1 (latest revision) and hearing protectors (ear plugs and/or ear muffs). Representative air sampling, in the breathing zone of the worker, shall be obtained prior to permanent issuance of any respiratory protection to assure that the protection factor of the respirator is not exceeded. Air sampling will not be required when non-silica containing abrasive blasting material (1% free silica content or less) is used and it has been established the the surface coating to be removed will not generate toxic airborne particulates (for example lead or chromates).

C2E-6.4 Medical Status.

C2E-6.4.1 Medical Evaluation. Prior to the start of work and annually thereafter, all Contractor employees working with or around media, those required to wear respiratory protective equipment, and those who will be exposed to high noise levels, shall be medically evaluated for the particular type of exposure they may encounter. The evaluation shall include:

(1) Audiometric testing and evaluation of employees who will work in the noise environments.

(2) Vision Screening (employees who use full face-piece respirators shall not wear contact lenses).

(3) Medical evaluation shall include but shall not be limited to the following:

(a) Medical history, including but not limited to alcohol use, with emphasis on liver, kidney and pulmonary systems, and sensitivity to chemicals to be used on the job.

(b) General physical examination with emphasis on liver, kidney and pulmonary system.

(c) Determination of the employee's physical and psychological ability to wear respiratory protective equipment and perform job related tasks.

(d) Determination of baseline values of biological indices for later comparison to changes associated with exposure to paint systems and thinners or blast media which include:

(1) liver function tests to include SGOT, SGPT, GGPT, alkaline phosphatase, bilirubin.

(2) complete urinalysis

(3) EKG (employees over age forty)

(4) blood urea nitrogen (bun)

(5) serum creatinine

(6) pulmonary function test, FVC and FEV

(7) chest x-ray (if medically indicated)

(8) blood lead (for individuals where it is known there will be an exposure to materials containing lead)

(9) other criteria that may be deemed necessary by the Contractor's physician.

(10) physician's statements for individual employees that medical status would permit specific task performance.

C2E-6.4.2 Change in Medical Status. Any employee whose medical status has changed negatively due to work related chemical and/or physical agent exposure while working with or around paint systems and thinners, blast media, or other chemicals shall be evaluated by a physician and the Contractor shall obtain a physicians statement as described in C2E-6.4.1 (10) above prior to allowing the employee to return to those work tasks. The

Contractor shall notify the Contracting Officer in writing of any negative changes in employee medical status and the results of the physician's reevaluation statement.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

C2E-7. INSTALLATION.

C2E-7.1 Driving Hammers. Hammers shall be steam, air, or diesel drop, single-acting, double-acting, differential-acting or vibratory type.

C2E-7.2 Driving Required and Existing Sheets. All piles shall be driven to the depths shown in the drawings. All piles shall be driven by approved methods in such a manner as not to subject the piles to serious damage and to insure proper interlocking throughout the length of the piles. Pile hammers shall be maintained in proper alignment during driving operations by use of suitable leads or by guides attached to the hammer. A protecting cap shall be employed in driving, when required, to prevent damage to the tops of piles. All piles shall be driven without the aid of a water jet unless otherwise authorized. Adequate precautions shall be taken to insure that piles are driven plumb. If a pile is overdriven and a vertical welded extension is necessary to restore proper elevation, a minimum extension of 6" above the weld shall be made even if it is necessary to pre-trim the overdriven pile to procure the correct elevation. Piles driven out of interlock with adjacent piles or otherwise damaged shall be removed and replaced by new piles at the Contractor's expense.

C2E-7.3 Sequence of Driving. The Contractor shall not drive sheet piles within 200 feet of concrete placed on this project less than 7 days after that concrete has been placed.

C2E-8. TRIMMING EXISTING SHEET PILE.

C2E-8.1 Scope. Existing sheet piling shall be trimmed at the locations described herein. Trimming shall not be done more than 120 feet in advance of cap construction unless approved by the Contracting Officer.

C2E-8.1.1 Transition Sections. Sheet pile at the following locations shall be driven and then trimmed as shown on the contract drawings:

- a) W/L Station 118+25.95 to W/L Station 116+39.51
- b) W/L Station 91+07.14 to W/L Station 89+20.70
- c) W/L Station 69+93.33 to W/L Station 67+82.02

C2E-8.1.2 U.S. Sprint Fiber Optic Line. The Contractor shall not drive the 4 sheet piles north or south of the centerline of the U.S. Sprint Fiber Optic Line (Approximately Station W/L 99+78 to W/L Station 99+65). He shall trim these sheets to the required grade.

C2E-8.2 Pulling Holes. The Contractor shall burn a standard pulling hole 4 inches below the top of each trimmed sheet unless otherwise directed by the Contracting Officer.

C2E-8.3 Disposal of Cut-Offs. Cut-offs shall become the property of the Contractor and shall be removed from the job site as directed by the Contracting Officer.

C2E-9. EMERGENCY PROVISIONS FOR SHEET PILE.

C2E-9.1 Scope. Temporary gaps in flood protection will be created as the sheet piles are driven from existing elevations to required grade. In the event of an approaching storm, all uncapped sheets which have been lowered to accommodate construction of the concrete cap shall be raised to top elevations existing at the start of the work.

C2E-9.2 Implementation. The Contracting Officer or his Representative shall decide when to require the Contractor to close all temporary gaps in flood protection. The Contractor shall have all temporary gaps in flood protection closed within 24 hours of the order to do so. This work shall include the following:

- a) The Contractor shall cap any sheeting with formwork in place, as formwork is not acceptable flood protection. In the event capping is not possible, the formwork and rebar shall be removed and the sheets raised as required in C2E-6.1.
- b) The Contractor shall, if working in different reaches, first raise all sheeting in the reach where the sheet pile has been driven to a lower elevation.
- c) Any levee degraded to allow for access or inspection shall be backfilled to its required cross-section in accordance with C2C-4.2.

C2E-9.3 Limits to Length of Temporary Gap. The Contractor shall limit the length of the temporary gaps in flood protection to 400 feet per fully operational driving rig on-site during the months of June through November, inclusive, or 800 feet per fully operational driving rig on-site during the months of December through May, inclusive.

C2E-10. PROVISIONS FOR COFFERDAM.

C2E-10.1 Scope. During construction operations from W/L Station 69+93.33 to W/L Station 9+25.80, the Contractor shall construct a sheet pile cofferdam to provide a dry area for floodwall construction on the flood side of the sheet pile wall. The cofferdam sheetpiling shall not be more than 12 feet west of the centerline of the existing sheetpiling.

C2E-10.2 Gage Readings. The following maximum monthly gage readings for the Orleans Marina are supplied to the Contractor to provide historical information on water levels in the canal. These readings are not predictions of future water levels in the canal.

MONTH, YR	MAX(NGVD)	MONTH, YR	MAX(NGVD)
Jan 1989	1.5	Oct 1991	3.8
Feb 1989	1.9	Nov 1991	3.0
Mar 1989	2.2	Dec 1991	3.1
Apr 1989	1.9	Jan 1992	2.7
May 1989	2.2	Feb 1992	3.1
Jun 1989	2.3	Mar 1992	2.9
Jul 1989	2.4	Apr 1992	3.1
Aug 1989	2.9	May 1992	1.9
Mar 1991	3.4	Jun 1992	2.2
Apr 1991	4.0	Jul 1992	2.1
May 1991	4.4	Aug 1992	4.4
Sep 1991	2.7	Sep 1992	3.7

C2E-11. MEASUREMENT. No measurement shall be made for driving existing sheet pile in place, or construction of the required cofferdam. No separate measurement or payment will be made for trimming, removal of coal tar epoxy paint, and breaking out existing concrete cap.

C2E-12. PAYMENT.

C2E-12.1 Driving Existing Sheet Pile in Place. Payment for driving existing sheet pile to the required elevation shall be made under the contract lump sum price for "Driving Existing Sheet Pile in Place". Price and payment shall constitute full compensation for providing all plant, labor, materials, and equipment, including all costs associated with driving, trimming, removing coal tar epoxy paint, and breaking out the existing concrete cap adjacent to W/L Station 0+72.69.

C2E-12.2 Emergency Provisions for Sheet Pile. Payment for raising and subsequent redriving of sheet pile required in the event of emergency conditions shall be made under the Contract Clause entitled "CHANGES".

C2E-12.3 Cofferdam. Payment for constructing the cofferdam required from W/L Station 69+93.33 to W/L Station 9+25.80 will be made under the contract lump sum price for "Cofferdam". Price and payment shall constitute full compensation for providing all plant, labor, materials and equipment, and shall include all costs associated with cofferdam construction.

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SECTION C3A-
FORMWORK FOR CONCRETE

PART 1 - GENERAL

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C3A-1.2 Reinforcing Steel. Section C3B.

C3A-1.3 Expansion Joints. Section C3C.

C3A-2. APPLICABLE PUBLICATIONS. The following publications of issues listed below, referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the reference thereto:

C3A-2.1 American Concrete Institute (ACI) Standards.

ACI 347R-88 Formwork for Concrete

C3A-2.2 U. S. Department of Commerce, National Institute of Standards and Technology (NIST) Product Standard.

PS 1-83 For Construction and Industrial Plywood

C3A-3. SUBMITTALS.

C3A-3.1 Shop Drawings. Drawings and design computations for all formwork (including prefabricated forms) required shall be submitted at least 45 days before either fabrication on site or before delivery of prefabricated forms. The drawings and data submitted shall include the type, size, quantity and strength of all materials of which the forms are made, the plan for jointing of facing panels, details affecting the appearance, type and location of form ties, and the assumed design values and loading conditions. The submittals are also required when prefabricated forms are bought or rented by the Contractor from a supplier.

C3A-3.2 Manufacturers Literature shall be submitted for plywood, concrete form hard board, form accessories, form lining, prefabricated forms, and form coating proposed for use.

PART 2 - PRODUCTS

C3A-4. DESIGN. The design and engineering of the formwork, as well as its construction, shall be the responsibility of the Contractor. The submittals shall include the member properties, allowable material stresses and form dimensions. The computations shall include the design of individual members for stress and deflection load diagrams are also required. The formwork shall be designed for loads, lateral pressure and allowable stresses in

accordance with Chapter 2 of ACI Standard 347R. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall have sufficient rigidity to maintain specified tolerances. For Class A or Class D finish, the design shall be made to limit deflection of facing material between studs as well as deflection of studs and walers to 0.0025 times the span.

C3A-5. MATERIALS.

C3A-5.1 Forms shall be fabricated with facing materials that produce the specified construction tolerance requirements of Section C3D-4.2 and the surface requirements of Section C3D-4.2.

C3A-5.1.1 Class "A" Finish. This class of finish shall apply to all exterior formed surfaces except those surfaces which are to receive a Class "D" Finish, listed below. The form facing material shall be composed of a smooth non-absorptive material such as steel fiberglass reinforced plastic, scarf-jointed High Density Overlay, Class I, Grade B, exterior type ply form conforming to NIST Product Standard PS-1, or approved equal. The Grade B Side of the ply form shall be stamped as such and shall face the concrete.

C3A-5.1.2 Class "D" Finish. This class of finish shall apply to all surfaces covered by backfill. The sheathing may be of wood or steel.

C3A-5.2 Form Accessories. Ties and other similar form accessories to be partially or wholly embedded in the concrete shall be of a commercially manufactured type. The use of tapered ties will not be allowed. After the ends or end fasteners have been removed, the embedded portion of metal ties shall terminate not less than 2-inches from any concrete surface either exposed to view or exposed to water. Plastic snap ties may be used in locations where the surface will not be exposed to view. Form ties shall be constructed so that the ends or end fasteners can be removed without spalling the concrete. Safety factors for form ties, anchors and hangers shall comply with the standards of ACI 347R, Table 2.4. Removable tie rods shall not be used.

C3A-5.3 Form Coating shall be a commercial formulation of satisfactory and proven performance that will not bond with, stain or adversely affect concrete surfaces and will not impair subsequent treatment of concrete surfaces depending upon bond or adhesion nor impede the wetting of surfaces to be cured with water or curing compounds.

PART 3 - EXECUTION

C3A-6. INSTALLATION. Forms shall be sealed to be mortar tight, properly aligned and adequately supported to produce concrete surfaces meeting the surface requirements of Section C3D-

4.3 and meeting the construction tolerances of C3D-4.2. Where concrete surfaces are to be permanently exposed to view, joints in form panels shall be arranged to provide a pleasing appearance. Where forms for continuous surfaces are placed in successive units, care shall be taken to fit the forms over the completed surface so as to obtain accurate alignment of the surface and to prevent leakage of mortar. Forms shall not be re-used if there is any evidence of surface wear and tear or defects which would impair the quality of the surface. All surfaces of forms and embedded materials shall be cleaned of any mortar from previous concreting and of all other foreign material before concrete is placed in them. The failure of a form or any system used in conjunction with a form in the placement of a floodwall that in any way affects the integrity of the form or tolerance of the floodwall shall necessitate the immediate removal of the form and any concrete placed prior to the failure. All costs for removal, clean up and salvage of reinforcing shall be borne by the Contractor. Any material removed shall not be returned to service until it has been satisfactorily shown to the Contracting Officer or his representative, that the cause for the failure has been corrected and proper steps have been added to the Contractor's Quality Control Plan to prevent a recurrence. Slip forming will not be allowed.

C3A-7. CHAMFERING. All exposed joints, edges and external corners shall be chamfered $\frac{3}{4}$ of an inch by molding placed in the forms unless the drawings specifically state that chamfering is to be omitted or as otherwise specified. When wood chamfering strips do not prevent leakage of paste or water, an elastomeric type shall be employed. Chamfered joints shall not be permitted where earth or rockfill is placed in contact with concrete surfaces. Chamfered joints shall be terminated a sufficient distance outside the limit of the earth or rockfill so that the end of the joints will be clearly visible.

C3A-8. COATING. Forms for exposed or painted surfaces shall be coated with form oil or a form-release agent before the form or reinforcement is placed in final position. The coating shall be used as recommended in the manufacturer's printed or written instructions. Forms for unexposed surfaces may be wet with water in lieu of coating immediately before placing concrete, except that in cold weather with probable freezing temperatures coating shall be mandatory. Surplus coating on form surfaces and coating on reinforcing steel and construction joints shall be removed before placing concrete. Coatings that discolor concrete or are incompatible with their concrete materials are prohibited.

C3A-9. REMOVAL. Forms shall not be removed without approval and all removal shall be accomplished in a manner which will prevent injury to the concrete. Forms shall not be removed before the expiration of the minimum time indicated below, except as

otherwise directed or specifically authorized. When conditions of the work are such as to justify the requirement, forms will be required to remain in place for a longer period.

C3A-9.1 Unsupported Concrete. Formwork for walls shall not be removed in less than 18 hours after concrete placement.

C3A-9.2 Inspection of Concrete Placement. The Contractor shall place the first monolith in its entirety and remove the formwork as indicated in C3A-9 prior to placing concrete in any other monolith. The Contractor shall notify the Contracting Officer's representative immediately after the forms are removed so that an on-site inspection of the concrete work can be made. No patching or repair shall be permitted until after the inspection is made. Curing operations shall not be altered. Recommendations made by the Contracting Officer's Representative, as a result of the inspection, shall be made part of the Contractor's Quality Control for all future concrete work at no cost to the Government.

C3A-10. QUALITY CONTROL.

C3A-10.1 Forms, embedded items, ties and other accessories as specified in C3A-5.2, shall be inspected in sufficient time prior to each concrete placement by the Contractor in order to certify to the Contracting Officer that they are ready to receive concrete. Inspection of forms for concrete shall include a detailed evaluation of leakage control measures, type and application of release agent, and form cleanliness to avoid dirt transfer to the concrete.

C3A-10.2 Reporting. The results of each inspection shall be reported in writing and shall include, but not limited to, the following:

- (1) Removal of extraneous material from forms.
- (2) Check of joints for mortar tightness.
- (3) Type of form material required for the concrete finish.
- (4) Falsework and/or bracing.
- (5) Alignment, tolerances, and dimensions.
- (6) Chamfering.
- (7) Form coating.

The original and two copies of these reports, as well as corrective action taken, shall be furnished to the Government daily. The format of these reports shall be as prescribed in Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C3A-11. MEASUREMENT AND PAYMENT. No separate measurement will be made for formwork. All costs associated with formwork are to be included in the contract price for "Reinforced Concrete Cap".

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SECTION C3B - REINFORCING STEEL

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SECTION C3B - REINFORCING STEEL

PART 1 - GENERAL

C3B-1. SCOPE. The work covered by this section consists of furnishing all equipment, materials and labor for providing and placing steel bars and accessories for concrete reinforcement.

C3B-2. RELATED WORK SPECIFIED ELSEWHERE.

C3B-2.1 Formwork. Section C3A, "FORMWORK FOR CONCRETE".

C3B-2.2 Joints. Section C3C, "EXPANSION JOINTS".

C3B-2.3 Concrete. Section C3D, "CAST-IN-PLACE STRUCTURAL CONCRETE".

C3B-3. APPLICABLE PUBLICATIONS. The following publications of the issues listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto:

C3B-3.1 American Concrete Institute (ACI) Standards.

ACI 318-89 Building Code Requirements for Reinforced Concrete

SP-66 ACI Detailing Manual - 1980

C3B-3.2 American Society for Testing and Materials (ASTM) Standards.

A 615-87a Deformed and Plain Billet-Steel Bars for Concrete Reinforcement

E 8-89 Tension Testing of Metallic Materials

C3B-4. QUALITY CONTROL.

C3B-4.1 Materials Tests. The Contractor shall have required material tests performed by an approved laboratory to demonstrate that the materials are in conformance with the specifications. Tension tests shall be performed on full cross section specimens in accordance with ASTM E 8, using a gage length that spans the extremities of specimens with welds or sleeves included. Tests shall be at the Contractor's expense.

C3B-4.2 General. The Contractor shall establish and maintain quality control for proper installation of all work covered in this section to assure compliance with contract specifications and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Minimum concrete cover of reinforcement steel.
- (2) Number, size, and location of placement.
- (3) Maintain adequate splicing lengths where required.

C3B-4.3 Reporting. The original and two copies of these records and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C3B-5. SUBMITTALS.

C3B-5.1 Shop Drawings. The Contractor shall prepare and submit complete shop drawings to the Contracting Officer for approval in accordance with the specified requirements. Shop drawings shall include details of bar supports showing types, sizes, spacing, and sequence.

C3B-5.2 Test Reports. Certified test reports of reinforcement steel showing that the steel complies with the applicable specifications shall be submitted to the Contracting Officer by the Contractor. Reports shall be furnished for each steel shipment and identified with specific lots prior to placement.

C3B-5.3 Disposition Records. A system of identification which shows the disposition of specific lots of approved materials in the work shall be established and submitted to the Contracting Officer before completion of the contract.

PART 2 - PRODUCTS

C3B-6. MATERIALS.

C3B-6.1 Reinforcing Steel.

C3B-6.1.1. Billet-Steel Bars. Billet-steel bars shall conform to ASTM A 615, Grade 60 for bar sizes 3 through 11, including the following requirements:

- (1) Tension test specimens shall be bars of full cross section as rolled for all sizes.
- (2) The bend test requirements shall be based upon 180 degree bends of full size bars for all grades of steel. The bend diameters for bend tests shall be as indicated in the following table and shall be measured on the inside of bars:

<u>Bar Size</u>	<u>Maximum Diameter</u>
#3, #4 and #5	4 bar diameters
#6, #7 and #8	5 bar diameters
#9, #10 and #11	5 bar diameters

C3B-6.2 Reinforcing Steel Accessories.

C3B-6.2.1 Bar Supports. Bar supports shall conform to ACI Publication SP-66. Bar supports for formed surfaces exposed to view or to be painted shall be plastic protected wire, stainless steel, or precast concrete bar supports. Precast concrete supports shall be wedge-shaped, not larger than 3-1/2 x 3-1/2 inches, of thickness equal to that indicated for concrete cover, and shall have an embedded hooked tie-wire for anchorage. If formed surface is exposed to view, precast concrete supports shall be the same quality, texture, and color as the finish surface.

C3B-6.2.2 Wire Ties. Wire ties shall be 16-gage or heavier black annealed wire.

PART 3 - EXECUTION

C3B-7. INSTALLATION. Reinforcement steel and accessories shall be placed as specified and as shown on contract drawings and approved shop drawings. Holes cut in steel sheet piling for passing reinforcing bars shall not exceed 2 inches in diameter. Where holes fall in the web of the steel sheet pile, the hole shall be slotted 4 inches horizontally to accommodate passing the reinforcing bars. Placement details of steel and accessories not specified or shown on the drawings shall be in accordance with ACI 315 ACI Publication SP-66 and or ACI 318 or as directed by the Contracting Officer. Steel Reinforcement shall be fabricated to shapes and dimensions shown, placed where indicated within the specified tolerances, and adequately supported during concrete placement. At the time of concrete placement all steel shall be free from loose, flaky rust, scale (except tight mill scale), mud, oil, grease, or any other coating that might reduce the bond with the concrete.

C3B-7.1 Hooks and Bends. Reinforcement bars may be mill or field bent. All steel bars shall be bent cold unless otherwise authorized. No steel bars partially embedded in concrete shall be field bent unless indicated on the drawings or otherwise authorized. All hooks or bends shall be in accordance with ACI 318.

C3B-7.2 Placing Tolerances.

C3B-7.2.1 Spacing of Bars. Bars shall be spaced as indicated on the drawings or as otherwise directed. The spacing between adjacent bars and the distance between layers of bars may not vary from the indicated position by more than one bar diameter nor more than one inch, whichever is less.

C3B-7.2.2 Concrete Cover. The minimum and maximum concrete cover of main reinforcement steel shall be as shown on the drawings.

C3B-7.3 Splicing. Splices in reinforcement steel shall be as specified, shown on the drawings or as directed by the Contracting Officer. Bars may be spliced at alternate or additional locations at no additional cost to the Government, subject to the approval of the Contracting Officer. Except as provided herein, all splicing shall be in accordance with approved splicing procedures and the requirements of ACI 318. Bars larger than No. 11 shall be spliced with mechanical connectors or butt welded in accordance with ACI 318. The splice shall be submitted to the Contracting Officer for approval.

C3B-7.3.1 Lap Splices. Lap Splices shall be used only for bars smaller than size #14. Bar laps may be placed in contact and securely tied or may be spaced transversely apart to permit the embedment of the entire surface of each bar in concrete, but lapped bars shall not be spaced farther apart than one-fifth the required length of lap or 6-inches. Lengths of laps for bars shall conform to the requirements of ACI 318, except when otherwise shown on the drawings.

C3B-8. MEASUREMENT AND PAYMENT. No separate measurement will be made for reinforcement bars and accessories. Payment for furnishing and placing reinforcement bars and accessories shall be included in the contract price for "Reinforced Concrete Cap".

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SECTION C3C - EXPANSION JOINTS

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SECTION C3C - EXPANSION JOINTS

PART 1 - GENERAL

C3C-1. SCOPE. This section covers the materials, techniques and workmanship requirements for forming expansion joints in concrete structures.

C3C-2. RELATED WORK SPECIFIED ELSEWHERE. Major requirements for concrete work are specified in Section C3D - "CAST-IN-PLACE STRUCTURAL CONCRETE".

C3C-3. APPLICABLE PUBLICATIONS. The following publications of the issues listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto:

C3C-3.1 American Society for Testing and Materials (ASTM) Standards. (With corresponding U.S. Army Corps of Engineers Handbook for Concrete and Cement (CRD) Specifications where indicated.)

D 1752-84 (CRD-C 509)	Preformed Sponge Rubber and Cork Expansion Joint Fillers and Concrete Paving and Structural Construction
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C3C-3.2 U.S. Army Corps of Engineers Handbook for Concrete and Cement (CRD) Specifications.

CRD-C 513-74	Rubber Waterstops
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CRD-C 572-74	Polyvinylchloride Waterstops
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C3C-4. QUALITY ASSURANCE.

C3C-4.1 Materials Tests.

C3C-4.1.1 Non-Metallic Waterstops. Samples of materials as required in C3C-5.2 below shall be visually inspected and tested by and at the expense of the Government for compliance with CRD-C 513 or CRD-C 572, as applicable. If a sample fails to meet the specification requirements, new samples shall be provided and the cost of retesting will be deducted from payments due the Contractor at the rate of \$650.00 per material sample retested.

NOTE: TESTING OF NON-METALLIC WATERSTOPS WILL BE PERFORMED BY THE WATERWAYS EXPERIEMENT STATION (WES).

C3C-5. SUBMITTALS.

C3C-5.1 Test Reports. Certified manufacturer's test reports shall be provided for premolded expansion-joint filler strips to verify compliance with the applicable specification.

C3C-5.2 Samples. The Contractor shall submit waterstop materials for inspection and testing and shall identify so as to indicate manufacturer, type of material, size and quantity of material and shipment represented. Each materials sample shall be a piece not less than 12 inches long cut from each 200 feet of finished waterstop furnished, but not less than a total of four linear feet of each type and size furnished. Test samples shall be furnished at least 75 days prior to the installation of waterstops in the work.

PART 2 - PRODUCTS

C3C-6. MATERIALS.

C3C-6.1 Premolded Expansion Joint Filler Strips. Premolded expansion joint filler shall be the sponge rubber type and shall conform to ASTM D 1752, Type I.

C3C-6.2 Non-Metallic Waterstops. Rubber waterstops shall conform to CRD-C 513. Polyvinylchloride waterstops shall conform to CRD-C 572.

PART 3 - EXECUTION

C3C-7. INSTALLATION. Joint locations and details, including materials and methods of installation of joint fillers and waterstops, shall be as specified, shown on the drawings and as directed. In no case shall any fixed metal be continuous through an expansion or contraction joint.

C3C-7.1 Expansion Joints. Premolded filler strips shall be accurately positioned and secured against displacement to clean, smooth concrete surfaces. Material used to secure premolded fillers and wood strips to concrete shall not harm the concrete and shall be compatible with the joint sealant or seals. The wood strips shall not be removed until after the concrete curing period. The groove shall be thoroughly cleaned of all laitence, curing compound, foreign materials, and protrusions of hardened concrete and any dust which shall be blown out of the groove with oil-free compressed air.

C3C-7.2 Waterstops. Waterstops shall be installed in joints as shown on the drawings or as otherwise directed. Waterstops shall be carefully and correctly positioned during installation to eliminate faulty installation that may result in joint leakage. Adequate provision shall be made to support and protect the waterstops during the progress of the work. Any waterstop punctured or damaged shall be replaced or repaired at the Contractor's expense. The concrete shall be thoroughly consolidated in the vicinity of the waterstop. Suitable guards shall be provided to protect exposed projecting edges and ends of partially embedded waterstops from damage when concrete placement has been discontinued.

C3C-8. MEASUREMENT AND PAYMENT. No separate measurement will be made for expansion joints, waterstops, and expansion joint fillers. All costs in connection with expansion joints, waterstops, and expansion joint fillers shall be included in the contract price for "Reinforced Concrete Cap".

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SECTION C3D - CAST-IN-PLACE STRUCTURAL CONCRETE

PART 1 - GENERAL

C3D-0. SCOPE. This section covers the materials, techniques, and workmanship required for placing cast-in-place structural concrete.

C3D-1. RELATED WORK SPECIFIED ELSEWHERE.

C3D-1.1 Expansion Joints. Section C3C.

C3D-1.2 Reinforcing Steel. Section C3B.

C3D-1.3 Formwork for Concrete. Section C3A.

C3D-2. APPLICABLE PUBLICATIONS. The following publications referred to thereafter by basic designation only, form a part of this specification to the extent indicated:

C3D-2.1 American Concrete Institute (ACI) Standards with Corresponding CRD Standard Indicated Where Available.

ACI 211.1-91 (CRD-C99)	Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete
ACI 305R-91	Hot Weather Concreting
ACI 318-89	Building Code Requirements for Reinforced Concrete

C3D-2.2 American Society for Testing and Materials (ASTM) with Corresponding CRD Standard Indicated Where Available.

C 29-90 (CRD-C 106)	Unit Weight and Voids in Aggregate
C 31-90 (CRD-C 11)	Making and Curing Concrete Test Specimens in the Field
C 33-90 (CRD-C 133)	Concrete Aggregates
C 39-86 (CRD-C 14)	Compressive Strength of Cylindrical Concrete Specimens
C 42-84a (CRD-C 27)	Obtaining and Testing Drilled Cores and Sawed Beams in of Concrete
C 70-79 (CRD-C 111)	Surface Moisture of Fine Aggregate
C 94-90 (CRD-C 31)	Ready-Mixed Concrete
C 127-88 (CRD-C 107)	Specific Gravity and Absorption of Coarse Aggregate

C 128-88 (CRD-C 108)	Specific Gravity and Absorption of Fine Aggregate
C 136-84a (CRD-C 103)	Sieve Analysis of Fine and Coarse Aggregates
C 143-90 (CRD-C 5)	Slump of Portland Cement Concrete
C 150-89 (CRD-C 201)	Portland Cement
C 171-69 (CRD-C 310)	Sheet Materials for Curing Concrete
C 172-90 (CRD-C 4)	Sampling Freshly Mixed Concrete
C 192-90a (CRD-C 10)	Making and Curing Concrete Test Specimens in the Laboratory
C 231-89a (CRD-C 41)	Air Content of Freshly Mixed Concrete by Pressure Method
C 260-86 (CRD-C 13)	Air-Entraining Admixtures for Concrete
C 309-89 (CRD-C 304)	Liquid Membrane-Forming Compounds for Curing Concrete
C 441-89 (CRD-C 257)	Effectiveness of Mineral Admixtures in Preventing Excessive Expansion of Concrete Due to the Alkali-Aggregate Reaction
C 494-86 (CRD-C 87)	Chemical Admixtures for Concrete
C 566-89 (CRD-C 113)	Total Moisture Content of Aggregate by Drying
C 595-89 (CRD-C 203)	Blended Hydraulic Cements
C 597-83 (CRD-C 51)	Pulse Velocity Through Concrete
C 618-89a (CRD-C 255)	Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
C 803-90 (CRD-C 59)	Penetration Resistance of Hardened Concrete
C 805-85 (CRD-C 22)	Rebound Number of Hardened Concrete
C 1017-85 (CRD-C 88)	Chemical Admixtures for Use in Producing Flowing Concrete
C 1064-86 (CRD-C 3)	Temperature of Freshly Mixed Portland Cement Concrete

C 1077-90 (CRD-C 553) Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation

C 1107-89a (CRD-C 621) Packaged Dry, Hydraulic Cement Grout (Non-Shrinkable)

D 75-87 (CRD-C 155) Sampling Aggregates

C3D-2.3 Concrete Plant Manufacturer's Bureau (CPMB).

8th Revision (CRD-C 514) Concrete Plant Standards (1 Jan 86)

C3D-2.4 National Institute of Standards and Technology (NIST) formerly National Bureau of Standards.

Handbook 44 Specifications, Tolerance and Other Technical
1989 Edition Requirements for Commercial Weighing and Measuring Devices

C3D-2.5 U.S. Army Corps of Engineers Handbook for Cement and Concrete (CRD-C).

94-66 Surface Retarders

100-75 Sampling Concrete Aggregate and Aggregate Sources and Selection of Material for Testing

104-80 Calculation of Fineness Modulus of Aggregate

112-69 Surface Moisture in Aggregate by Water Displacement

143-62 Meters for Automatic Indication of Moisture in Fine Aggregate

400-63 Water for Use in Mixing or Curing Concrete

521-81 Frequency and Amplitude of Vibrators for Concrete

C3D-2.6 Louisiana Standard Specifications for Roads and Bridges (LSSRB) 1982 Edition, State of Louisiana, Department of Transportation and Development (LDOTD).

1003.02 Aggregates for Portland Cement Concrete and Mortar

C3D-2.6 Federal Specifications (Fed. Spec.).

A-A-1555(1981) Water Paint, Powder, (Cementitious White and Colors)

C3D-3. QUALITY ASSURANCE.

C3D-3.1 Preconstruction Sampling and Testing.

C3D-3.1.1 Aggregates. The aggregate sources listed in the Special Clause entitled "Aggregate Sources" have been determined to be capable of producing materials of a quality acceptable for this project. Proposed materials produced from similar strata, or of similar quality as those originally tested, will be approved. If the Contractor proposes to furnish aggregates from a source not listed in the Special Clause entitled "AGGREGATE SOURCES", samples consisting of not less than 500 pounds of each size coarse aggregate and 300 pounds of fine aggregate taken under the supervision of the Contracting Officer in accordance with CRD-C 100 shall be delivered to the Waterways Experiment Station (3909 Halls Ferry Road) in Vicksburg, MS within 15 days after notice to proceed. Sampling and shipment of samples shall be at the Contractor's expense. From 90 to 120 days will be required to complete evaluation of the aggregates. Testing by and at the expense of the Government will be in accordance with the applicable CRD or ASTM test methods. Tests to which aggregate may be subjected are specific gravity, absorption, cycles of freezing and thawing in concrete, alkali-aggregate reaction, organic impurities, and any other test necessary to demonstrate that the aggregate is of a quality that is at least equivalent to those sources listed in the Special Clause entitled "AGGREGATE SOURCES".

C3D-3.1.2 Cementitious Materials, Admixtures. At least 60 days in advance of concrete placement, the Contractor shall notify the Contracting Officer of the source of materials, along with sampling location, brand name, type, and quantity to be used in the manufacture and/or curing of the concrete.

C3D-3.1.2.1 Air-Entraining Admixture or other chemical admixtures that have been in storage at the project site for longer than 6 months or that have been subjected to freezing will be retested at the expense of the Contractor when directed by the Contracting Officer and will be rejected if test results indicate non-compliance with C3D-6.3.

C3D-3.2 Construction Testing By Government. The Government will sample and test aggregates and concrete to determine compliance with the specifications. The Contractor shall provide facilities and labor necessary to procure the representative test samples in the presence of the Contracting Officer or his representative. Samples of aggregates will be obtained at the point of batching in accordance with ASTM D 75. Concrete will be sampled in accordance with ASTM C 172. When cylinders are molded, slump and air content will be determined in accordance with ASTM C 143 and ASTM C 231, respectively. Test samples for each class of concrete will be taken at least once every 8-hour shift or for every 150 cubic yards placed, whichever requires more samples. From each sample, three compression test specimens will be made in

accordance with ASTM C 31. Compression test specimens will be protected and cured while in the field in accordance with paragraphs 9.1 and 9.2 of ASTM C 31. If cylinders are not delivered to the testing laboratory within 24 to 48 hours, they will be submerged in a water tank provided by the Contractor, where the surrounding water temperature is maintained by the Contractor at 73.4 degrees F (plus or minus 3 degrees F). Cylinders that are cured in these water storage tanks shall be delivered to the testing laboratory within 6 days after molding so that 7-day testing can be performed. The number of days that the cylinders were cured in a water tank shall be noted in the remarks space of LMN FORM 853-R (May 86) by field personnel. Cylinders will be transported in accordance with ASTM C 31. Compression testing will be performed in accordance with ASTM C 39. One cylinder will be tested at 7 days for information and two will be tested at 28 days (90 if pozzolan used) for acceptance.

C3D-4. EVALUATION AND ACCEPTANCE.

C3D-4.1 Concrete Strength. The strength of the concrete will be considered satisfactory so long as the averages of all sets of three consecutive test results equals or exceeds the specified compressive strength, f'_c , and no individual test (average of two companion cylinders) result falls below f'_c by more than 500 pounds per square inch. Additional analysis or testing may be required at the Contractor's expense when the strength of the concrete in the structure is considered potentially deficient.

C3D-4.1.1 Investigation of Low-Strength Test Results. When any individual strength test of standard-cured companion test cylinders falls below f'_c by more than 500 pounds per square inch or if tests of field-cured cylinders indicate deficiencies in protection and curing, steps shall be taken to assure that the load-carrying capacity of the structure is not jeopardized. Nondestructive testing in accordance with ASTM C 597, C 803, or C 805 may be permitted by the Contracting Officer to determine the relative strengths at various locations in the structure as an aid in evaluating concrete strength in place or for selecting areas to be cored. Such tests, unless properly calibrated and correlated with other test data, shall not be used as a basis for acceptance or rejection.

C3D-4.1.2 Testing of Cores. When the strength of concrete in place is considered potentially deficient, cores shall be obtained and tested in accordance with ASTM C 42. At least three representative cores shall be taken from each member or area of concrete in place that is considered potentially deficient. The location of cores will be determined by the Contracting Officer to least impair the strength of the structure. If the concrete in the structure will be dry under service conditions, the cores shall be air dried (temperature 60 to 80 degrees F, relative humidity less than 60 percent) for 7 days before testing and shall

be tested dry. If the concrete in the structure will be more than superficially wet under service conditions, the cores shall be tested after moisture conditioning in accordance with ASTM C 42. Concrete in the area represented by the core testing will be considered adequate if the average strength of the cores is equal to at least 85 percent of the specified strength requirement and if no single core is less than 75 percent of the specified strength requirement.

C3D-4.1.3 Load Tests. If the core tests are inconclusive or impractical to obtain or if structural analysis does not confirm the safety of the structure, load tests may be directed by the Contracting Officer in accordance with the requirements of Chapter 20 of ACI 318. Concrete work evaluated by structural analysis or by results of a load test shall be corrected in a manner satisfactory to the Contracting Officer. All investigations, testing, load tests, and correction of deficiencies will be performed and approved by the Contracting Officer at the expense of the Contractor, except that if all concrete is found to be in compliance with the plans and specifications, the cost of investigations, testing, and load tests will be at the expense of the Government.

C3D-4.2 Construction Tolerances. Variation in alignment, grade, and dimensions of the structures from the established alignment, grade, and dimensions shown on the drawings shall be within the tolerances specified in the following tables:

TABLE 1.

CONSTRUCTION TOLERANCES FOR
REINFORCED CONCRETE STRUCTURES

(1) Variations from the plumb:	In any 10 feet of length....	1/4 inch
a. In the lines and surfaces of columns, piers, and walls and in arrises	Maximum for entire length...	1 inch
b. For exposed corner columns, control-joint grooves, and other conspicuous lines	In any 20 feet of length....	1/4 inch
	Maximum for entire length...	1/2 inch
(2) Variation from the level or from the grades indicated on the drawings:	In any 10 feet of length....	5/16 inch
	In any bay or in any 20 feet of length.....	3/8 inch
a. In slabs and in arrises	Maximum for entire length...	3/4 inch
b. In exposed horizontal grooves, and other conspicuous lines	In any bay or in any 20 feet of length.....	1/4 inch
	Maximum for entire length...	1/2-inch

- (3) Variation wall lines from established position in plan
 - In any 20 feet..... 1/2 inch
 - Maximum..... 1 inch

- (4) Variation in the sizes locations of wall openings
 - Minus..... 1/4 inch
 - Plus..... 1/2 inch

- (5) Variations in cross-sectional dimensions of columns and beams and in the thickness of slabs and walls
 - Minus..... 1/4 inch
 - Plus..... 1/2 inch

- (6) Footings:
 - a. Variation of dimensions in plan
 - Minus..... 1/2 inch
 - Plus..... 2 inches when formed or plus 3-inches when placed against unformed excavation.

 - b. Misplacement of eccentricity
 - 2 percent of the footing width in the direction of misplacement but not more than..... 2 inches

 - c. Reduction in thickness
 - Minus..... 5 percent of specified thickness

C3D-4.2 Surface Requirements. The surface requirements for the classes of finish required by C3A-5.1, shall be as hereinafter specified. Allowable irregularities are designated "abrupt" or "gradual" for purposes of providing for surface variations. Offsets resulting from displaced, misplaced, or mismatched forms, or sheathing, or by loose knots in sheathing, or other similar form defects, shall be considered "abrupt" irregularities. Irregularities resulting from warping, unplaneness, or similar uniform variations from planeness, or true curvature, shall be considered "gradual" irregularities. "Gradual" irregularities will be checked for compliance with the prescribed limits with a 5-ft template, consisting of a straightedge for plane surfaces and a shaped template for curved or warped surfaces. In measuring irregularities, the straightedge or template may be placed anywhere on the surface in any direction, with the testing edge held parallel to the intended surface.

<u>Class of Finish</u>	<u>Irregularities Abrupt, inches</u>	<u>(Maximum Allowed) Gradual, inches</u>
A	1/8	1/4
D	1	1

C3D-4.3 Appearance. Permanently exposed surfaces shall be cleaned, if stained or otherwise discolored, by a method that does not harm the concrete and that is approved by the Contracting Officer.

C3D-5. SUBMITTALS.

C3D-5.1 Test Reports.

C3D-5.1.1 Concrete mixture proportions shall be determined by the Contractor in accordance with the requirements in C3D-7, and submitted for approval 30 days prior to its use. The quantities of all ingredients per cubic yard and nominal maximum coarse aggregate size that will be used in the manufacture of each quality of concrete shall be stated. Proportions shall indicate the weight of cement, pozzolan (if used) when used, and water; and weights of aggregates in a saturated surface-dry condition; and the quantities of admixtures. The submission shall be accompanied by test reports from a laboratory complying with ASTM C 1077 which show that proportions thus selected will produce concrete of the qualities indicated. The submission shall provide information specified in C3D-7.5, and C3D-7.3. Concrete compression strength results submitted shall include specific gravity and absorption of fine and coarse aggregates determined by ASTM C 128 and ASTM C 127, respectively; slump; air content; and concrete temperature. No substitution shall be made in the source or type of materials used in the work without additional tests to show that the new materials and quality of concrete are satisfactory.

C3D-5.1.2 Cement and pozzolan will be accepted on the basis of the manufacturer's certification of compliance, accompanied by mill test reports, stating that materials meet the requirements of the specification under which they are furnished. Certification and mill test reports shall be from current production and be representative of the particular lot furnished. No cement or pozzolan shall be used until notice of acceptance has been given by the Contracting Officer. Cement and pozzolan will be subject to check testing from samples obtained at the mill, at transfer points, or at the project site, as scheduled by the Contracting Officer, and such sampling will be by or under the supervision of the Government at its expense. Material not meeting specifications shall be promptly removed from the site of work.

C3D-5.1.3. Aggregates. Information identifying the aggregate source to be used along with gradation tests for fine and coarse aggregates shall be submitted for approval. The gradation test for fine aggregate shall include the No. 8 and No. 30 sieve sizes.

C3D-5.1.4 Water. The name of the source of mixing and curing water (and documentation that mixing water meets CRD-C 400, if undrinkable) shall be submitted for conformance with C3D-6.5.

C3D-5.2 Manufacturer's Certificate.

C3D-5.2.1 Impervious-sheet curing materials shall be certified for compliance with all specification requirements.

C3D-5.2.2 Air-entraining admixture shall be certified for compliance with all specification requirements.

C3D-5.2.3 Other chemical admixtures shall be certified for compliance with all specification requirements.

C3D-5.2.4 Cementitious paint shall be certified for compliance with the specification requirements of C3D-12.2.2.

C3D-5.3 Review of Plant, Equipment, and Methods.

C3D-5.3.1 Batch Plant. Details of the data on concrete plant shall be submitted for review by the Contracting Officer for conformance with C3D-8.1 and C3D-8.2.

C3D-5.3.2 Mixers. The make, type, and capacity of concrete mixers proposed for mixing concrete shall be submitted for review by the Contracting Officer for conformance with C3D-8.1 and C3D-8.3. The results of the initial mixer uniformity tests as required in C3D-15.2.12 shall be submitted at least 5 days prior to the initiation of placing.

C3D-5.3.3 Conveying Equipment. A description of the methods and equipment for transporting, handling, and depositing the concrete shall be submitted for review by the Contracting Officer for conformance with C3D-9.

C3D-5.3.4 Placing. A description of all placing equipment and methods shall be submitted for review by the Contracting Officer for conformance with C3D-11.

C3D-5.3.5 Curing. A description of the curing media, equipment and methods to be used shall be submitted for review by the Contracting Officer for conformance with C3D-13.

C3D-5.3.6 Cold-Weather Requirements. If concrete is to be placed under cold-weather conditions, a description of the proposed materials, methods, and protection shall be submitted for approval by the Contracting Officer for conformance with C3D-11.3 and C3D-13.3.

C3D-5.3.7 Hot-weather Requirements. If concrete is to be placed under hot-weather conditions, A description of the proposed materials and methods shall be submitted for approval by the Contracting Officer for conformance with C3D-11.4 and C3D-12.1.1.

PART 2 - PRODUCTS

C3D-6. MATERIALS.

C3D-6.1 Cementitious materials shall be portland cement or portland-pozzolan cement and shall conform to appropriate specifications listed below. Usage for architectural concrete shall be restricted to one color and one type.

C3D-6.1.1 Portland Cement. ASTM C 150, Type I or II, low alkali, except the maximum amount of C₃A in Type I cement shall be 15 percent.

C3D-6.1.2 High-Early-Strength Portland Cement. ASTM C- 150, Type III, low alkali used only when specifically approved in writing.

C3D-6.1.3 Portland-Pozzolan Cement. ASTM C 595, Type IP with Table 2 mortar expansion limits.

C3D-6.1.4 Pozzolan. Pozzolan shall conform to ASTM C 618, Class C or F, with the alkali requirements of Table 2, the optional requirements for multiple factor, drying shrinkage, and uniformity of Table 2A.

C3D-6.1.5 Pozzolan-Modified Portland Cement. ASTM C 595, Type I (PM) with Table 2 mortar expansion limits.

C3D-6.2 Aggregates shall be produced from the sources and under the conditions described in C3D-3.1.1 and the Special Clause entitled "AGGREGATE SOURCES". Fine and coarse aggregates shall conform to the grading requirements of either ASTM C 33 or LSSRB 1003.02. The quality of all aggregates shall conform to ASTM C 33. The nominal maximum size shall be as listed in C3D-7.2.3. Where the use of highway department gradations are permitted, proposed gradations shall be submitted for approval.

C3D-6.3 Chemical Admixtures to be used, when required or permitted, shall conform to the appropriate specification listed below:

C3D-6.3.1 Air-Entraining Admixture. ASTM C 260.

C3D-6.3.2 Water-Reducing or Retarding Admixtures. ASTM C 494, Type A, B, or D.

C3D-6.3.3 High-Range Water Reducer. ASTM C 494, Type F. The admixture may be used only when approved by the Contracting Officer, such approval being contingent upon particular mixture control as described in the Contractor's Quality Control Plan.

C3D-6.4. Impervious-Sheet Curing Materials. ASTM C 171, type optional, except polyethylene film, if used, shall be white opaque.

C3D-6.5 Water for mixing and curing shall be fresh, clean, drinkable, and free of injurious amounts of oil, acid, salt, sugar, or alkali, except that undrinkable water may be used if it meets the requirements of CRD-C 400.

C3D-7. MIXTURE PROPORTIONING.

C3D-7.1 General. For each portion of the structure, mixture proportions shall be selected so that the following strength and water-cement ratio requirements are met.

C3D-7.2 Properties.

C3D-7.2.1 Strength. Specified compressive strength, f'_c , shall be 3,000 psi at 28 days.

C3D-7.2.2 Maximum Water-Cementitious Ratio. Maximum water-cement ratio shall be 0.58.

C3D-7.2.3 Nominal maximum-size coarse aggregate shall be 3/4 inch.

C3D-7.2.4 Air content as determined by ASTM C 231 shall be between 5 and 7 percent.

C3D-7.2.5 Slump. The slump shall be determined in accordance with ASTM C 143 and shall be within the range of 1 to 4 inches. Where placement by pump is approved, the slump shall not exceed 6 inches and shall remain within a 3-inch band.

C3D-7.2.6 Pozzolan Content. If pozzolan is used, it shall be limited to a maximum of 35 percent by absolute volume of the total cementitious materials.

C3D-7.3 Determining Standard Deviation. Test records from which a standard deviation is calculated shall:

a. represent materials, quality control procedures, and conditions similar to those expected at the proposed work;

b. not be from a project where the allowable changes in materials and/or proportions were more restricted than for the proposed work;

c. represent concrete produced to meet a specified strength or strengths, f'_c , within 1000 psi of that specified for the proposed work;

d. consist of at least 30 consecutive tests or two groups of consecutive tests totaling at least 30 tests;

e. be from different batches;

f. be the average of strengths from two cylinders made from the same sample of concrete and tested at the age indicated in C3D-7.2; and

g. be from concrete that was produced within one year of the time when concrete placement is expected to begin for the proposed work.

C3D-7.3.1 For 30 Test Records. Use an unmodified standard deviation and calculate f_{cr} as specified in C3D-7.4.1.

C3D-7.3.2 For 15 to 29 Test Records. Where a concrete production facility does not have 30 test records, but does have a record based on 15 to 29 consecutive tests, a modified standard deviation may be established as the product of the standard deviation based on 15 to 29 tests and modification factor from the following table. Calculate f_{cr} as specified in C3D-7.4.1.

<u>Number of Records*</u>	<u>Modification Factor for Standard Deviation</u>
15	1.16
20	1.08
25	1.03
30 or more	1.00

*Interpolate for intermediate numbers of records.

C3D-7.3.3 For Less Than 15 Test Records. No standard deviation is needed. Calculation of f_{cr} shall be as specified in C3D-7.4.2.

C3D-7.4 Required Average Compressive Strength, f_{cr} . In meeting the strength requirements specified in C3D-7.2.1, the selected mixture shall have proportions so as to produce an f_{cr} exceeding f'_c as indicated below.

C3D-7.4.1 For 15 to 30 Records. If a standard deviation is calculated as specified in C3D-7.3.1 or C3D-7.3.2, f_{cr} shall be determined based on the value of f'_c and the standard deviation, S , as follows:

<u>Standard Deviation, S</u>	<u>Required Average Compressive Strength, f_{cr} (psi)</u>
Less than or equal to 505	$f'_c + 1.34 S$
Greater than 505	$f'_c + 2.33 S - 500$

C3D-7.4.2 For less than 15 Records. When a concrete production facility does not have field strength test records for calculation of standard deviation, f_{cr} , shall be determined based on the value of f'_c as follows:

Specified Compressive Strength, f'_c (psi)

Required Average Compressive Strength, f'_{cr} (psi)

Less than 3000

$f'_c + 1000$

3000-5000

$f'_c + 1200$

Greater than 5000

$f'_c + 1400$

C3D-7.5 Documenting Average Strength. Documentation that proposed concrete proportions produce the required average strength, f_{cr} , determined in C3D-7.4 shall be based on previous field experience (C3D-7.5.1) or laboratory trial batches (C3D-7.5.2).

C3D-7.5.1 Field Experience. Required average strength can be documented by field experience if compressive strength test records consisting of not less than 10 consecutive tests and encompassing a period of not less than 60 days are used. Test records shall represent similar materials to those proposed and similar conditions to those expected. Changes in materials, conditions, and proportions within the test record shall not have been more closely restricted than those for the proposed work.

C3D-7.5.2 Laboratory Trial Batches. The laboratory used to develop information required by this section shall comply with ASTM C 1077.

C3D-7.5.2.1. Representative samples for all concrete materials proposed for this project and a copy of this section of the contract specifications entitled "CAST-IN-PLACE STRUCTURAL CONCRETE" shall be delivered to the laboratory that performs the concrete proportioning at least 60 days (120 when pozzolan used) before concrete placement is expected to begin. Samples of approved aggregates shall be obtained in accordance with the requirements of ASTM D 75. Samples of materials other than aggregate shall be representative of those proposed for the project and shall be accompanied by manufacturer's test reports indicating compliance with applicable specification requirements. When all of these materials have been delivered, the name, address, and phone number of this laboratory and a list of the sources and types of all concrete materials shall be submitted to the Contracting Officer.

C3D-7.5.2.2. Trial mixtures having proportions, consistencies, maximum slump and maximum air content suitable for the work shall be made based on ACI 211.1, using at least three different water-cementitious ratios which will produce a range of strengths encompassing those required for the work. The target water-cementitious ratios required in C3D-7.2.2 include the total weight of cement plus pozzolan, converted from absolute volume as described in ACI 211.1. Trial mixtures shall be designed in accordance with the procedure in ACI 211.1, Chapter 6, using the absolute volume basis for determining the required amount of fine aggregate. Format for submittal of mixture proportions shall be

in accordance with ACI 211.1, paragraph 7.3.7.2. The dry rodded weight per cubic foot of the coarse aggregate determined according to ASTM C 29; the fineness modulus of the fine aggregate determined according to CRD-C 104; and the yield, slump and air content shall be reported. For each water-cement ratio at least three test cylinders for each test age shall be tested at 7 and 28 days in accordance with ASTM C 39. From these test results a curve shall be plotted and submitted showing the relationship between water-cement ratio and strength at design age.

PART 3 - EXECUTION

C3D-8. PRODUCTION EQUIPMENT.

C3D-8.1 Capacity. The batching and mixing equipment shall have a capacity of at least 30 cubic yards per hour.

C3D-8.2 Batching Plant shall conform to the requirements of the Concrete Plant Standards of CPMB and as specified; however, rating plates attached to batch plant equipment are not required.

C3D-8.2.1 Equipment. The batching controls shall be semiautomatic, or automatic. The semiautomatic batching system shall be provided with interlocks such that the discharge device cannot be actuated until the indicated material is within the applicable tolerance. The batching system shall be equipped with an accurate recorder or recorders that meet the requirements of the Concrete Plant Standards of CPMB. Separate bins or compartments shall be provided for cement, pozzolan, and each size group of aggregate. Aggregates shall be weighed either in separate weigh batchers with individual scales or cumulatively in one weigh batcher on one scale. Aggregate shall not be weighed in the same batcher with cement, or pozzolan. If both cement and pozzolan are used, they may be weighed cumulatively provided that the portland cement is weighed first. If weighed, water shall not be weighed cumulatively with another ingredient. Water batcher filling and discharging valves shall be so inter-locked that the discharge valve cannot be opened before the filling valve is fully closed. An accurate mechanical device for measuring and dispensing each admixture shall be provided. Each dispenser shall be interlocked with the measuring and discharging operation of the water so that each admixture is separately measured and discharged automatically in a manner to obtain uniform distribution throughout the batch in the specified mixing period. Admixtures shall not be combined prior to introduction in water or sand. The plant shall be arranged so as to facilitate the inspection of all operations at all times. Suitable facilities shall be provided for obtaining representative samples of aggregates from each bin or compartment.

C3D-8.2.2 Scales. The weighing equipment shall conform to the applicable requirements of NIST Handbook 44, except that the accuracy shall be plus or minus 0.2 percent of scale capacity. The Contractor shall provide standard test weights and any other

auxiliary equipment required for checking the operating performance of each scale or other measuring devices. The tests shall be made at the frequency required in C3D-15.2.4 and in the presence of a Government inspector.

C3D-8.2.3 Batching Tolerances.

C3D-8.2.3.1 Weighing Tolerances. Whichever of the following tolerances is greater shall apply, based on required scale reading.

<u>Material</u>	<u>Percent of Required Weight</u>	<u>Percent of Scale Capacity</u>
Cementitious materials	+1	±0.3
Aggregate	+2	±0.3
Water	+1	±0.3
Admixture	+3	±0.3

C3D-8.2.3.2 Volumetric Tolerances. For volumetric batching equipment, the following tolerances shall apply to the required volume of material being batched:

Water: Plus or minus 1 percent.
 Admixtures: Plus or minus 3 percent.

C3D-8.2.4 Moisture Control. The plant shall be capable of ready adjustment to compensate for the varying moisture content of the aggregates and to change the weights of the materials being batched. An electric moisture meter complying with the provisions of CRD-C 143 shall be provided for measuring moisture in the fine aggregate. The sensing element shall be arranged so that the measurement is made near the batcher charging gate of the sand bin or in the sand batcher.

C3D-8.3 Mixers.

C3D-8.3.1 General. The mixers shall not be charged in excess of the capacity recommended by the manufacturer. The mixers shall be operated at the drum or mixing blade speed designated by the manufacturer. The mixers shall be maintained in satisfactory operating condition, and the mixer drums shall be kept free of hardened concrete. Should any mixer at any time produce unsatisfactory results, its use shall be promptly discontinued until it is repaired.

C3D-8.3.2 Concrete plant mixers shall be tilting, non-tilting, horizontal shaft, or vertical-shaft type, or pugmill type and shall be provided with an acceptable device to lock the discharge mechanism until the required mixing time has elapsed. The mixing time and uniformity shall conform to all the paragraphs in ASTM C 94 applicable to central-mixed concrete.

C3D-8.3.3 Truck Mixers. Truck mixers, the mixing of concrete therein, and concrete uniformity shall conform to the requirements of ASTM C 94. A truck mixer may be used either for complete mixing (transit-mixed) or to finish the partial mixing done in a stationary mixer (shrink-mixed). Each truck shall be equipped with two counters from which it will be possible to determine the number of revolutions at mixing speed and the number of revolutions at agitating speed.

C3D-9. CONVEYING EQUIPMENT.

C3D-9.1 General. The conveying equipment shall have a capacity of at least 30 cubic yards per hour. Concrete shall be conveyed from mixer to forms as rapidly as practicable and within the time interval in C3D-11.2 by methods that will prevent segregation or loss of ingredients. Any concrete transferred from one conveying device to another shall be passed through a hopper that is conical in shape and shall not be dropped vertically more than 8 feet, except where suitable equipment is provided to prevent segregation and where specifically authorized.

C3D-9.2 Buckets. The interior hopper slope shall be not less than 58 degrees from the horizontal, the minimum dimension of the clear gate opening shall be at least 5 times the nominal maximum size aggregate, and the area of the gate opening shall be not less than 2 square feet. The maximum dimension of the gate opening shall not be greater than twice the minimum dimension. The bucket gates shall be essentially mortar tight when closed and may be manually, pneumatically, or hydraulically operated except that buckets larger than 2 cubic yards shall not be manually operated. The design of the bucket shall provide means for positive regulation of the amount and rate of deposit of concrete in each discharge position.

C3D-9.3 Transfer Hoppers. Concrete may be charged into nonagitating hoppers for transfer to other conveying devices. Transfer hoppers shall be capable of receiving concrete directly from delivery vehicles and have conical-shaped discharge features. The machine shall be equipped with a hydraulically operated gate and with a means of external vibration to effect complete and easy discharge. Concrete shall not be held in nonagitating transfer hoppers more than 30 minutes.

C3D-9.4 Trucks. Truck mixers operating at agitating speed or truck agitators used for transporting plant-mixed concrete shall conform to the requirements of ASTM C 94. Nonagitating equipment may be used for transporting plant-mixed concrete over a smooth road when the hauling time is less than 15 minutes. Bodies of nonagitating equipment shall be smooth, watertight, metal containers specifically designed to transport concrete, shaped with rounded corners to minimize segregation, and equipped with gates that will permit positive control of the discharge of the concrete.

C3D-9.5 Chutes. When concrete can be placed directly from a truck mixer, agitator, or nonagitating equipment, the chutes attached to this equipment may be used. A discharge deflector shall be used when required by the Contracting Officer. Separate chutes and other similar equipment will not be permitted for conveying concrete except when specifically approved.

C3D-9.6 Belt Conveyors. Belt conveyors may be used when approved. Such conveyors shall be designed and operated to assure a uniform flow of concrete from mixer to final place of deposit without segregation of ingredients or loss of mortar and shall be provided with positive means for preventing segregation of the concrete at the transfer points and the point of placing. Belt conveyors shall be constructed such that the idler spacing shall not exceed 36 inches. If concrete is to be placed through installed horizontal or sloping reinforcing bars, the conveyor will discharge concrete into a hopper through a pipe or elephant trunk that is small enough in diameter and long enough to extend through the reinforcing bars. In no case shall concrete be discharged to free fall through the reinforcing bars.

C3D-9.7 Pump Placement. Concrete may be conveyed by positive displacement pump when approved. The pumping equipment shall be piston or squeeze pressure type. The pipeline shall be rigid steel pipe or heavy duty flexible hose. The inside diameter of the pipe shall be at least 3 times the nominal maximum-size coarse aggregate in the concrete mixture to be pumped but not less than 4 inches. The maximum-size coarse aggregate shall not be reduced to accommodate the pumps. The distance to be pumped shall not exceed limits recommended by the pump manufacturer. The concrete shall be supplied to the concrete pump continuously. When pumping is completed, concrete remaining in the pipeline shall be ejected without contamination of concrete in place. After each operation, equipment shall be thoroughly cleaned, and flushing water shall be wasted outside of the forms.

C3D-10. PREPARATION FOR PLACING.

C3D-10.1 Embedded Items. Before placement of concrete, care shall be taken to determine that all embedded items are firmly and securely fastened in place as indicated on the drawings, or required. Embedded items (sheet pile, rebars, shear studs, waterstops) shall be free of oil, dirt, and other foreign matter such as loose coatings of rust, paint, and scale. The embedding of wood in concrete will be permitted only when specifically authorized or directed. Voids in sleeves, inserts, and anchor slots shall be filled temporarily with readily removable materials to prevent the entry of concrete into voids.

C3D-10.2 Concrete on Earth Foundations. Earth surfaces upon which concrete is to be placed shall be clean, damp, and free from frost, ice, and standing or running water. Prior to placement of concrete, the earth foundation shall have been satisfactorily compacted in accordance with the provisions of Section C2C.

NOTE: There shall be no construction joints allowed within the the 30'± panels of the cap. Each pour between expansion joints shall be a single continuous pour.

C3D-11. PLACING.

C3D-11.1 General. The placing equipment shall have a capacity of at least 30 cubic yards per hour. Concrete placement will not be permitted when, in the opinion of the Contracting Officer, weather conditions prevent proper placement and consolidation. Concrete shall be deposited as close as possible to its final position in the forms, and in so depositing, there shall be no vertical drop greater than 5 feet except where suitable equipment is provided to prevent segregation and where specifically authorized. Depositing of the concrete shall be so regulated that it may be effectively consolidated in horizontal layers 1-1/2 feet or less in thickness with a minimum of lateral movement. The amount deposited in each location shall be that which can be readily and thoroughly consolidated. Sufficient placing capacity shall be provided so that concrete placement can be kept plastic and free of cold joints while concrete is being placed.

C3D-11.2 Time Interval Between Mixing and Placing. Concrete shall be placed within 30 minutes after discharge into nonagitating equipment. When concrete is truck mixed or when a truck mixer or agitator is used for transporting concrete mixed by a concrete plant mixer, the concrete shall be delivered to the site of the work, and discharge shall be completed within 1-1/2 hours after introduction of the cement to the aggregates. When the length of haul makes it impossible to deliver truck-mixed concrete within these time limits, batching of cement and a portion of the mixing water shall be delayed until the truck mixer is at or near the construction site.

C3D-11.3 Cold-Weather Placing. Concrete shall not be placed without a procedure approved in accordance with C3D-5.3.6 when the concrete is likely to be subjected to freezing temperatures before the expiration of the curing period. The ambient temperature of the space adjacent to the concrete placement and surfaces to receive concrete shall be above 32 degrees F. The placing temperature of the concrete having a minimum dimension less than 12 inches shall be between 55 and 75 degrees F. The placing temperature of the concrete having a minimum dimension greater than 12 inches shall be between 50 and 70 degrees F. Heating of the mixing water or aggregates will be required to regulate the concrete-placing temperatures. Materials entering the mixer shall

be free from ice, snow, or frozen lumps. Salt, chemicals, or other materials shall not be mixed with the concrete to prevent freezing.

C3D-11.4 Hot-Weather Placing. Concrete shall be properly placed and finished with approved procedures in accordance with C3D-5.3.7. The concrete-placing temperature shall not exceed 90 degrees F. Cooling of the mixing water and/or aggregates will be required to obtain an adequate placing temperature. An approved retarder shall be used to facilitate placing and finishing when concrete temperatures exceed 85 degrees F. Steel forms and reinforcement shall be cooled prior to concrete placement when steel temperatures are greater than 120 degrees F. Conveying and placing equipment shall be cooled if necessary to maintain proper concrete-placing temperature.

C3D-11.5 Consolidation. Immediately after placement, each layer of concrete, including flowing concrete, shall be consolidated by internal vibrating equipment. Vibrators shall not be used to transport concrete within the forms. Hand spading may be required with internal vibrating along formed surfaces permanently exposed to view. Vibrating equipment shall at all times be adequate in number of units and power to properly consolidate the concrete. A spare vibrator shall be kept on the job site during all concrete placing operations. A spare vibrator shall be kept on the job site during all concrete placing operations. Form or surface vibrators shall not be used unless specifically approved. Vibrators of the proper size, frequency, and amplitude shall be used for the type of work being performed in conformance with the following requirements:

<u>Application</u>	<u>Head Diameter inches</u>	<u>Frequency VPM</u>	<u>Amplitude inches</u>
Thin walls, beams, etc.	1-1/4 - 2-1/2	9,000 - 13,500	0.02 - 0.04
General construction	2 - 3-1/2	8,000 - 12,000	0.025 - 0.05

The frequency and amplitude shall be within the range indicated in the table above as determined in accordance with C3D-15.2.9. The vibrator shall be inserted vertically at uniform spacing over the entire area of placement. The distance between insertions shall be approximately 1-1/2 times the radius of action of the vibrator. The vibrator shall penetrate rapidly to the bottom of the layer and at least 6 inches into the preceding layer if such exists. It shall be held stationary until there is a general cessation in escape of large bubbles of entrapped air at the surface of the concrete (generally 5 to 15 seconds) and then withdrawn slowly at about 3 inches per second.

C3D-12. FINISHING.

C3D-12.1 Unformed Surfaces.

C3D-12.1.1 General. The ambient temperature of spaces adjacent to surfaces being finished shall be not less than 50 degrees F. In hot weather when the rate of evaporation of surface moisture, as determined by use of Figure 2.1.5 of ACI 305R, may reasonably be expected to exceed 0.2 pound per square foot per hour, provisions for windbreaks, shading, fog spraying, or wet covering with a light-colored material shall be made in advance of placement. These protective measures shall be taken as quickly as finishing operations will allow. All unformed surfaces that are not to be covered by additional concrete or backfill shall have a float finish, unless a trowel finish is specified, and shall be true to the elevation shown on the drawings. Surfaces to receive additional concrete or backfill shall be brought to the elevation shown on the drawings and left true and regular. Exterior surfaces shall be sloped for drainage unless otherwise shown on the drawings or as directed. Joints shall be carefully made with a jointing or edging tool. The finished surfaces shall be protected from stains or abrasions.

C3D-12.1.2 Trowel Finish. A trowel finish shall be applied to the top surfaces of all walls and columns. Concrete surfaces shall be finished with a float finish, and after surface moisture has disappeared, the surface shall be troweled to a smooth, even, dense finish free from blemishes including trowel marks. Tolerance shall be true planes within 5/16 inch in 10 feet as determined by a 10-foot straightedge placed anywhere on the slab in any direction.

C3D-12.2 Formed Surfaces. Within 24 hours after form removal, all fins and loose materials permanently exposed to view shall be removed and all tie rod holes and defective concrete repaired. All voids and honeycombs exceeding 1/2 inch in diameter permanently exposed to view and all tie-rod holes, permanently exposed to view shall be reamed or chipped and filled with dry-pack mortar. Defective areas larger than 36 square inches in any surface, permanently exposed or not, shall be delineated in a rectangular shape by a saw cut a minimum depth of 1 inch. All defective concrete in the delineated area shall be removed and replaced with carefully placed and compacted concrete. The cement used in the mortar or concrete for all surfaces permanently exposed to view shall be a blend of portland cement and white cement properly proportioned so that the final color when cured will be the same as adjacent concrete. Temperature of the concrete, ambient air, replacement concrete, or mortar during remedial work including curing shall be above 50 degrees F. The prepared area shall be dampened, brush-coated with a neat cement grout or with an approved epoxy resin, and filled with mortar or concrete. The mortar shall consist of 1 part cement to 2-1/2 parts fine aggregate. The quantity of mixing water shall be the

minimum necessary to obtain a uniform mixture and to permit placing. Mortar shall be thoroughly compacted in place and struck off to adjacent concrete. Replacement concrete shall be drier than the usual mixture and thoroughly tamped into place and finished. Forms shall be used if required. Metal tools shall not be used to finish permanently exposed surfaces. The patched areas shall be cured and protected in accordance with Section C3D-13.

C3D-12.2.1 General. Surfaces, unless other type of finish is specified, shall be left with the texture imparted by the forms except that defective surfaces shall be repaired as described in C3D-12.2. Other types of finishes shall be applied to the following structures or portions of structures:

<u>Type of Finish</u>	<u>Structure or Portion of Structure</u>
Coating of waterproof cementitious paint finish (Color: Pearl Gray)	The top and both sides of the caps to a limit 12 inches below the ground elevation.

The form panels used to produce the finish shall be orderly in arrangement, with joints between panels planned in approved relation to openings, building corners, and other architectural features. Forms shall not be reused if there is any evidence of surface wear or defects that would impair the quality of the surface.

C3D-12.2.2 Cementitious Paint Finish. As approved by the Contracting Officer and after all required patching, cleaning, and correction of major imperfections have been completed, concrete surfaces to be finished shall be given a cementitious paint finish as hereinafter described. The finish shall not be applied before the initial 7 day moist curing period is complete. The temperature of the air adjacent to the surface shall be less than 50 degrees F for 24 hours prior to and following the application of the finish. If the temperature of the air adjacent to the surface is above 90 degrees F, the surface shall be cooled prior to the application of the finish by hosing with clean water until it reaches a temperature of 85 degrees F. The finish for any area shall be completed in the same day and the limits of the finished area shall be made at corners or monolith joints. The surfaces to be finished must be structurally sound, clean and free from dirt, form marks, loose mortar particles, paint, films, protective coatings, efflorescence, laitance, etc. The cementitious paint finish shall consist of dampening the surface ahead of the cementitious paint application with clean water. As a base coat, cementitious paint shall be applied at a rate of two pounds per square yard of surface area. The top coat shall be applied at a rate of 75-100 square feet per gallon. The coating shall be uniform completely filling all pits, air bubbles, and surface voids. All cementitious paint shall conform to Fed. Spec. A-A-1555. Cementitious paint shall be prepared and applied in accordance with the manufacturer's written recommendations.

Uniform color shall be maintained by use of only one mixture without any changes in materials or proportions for any structure or portion of structure which is exposed to view or on which a special finish is required.

The cementitious paint finish shall be a Thoroseal base coat and a Thorocoat top coat unless an approved equal is used. The areas enclosed by the recessed notches on the protected side of the cap shall be Thoro #8587 Buckskin, coarse finish or approved equal. All other locations on the cap shall be #8510 Pearl Grey smooth finish, or approved equal.

C3D-13. CURING AND PROTECTION.

C3D-13.1 General. All concrete shall be cured by an approved method for a period of 7 days. The Contractor shall locate the source of water for curing and shall obtain the approval of the source from the Contracting Officer before the start of any concrete work. Immediately after placement, concrete shall be protected from premature drying, extremes in temperatures, rapid temperature change, and mechanical injury. All materials and equipment needed for adequate curing and protection shall be available and in working order at the placement site prior to the start of concrete placement. Concrete shall be protected from the damaging effects of rain for 12 hours and from flowing water for 14 days (7 days for Type III cement). Concrete shall be shielded from direct rays of the sun for 3 days. No fire or excessive heat shall be permitted near or in direct contact with concrete at any time.

C3D-13.2 Moist Curing. Moist-cured concrete shall be maintained continuously (not periodically) wet for the entire curing period. Vertical surfaces shall be cured using soaker hoses, fog sprayers or sprinklers. Burlap may be used to assist moist curing provided that the wall and the burlap are kept continuously saturated, including nights and weekends, and the burlap is kept in contact with the concrete being cured. If water or curing materials stain or discolor concrete surfaces that are to be permanently exposed, they shall be cleaned as required in C3D-4.3. Where wooden form sheathing is left in place during curing, the sheathing shall be kept wet at all times. Horizontal surfaces may be moist cured by ponding, by covering with a minimum uniform thickness of 2 inches of continuously saturated sand, or by covering with saturated nonstaining burlap or cotton mats.

C3D-13.3 Cold Weather. When the daily outdoor low temperature is less than 32 degrees F, the temperature of the concrete shall be maintained above 40 degrees F for the first 7 days after placing. In addition, during the period of protection removal, the air temperature adjacent to the concrete surfaces shall be controlled so that concrete near the surface will not be subjected to a temperature differential of more than 25 degrees F

as determined by observation of ambient and concrete temperatures indicated by suitable thermometers furnished by the Government as required and installed adjacent to the concrete surface and 2 inches inside the surface of the concrete. The installation of the thermometers shall be made by the Contractor at such locations as may be directed.

C3D-14. RESERVED.

C3D-15. CONTRACTOR QUALITY CONTROL.

C3D-15.1 General. The Contractor shall perform the inspection and tests described in C3D-15.2, and based upon the results of these inspections and tests, he shall take the action required in C3D-15.3 and submit reports as required in C3D-15.3 and C3D-15.4. The laboratory performing the tests shall conform with ASTM C 1077. The individuals who sample and test concrete or the constituents of concrete as required in this specification shall have demonstrated a knowledge and ability to perform the necessary test procedures equivalent to the ACI minimum guidelines for certification of Concrete Field Testing Technicians, Grade I.

C3D-15.2 Inspection Details and Frequency of Testing.

C3D-15.2.1 Fine Aggregate.

C3D-15.2.1.1 Grading. At least once during each shift in which concrete is being delivered, there shall be one sieve analysis and fineness modulus determination in accordance with ASTM C 136 and CRD-C 104, respectively, for the fine aggregate or for each fine aggregate, if it is batched in more than one size or classification. The location at which samples are taken may be selected by the Contractor as the most advantageous for control. However, the Contractor is responsible for delivering fine aggregate to the mixer within specification limits. Results of tests shall be reported in writing.

C3D-15.2.1.2 Moisture Content. When in the opinion of the Contracting Officer the electric moisture meter is not operating satisfactorily, at least four tests for moisture content shall be conducted in accordance with either ASTM C 70, C 566, or CRD-C 112 during each 8-hour period of mixing plant operation. The times for the tests shall be selected randomly within the 8-hour period. An additional test shall be made whenever the slump is shown to be out of control or excessive variation in workability is reported by the placing foreman. When the electric moisture meter is operating satisfactorily, at least two direct measurements of moisture content shall be made per week to check the calibration of the meter.

C3D-15.2.2 Coarse Aggregate.

C3D-15.2.2.1 Grading. At least once during each shift that concrete is being delivered, there shall be a sieve analysis in accordance with ASTM C 136 for each size group of coarse aggregate. The location at which samples are taken may be selected by the Contractor as the most advantageous for production control. However, the Contractor is responsible for delivering the aggregate to the mixer within specification limits. A test record of samples of aggregate taken shall show the results of the five most recent tests including the current test. The Contractor may adopt limits for control coarser than the specification limits for samples taken other than at the batch plant bins to allow for degradation during handling. Results of tests shall be reported in writing.

C3D-15.2.2.2 Moisture Content. A test for moisture content of each size of coarse aggregate in accordance with ASTM C 566 or CRD-C 112 shall be made at least once a shift. When two consecutive readings for smallest size coarse aggregate differ by more than 1.0 percent, frequency of testing shall be increased to that specified for fine aggregate in C3D-15.2.1.2. These results shall be used to adjust the added water in the control of the batch plant.

C3D-15.2.3 Deleterious Substances. When in the opinion of the Contracting Officer a problem exists in connection with deleterious substances in fine or coarse aggregates, tests shall be made in accordance with ASTM C 33 at a frequency not less than one per week. Results of tests shall be reported in writing.

C3D-15.2.4 Scales.

C3D-15.2.4.1 Weighing Accuracy. The accuracy of the scales shall be checked by test weights at least once a month for conformance with the applicable requirement of C3D-8.2.2. Such tests shall also be made whenever there are variations in properties of the fresh concrete that could result from batching errors. Results of tests shall be reported in writing.

C3D-15.2.4.2 Batching and Recording Accuracy. Once a week the accuracy of each batching and recording device shall be checked during a weighing operation by noting and recording the required weight, recorded weight, and the actual weight batched. The Contractor shall provide the necessary calibration devices and confirm that the admixture dispensers described in C3D-8.2.1 are operating properly. Results of tests shall be reported in writing.

C3D-15.2.5 Batch-Plant Control. The measurement of all constituent materials including cement, pozzolan each size of aggregate, water, and admixtures shall be continuously controlled. The aggregate weights and amount of added water shall be adjusted

as necessary to compensate for free moisture in the aggregates. The amount of air-entraining admixture shall be adjusted to control air content within specified limits. A report shall be prepared indicating type and source of cement used, type and source of pozzolan used, amount and source of admixtures used, aggregate source, the required aggregate and water weights per cubic yard, amount of water as free moisture in each size of aggregate, and the batched aggregate and water weights per cubic yard for each class of concrete batched during plant operation. The report shall be furnished to the Contracting Officer.

C3D-15.2.6 Concrete.

C3D-15.2.6.1 Air Content. At least two tests for air content shall be made on randomly selected batches of each class of concrete during each 8-hour period of concrete production or at least once a day when concrete is placed. Additional tests shall be made when excessive variation in workability is reported by the placing foreman or Government inspector. Tests shall be made in accordance with ASTM C 231. For concrete having a nominal maximum aggregate size of 1 or 1-1/2 inches, the average of each set of two tests shall be plotted on a control chart on which the average is set at 5.5 percent and the upper and lower control limits at 7 and 4 percent, respectively. For concrete having a nominal maximum aggregate size of 3/4-inch, the average shall be set at 6.0 percent and the upper and lower control limits at 7.0 and 5.0 percent, respectively. The control charts shall be furnished to the Contracting Officer.

C3D-15.2.6.2 Slump. At least two slump tests shall be made on randomly selected batches of each class of concrete during each day's concrete production in accordance with ASTM C 143. Additional tests shall be made when excessive variation in workability is reported by the placing foreman or Government inspector. The average of each set of two tests shall be plotted on a control chart on which the upper and lower limits are set 1.5 inches above and below the mid-range value. The range shall be plotted on a control chart on which the upper control limit is 3.0 inches. The control chart shall be furnished to the Contracting Officer.

C3D-15.2.7 Preparation for Placing. Foundation or construction joints, forms, and embedded items shall be inspected in sufficient time prior to each concrete placement by the Contractor in order to certify to the Contracting Officer that they are ready to receive concrete. The results of each inspection shall be reported in writing.

C3D-15.2.8 Placing. The placing foreman shall supervise all placing operations, shall determine that the correct quality of concrete or grout is placed in each location as directed by the Contracting Officer, and shall be responsible for measuring and recording concrete temperatures, ambient temperature, weather

conditions, placement time, placement duration, yardage placed, and placement method. Concrete temperatures shall be determined in accordance with ASTM C 1064. A report shall be furnished in writing to the Contracting Officer.

C3D-15.2.9 Vibrators. The frequency and amplitude of each vibrator shall be determined in accordance with CRD-D 521 prior to initial use and at least once a month when concrete is being placed. Additional tests shall be made when a vibrator does not appear to be adequately consolidating the concrete. The frequency shall be determined while the vibrator is operating in concrete with the tachometer being held against the upper end of the vibrator while almost submerged and just before the vibrator is withdrawn from the concrete. The amplitude shall be determined with the head vibrating in air. Two measurements shall be taken, one near the tip and another near the upper end of the vibrator head, and these results averaged. The make, model, type, and size of the vibrator and frequency and amplitude results shall be reported in writing.

C3D-15.2.10 Curing.

C3D-15.2.10.1 Moist Curing. At least once each calendar day during the curing period, an inspection shall be made of all areas subject to moist curing. The surface moisture condition shall be reported in writing.

C3D-15.2.11 Protection. At least once each calendar day during the curing period, an inspection shall be made of all areas subject to cold-weather protection. Deficiencies shall be noted. During removal of protection, measurement of concrete and ambient temperatures shall be recorded at least hourly. A report shall be furnished in writing to the Contracting Officer.

C3D-15.2.12 Mixer Uniformity.

C3D-15.2.12.1 Concrete Plant Mixer. At the start of concrete placing, and at least once every 6 months when concrete is being placed, uniformity of concrete shall be determined. The tests shall be performed in accordance with ASTM C 94. Whenever adjustments in mixer or increased mixing times are necessary because of failure of any mixer to comply, the mixer shall be retested after adjustment. Results of tests shall be reported in writing.

C3D-15.2.12.2 Truck Mixers. At the start of concrete placing and at least once every 6 months when concrete is being placed, uniformity of concrete shall be determined in accordance with ASTM C 94. The truck mixers shall be selected randomly for testing. When satisfactory performance is found in one truck mixer, the performance of mixers of substantially the same design and condition of blades may be regarded as satisfactory. Results of tests shall be reported in writing.

C3D-15.3 Action Required.

C3D-15.3.1 Fine Aggregate.

C3D-15.3.1.1 Grading. When the amount passing any sieve is outside the specification limits, the fine aggregate shall be immediately resampled and retested. If there is another failure on any sieve, the fact shall immediately be reported to the Contracting Officer, and immediate steps shall be taken to rectify the situation.

C3D-15.3.1.2 Moisture. Whenever the moisture content of the fine aggregate changes by 0.5 percent or more, the scale settings for the fine-aggregate batcher and water batcher shall be adjusted directly or by means of a moisture compensation device.

C3D-15.3.2 Coarse Aggregate Grading. When the amount passing any sieve is outside the specification limits, the coarse aggregate shall immediately be resampled and retested. If the second sample fails on any sieve, that fact shall be reported to the Contracting Officer. Where two consecutive moving averages of five tests are outside specification limits, that fact shall be reported to the Contracting Officer, and immediate steps shall be taken to correct the grading.

C3D-15.3.3 Deleterious Substances. When the results for a deleterious substance are outside the specification limit, the aggregate shall be resampled and retested for the deleterious substance that failed. If the second sample fails, that fact shall be reported to the Contracting Officer. When material finer than No. 200 sieve for coarse aggregate exceeds the specification limit, immediate steps, such as washing or other corrective actions, shall be initiated.

C3D-15.3.4 Scales. Whenever either the weighing accuracy or batching accuracy is found not to comply with specification requirements, the plant shall not be operated until necessary adjustments or repairs have been made. Discrepancies in recording accuracies shall be corrected immediately.

C3D-15.3.5 Concrete.

C3D-15.3.5.1 Air Content. Whenever points on the control chart approach the upper or lower control limits, an adjustment should be made in the amount of air-entraining admixture batched. If a single test result is outside the specification limit, such adjustment is mandatory. As soon as practical after each adjustment, another test shall be made to verify the correctness of the adjustment. Whenever a point falls above the upper control limit for range, the dispenser shall be calibrated to ensure that

it is operating correctly and with good reproducibility. Whenever two consecutive points for either average or range are outside the control limits, the Contracting Officer shall be notified. Whenever the air content departs from the specified range, the concrete shall not be delivered to the forms.

C3D-15.3.5.2 Slump. Whenever points on the control chart approach the upper or lower control limits, an adjustment should be made in the batch weights of water and fine aggregate. The adjustments are to be made so that the total free water does not exceed that amount specified in the approved mixture proportions based on the free water available with the fine aggregate and that amount of water batched. If the adjustments to the batch weights of water and fine aggregate do not satisfactorily produce the required slump, the mixture shall be reportioned to meet the specified criteria and resubmitted to the Contracting Officer for approval. When a single slump is outside the control limits, such adjustment is mandatory. As soon as practical after each adjustment, another test shall be made to verify the correctness of the adjustment. Whenever the slump exceeds the upper limit stipulated in C3D-7.2.5, the concrete shall not be delivered to the forms. Whenever two consecutive slump tests, made during a period when there was no adjustment of batch weights, produce a point on the control chart for range above the upper control limit, the slump shall be considered to be out of control, and the additional testing for aggregate moisture content required in C3D-15.2 shall be undertaken.

C3D-15.3.6 Placing. The placing foreman shall not permit placing to begin until he has verified that an adequate number of acceptable vibrators in working order and with competent operators are available. Placing shall not be continued if any pile of concrete is inadequately consolidated. If any batch of concrete fails to meet the temperature requirements, immediate steps shall be taken to improve temperature controls.

C3D-15.3.7 Curing.

C3D-15.3.7.1 Moist Curing. When a daily inspection report lists an area of inadequate curing, the required curing period for that area shall be extended by 1 day.

C3D-15.3.8 Protection. When any concrete temperature during the period of protection or protection removal fails to comply with the specifications, that fact shall be reported to the Contracting Officer, and immediate steps shall be taken to correct the situation.

C3D-15.3.9 Mixer Uniformity. When a mixer fails to meet mixer uniformity requirements, either the mixing time shall be increased or adjustments shall be made to the mixer until compliance is achieved.

C3D-15.4 Reports. All results of tests shall be reported as required. Each report shall include the updating of control charts covering the entire period from the start of the construction season through the current week. During periods of cold-weather protection, reports of pertinent temperatures shall be made daily. These requirements do not relieve the Contractor of the obligation to report certain failures immediately as required in preceding paragraphs. Such reports of failures and the action taken shall be confirmed in writing in the routine reports. The Contracting Officer has the right to examine all Contractor quality control records.

C3D-16. MEASUREMENT AND PAYMENT. No measurement of concrete will be made. Payment for concrete will be made at the contract lump sum price for "Reinforced Concrete Cap". Price and payment shall include the cost of all labor, materials, and the use of all equipment and tools required to complete the concrete work, including steel reinforcement, formwork, waterstops, expansion joint filler, cathodic protection for the sheet pile, the application of a cementitious paint finish to the cap, shear studs, and all other items incidental thereto.

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SECTION C5A - SHEAR STUDS

PART 1 - GENERAL

C5A-1. SCOPE. This section covers the installation of shear studs on the steel sheet pile portion of the floodwall as shown in the contract drawings and specified herein.

C5A-2. APPLICABLE PUBLICATION. The following publication American Welding Society, Inc. (AWS) referred to thereafter by basic designation only, form a part of this specification to the extent indicated.

D 1.1-88

Structural Welding Code-Steel

C5A-3. STUD WELDING. Stud welding, unless otherwise specified shall conform to the applicable provisions of section 7 of AWS D1.1. Studs shall not be welded to sheet pile until after the coal tar epoxy paint has been removed from the sheet pile and after the sheet pile has been driven to its required grade.

C5A-4. STUD MATERIALS. Studs shall be Type A in accordance with AWS D1.1, Subsection 7.3 and shall be 5/8 inch in diameter and 8 inches long. The Contractor shall furnish for approval the manufacturer's certified test reports and certification that the studs conform to the applicable requirements of AWS D1.1, Subsections 7.2 and 7.3.

C5A-5. STUD BASE APPLICATION QUALIFICATION. As a condition of approval of the stud application process, the Contractor shall furnish results of the manufacturer's stud base qualification tests and/or certified results of the stud application qualification test as required by AWS D1.1, Subsection 7.6 except as otherwise specified.

C5A-6. WORKMANSHIP. The studs shall be welded in accordance with the provisions of Article 7.4 of AWS D1.1. Studs on which a full 360 degree weld fillet is not obtained may, at the option of the Contractor, be repaired by adding a 3/16-inch fillet, using shielded metal arc process with low-hydrogen welding electrodes. If the reduction of the length of studs becomes less than normal as they are welded, welding shall be stopped immediately and not resumed until the cause has been corrected.

C5A-7. INSPECTION. The welding of stud connectors will be subject to visual inspection by Government Inspector. Each stud connector that does not show a full 360 degree weld fillet, that has been repaired by welding, or the reduction in length due to welding is less than normal shall be tested in accordance with the requirements for testing of one in every 100 stated in C5A-8 below.

C5A-8. TESTING. Prior to starting welding operation and at the beginning of each day's operation, two stud connectors shall be welded in the same general position (flat, vertical, overhead, sloping) to a separate piece of material of similar thickness and composition as the member to which the studs are to be welded. After being allowed to cool, these studs shall be tested by bending to an angle of 30 degrees by striking the stud with a hammer. If failure occurs in the weld zone of either stud, the procedure shall be corrected and two successive studs successfully welded and tested before any studs are welded to the member. The foregoing testing shall be performed after any change in the welding procedure. If failure occurs in the stud shank, an investigation shall be made to ascertain and correct the cause before further welds are made. In addition to the foregoing tests at least one stud in every 100 shall be struck with a hammer and bent to an angle of 15 degrees or if threaded shall be torque tested with a calibrated torque wrench as indicated in Figure 7.6.6 of AWS D1.1. If the stud fails, two more of the existing studs shall be bent or torque tested. If either of these two studs fails, all of the studs represented by the tests shall be rejected. Studs under testing that crack either in the weld, the base metal, or the shank shall be rejected and replaced by the Contractor at no additional cost to the Government.

C5A-9. MEASUREMENT AND PAYMENT. No separate measurement will be made for furnishing and installing shear studs. Payment for all costs associated with furnishing and installing shear studs shall be included in the contract price for "Reinforced Concrete Cap".

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SECTION C5B - MISCELLANEOUS METALWORK
PART 1 - GENERAL

C5B-1. SCOPE. The work covered by this section consists of furnishing all plant, labor, materials and equipment, and furnishing and installing the miscellaneous metalwork as shown on the drawings and specified herein and shall include, but is not limited to, the following items:

C5B-1.1 Corrosion Resistant Steel (C.R.S.).

C5B-1.1.1 Settlement reference bolts.

C5B-1.1.2 Identification tag for reference bolts.

C5B-1.2 Manufactured Products.

C5B-1.2.1 Flexible bonding jumpers for bonding of piling as specified in Section C16A.

C5B-1.2.2 Plastic sealant as specified herein.

C5B-1.3 Fabricated Steel.

C5B-1.3.1 Slip joint, Capped I-wall to Uncapped I-wall.

C5B-2. QUALITY CONTROL.

C5B-2.1 General. The Contractor shall establish and maintain quality control for proper fabrication and installation of all work covered in this section to assure compliance with contract specifications and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Fabrication.
- (2) Protective coating.
- (3) Placement and protection.
- (4) Material compliance with plans and specifications.

C5B-2.2 Reporting. The original and two copies of these records and tests, as well as the records of corrective action taken, shall be furnished to the Government daily. Format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

C5B-3. SUBMITTALS.

C5B-3.1 Shop Drawings. The Contractor shall prepare and submit for approval, complete shop drawings and descriptive literature showing details of all auxiliary items required as

indicated herein or on the contract drawings. Shop drawings shall indicate computed weights of structural steel and approval of shop drawings will constitute acceptance of the computed weights shown on these drawings.

C5B-3.2 Manufacturer's Certification. The galvanizing compound shall be certified for compliance with all specification requirements.

PART 2 - PRODUCTS

C5B-4. FABRICATED AND MANUFACTURED ITEMS.

C5B-4.1 General. Fabrication and placement of all fabricated items shall be as indicated on the drawings.

C5B-4.2 Materials.

C5B-4.2.1 Corrosion Resistant Steel. Corrosion resistant steel shall conform to Federal Specification QQ-S-766C (up to and including amendment 6), Class 304. High strength corrosion resistant steel shall conform to ASTM A 276-84, Type 431. Corrosion resistant steel bolts, nuts and washers shall conform to the applicable provisions of C5B-12 except that the material shall be corrosion-resistant steel.

C5B-4.2.2 Plastic Sealant. This sealant shall conform to the applicable provisions of Federal Specification SS-S-00210 "Sealing Compound, Preformed Plastic, for Expansion Joints and Pipe Joints".

C5B-4.2.3 Transition from Capped I-Wall to Uncapped I-Wall. The steel sheet piling slip joint shall be surrounded by 18 gage steel sheet metal, as shown on the drawings. The space between the sheet metal and the steel sheet piling is to be filled with a plastic sealant.

C5B-4.3 Galvanizing. Hot-dip galvanizing or zinc coating applied on products fabricated from rolled, pressed, or forged steel shapes, plates, bars, and strips shall comply with ASTM A 123. Hot-dip galvanizing or zinc coatings on assembled steel products shall comply with ASTM A 386. Weight of coatings shall be as designated in Table 1 of the ASTM specification for class and thickness of material to be coated, but in no case shall it be less than 1.25 oz. per square foot.

C5B-4.4 Expansion Anchors. Fed. Spec. FF-S-325, Group II, Type 4, Class 1. Nail driven types will not be acceptable. Anchors shall be galvanized unless otherwise indicated.

PART 3 - EXECUTION

C5B-5. WORKMANSHIP. All parts shall be properly fabricated, assembled and installed to conform to the shapes, sizes and dimensions indicated on the contract drawings and approved shop drawings.

C5B-5.1 Settlement Reference Bolts. Upon installation of the settlement reference bolts the Contractor shall determine elevations of each bolt and submit his results to the Contracting Officer.

C5B-6. MEASUREMENT AND PAYMENT.

C5B-6.1 Unless otherwise specified herein, any materials or operations used in conjunction with installation or as part of metalwork which is not included in the cost of other items of work listed in the bidding schedule shall not be measured for payment. Payment for miscellaneous metalwork will be included in the contract lump sum price for "Reinforced Concrete Cap". This price and payment shall constitute full compensation for furnishing and installing all miscellaneous metalwork indicated on the drawings and/or herein specified which is not specified to be paid for under other items of work listed on the bidding schedule.

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SECTION C16A - CATHODIC PROTECTION

PART 1 - GENERAL

C16A-1. SCOPE. The work covered by this section consists of furnishing all plant, labor, material, and equipment required to electrically bond the piling as shown on the drawings and as specified herein to permit installation of a cathodic protection system.

C16A-2. QUALITY CONTROL.

C16A-2.1 General. The Contractor shall establish and maintain quality control for bonding operations to assure compliance with contract specifications and maintain records of his quality control for all construction operations including, but not limited to the installation of bond cables.

C16A-2.2 Reporting. The original and two copies of these records and tests, as well as the records of corrective action taken, shall be furnished to the Government daily. The format of the report shall be as prescribed in the Special Clause entitled "CONTRACTOR QUALITY CONTROL".

PART 2 - PRODUCTS

C16A-3. BONDING.

C16A-3.1 Reinforcing Bar. A. No. 6 reinforcing bar shall be used for electrically bonding sheet piles.

C16A-3.2 Bond Cables. Bond cables shall be cathodic protection, type CPS cables, 7-strand, #4 AWG, Class B, uncoated annealed copper conforming to ASTM B-3 and B-8. Insulation shall be black, high molecular weight polyethylene. Insulation wall thickness shall be a minimum of 110 mils.

PART 3 - EXECUTION

C16A-4. BONDING, I TYPE FLOODWALL . The sheet piles shall be electrically bonded together with a No. 6 reinforcing bar as shown on the drawings and bond cables as indicated in C16A-5.

C16A-5. BOND CABLES. Bond cables shall be welded to the piling using an exothermic type process. Welded joints shall be coated with Scotchcast Electrical Insulating Resin, or approved equal splicing epoxy to obtain a moisture proof joint. The welding process shall be such that the heat of welding will not damage the insulation on the wire. The welding process shall be the Cadweld process of Erico Products, Inc., or approved equal. Epoxy shall completely cover welded joints and extend 2 inches over cable insulation.

C16A-6. MEASUREMENT AND PAYMENT. Measurement will not be made for cathodic protection. Payment for furnishing and installing the No. 6 reinforcing bars and for the bond cables will be included in the contract price for which the work is incidental.

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SECTION H - SPECIAL CLAUSES

H-1 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (FAR 52.212-3 - 1984 APR). The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 400 calendar days after the date of receipt by him of notice to proceed. The time stated for completion shall include final cleanup of the premises.

H-2 LIQUIDATED DAMAGES. (FAR 52.212-5 - 1984 APR).

a. If the Contractor fails to complete the work within the time specified in the contract, or any extension, the Contractor shall pay to the Government as liquidated damages, the sum of \$1,280.00 for each day of delay.

b. If the Government terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned the Government in completing the work.

c. If the Government does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

H-3 CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS. (DFARS 252.236-7001 - 1991 DEC).

a. The Government--

(1) Will provide the Contractor, without charge, five sets (unless otherwise specified) of large-scale contract drawings and specifications except publications incorporated into the technical specifications by reference;

(2) Will furnish additional sets on request, for the cost of reproduction; and

(3) May, at its option, furnish the Contractor one set of reproduces, or half-size drawings, in lieu of the contract drawings in paragraph a.(1) of this clause.

b. The Contractor shall--

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer of any discrepancies; and

(4) Be responsible for any errors which might have been avoided by complying with this paragraph b.

c. Large scale drawings shall, in general, govern small scale drawings. Figures marked on drawings shall, in general, be followed in preference to scale measurements.

d. Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work, but shall be performed as if fully and correctly set forth and described in the drawings and specifications.

e. The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

<u>Title</u>	<u>File No.</u>	and	<u>Drawing No.</u>
Lake Pontchartrain, La. & Vicinity, Hurricane Protection Project, High Level Plan, 17th St. Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, La.	H-4-40208		1 thru 17

H-4 CONTRACTOR QUALITY CONTROL (CQC) - (16 MAY 1988).

a. General. The Contractor shall establish and maintain an effective quality control system in compliance with the contract clause entitled "Inspection of Construction". The quality control system shall consist of plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with contract requirements. The system shall cover construction operations both onsite and offsite, and shall be keyed to the proposed construction sequence.

b. Coordination Meeting. Before start of construction, the Contractor shall meet with the Contracting Officer (CO) or his authorized representative (COR) and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities,

testing, administration of the system for both onsite and offsite work, and the interrelationship of the Contractor's management and control with the Government's inspection. Minutes of the meeting shall be prepared and signed by both the Contractor and the CO or COR. The minutes shall become a part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understandings.

c. Quality Control Plan.

(1) General. The Government will consider an interim plan for the first 30 days of operation. However, the Contractor shall furnish for approval by the Government, not later than 15 days after receipt of Notice to Proceed, the Contractor Quality Control (CQC) Plan within which he proposes to implement the requirements of Contract Clause entitled "Inspection of Construction". The plan shall identify personnel, procedures, instructions, records, and forms to be used. If the Contractor fails to submit an acceptable QC plan within the time herein prescribed, the CO or COR may refuse to allow construction to start if an acceptable interim plan is not furnished or withhold funds from progress payments in accordance with the Contract Clause entitled "Payments Under Fixed-Price Construction Contracts" until such time as the Contractor submits an acceptable final plan.

(2) The Quality Control Plan. This plan shall include as a minimum, the following:

(a) A description of the quality control organization, including chart showing lines of authority and acknowledgement that the CQC staff shall implement the three phase control system for all aspects of the work specified and shall report to the project manager or someone higher in the Contractor's organization.

(b) The name, qualifications, duties, responsibilities, and authorities of each person assigned a QC function.

(c) A copy of the letter to QC manager signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the QC manager.

(d) Procedures for scheduling and managing submittals, including those of subcontractors, offsite fabricators, suppliers and purchasing agents.

(e) Control testing procedures for each specific test. (Laboratory facilities will be approved by the Contracting Officer).

(f) Reporting procedures including proposed reporting formats.

(g) A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements.

(3) Acceptance of Plan. Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC plan and operations as necessary to obtain the quality specified.

(4) Notification of Changes. After acceptance of the QC plan, the Contractor shall notify the CO in writing of any proposed change. Proposed changes are subject to acceptance by the CO or COR.

d. Quality Control Organizations.

(1) CQC System Manager. The Contractor shall identify an individual, within his organization at the site of the work, who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be approved by the CO or COR.

(2) Personnel. A staff shall be maintained under the direction of the system manager to perform all QC activities. The actual strength of the staff during any specific work period may vary to cover work phase needs, shifts, and rates of placement. The personnel of this staff shall be fully qualified by experience and technical training to perform their assigned responsibilities.

e. Submittals. Submittals shall be as specified in H-13, "Submittals". The CQC Organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

f. Control. Contractor Quality Control is the means by which the Contractor assures himself that his construction complies with the requirements of the contract plans and specifications. The controls shall be adequate to cover all construction operations, including both onsite and offsite fabrication, and will be keyed to the proposed construction sequence. The controls shall include at least three phases of control for all definitive features of work as follows:

(1) Preparatory Inspection Phase. This phase shall occur prior to beginning any work or any definable feature of work. It shall include a review of contract requirements; a check to assure that all materials and/or equipment have been tested,

submitted and approved; a check to assure that provisions have been made to provide required control testing; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials, equipment and sample work to assure that they conform to approved shop drawings or submittal data and that all materials and/or equipment are on hand. The Contracting Officer's Representative (COR) shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory inspection. The Contractor must submit a written agenda of the topics to be discussed at the preparatory meeting on the day prior to the meeting. The results of the preparatory inspections shall be documented by separate minutes prepared by the CQC representative and attached to the daily QC report. Subsequent to the preparatory phase and prior to commencement of work, the Contractor shall instruct applicable workers as to the acceptable level of workmanship required in his CQC plan in order to meet contract specifications.

(2) Initial Phase. This phase must be accomplished at the beginning of the definable feature of work. This phase shall include a check of preliminary work, verify full compliance, establish level of workmanship, resolve all differences, and check safety to include compliance with hazard analysis. The Contracting Officer's representative shall be notified at least 24 hours in advance of the inspection of the initial phase. Separate minutes of this phase shall be prepared by the CQC representative and attached to the daily QC Report. The initial phase should be repeated for each new crew to work on site, or if acceptable standards of workmanship are not being met.

(3) Follow-up Phase. Daily inspections shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The inspections shall be made a matter of record in the CQC documentation as required below. Final follow up inspections shall be conducted and all deficiencies corrected prior to the start of additional work.

g. Tests.

(1) Testing Procedures. The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product which conforms to contract requirements. The Contractor shall procure the services of an industry recognized testing laboratory or he may establish an approved testing laboratory at the project site. A list of tests which the Contractor is to perform shall be furnished as a part of the CQC plan to the Contracting Officer. The list shall give the test name, specification paragraph containing the test requirements, and the personnel and laboratory responsible for each type of test. The Contractor shall perform and record the following activities and provide the following data:

(a) Verify that testing procedures comply with contract requirements.

(b) Verify that facilities and testing equipment are available and comply with testing standards.

(c) Check test instrument calibration data against certified standards.

(d) Verify that recording forms, including all of the test documentation requirements, have been prepared.

(2) Testing.

(a) Capability Check. The COR will have the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques.

(b) Capability Re-Check. If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$1,500 to reimburse the Government for each succeeding re-check of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

(c) Project Laboratory. If the Contractor uses an on site testing laboratory, the COR will have the right to utilize the laboratory and equipment to make assurance tests and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

(d) Transportation of Samples for Testing. Costs incidental to the transportation of samples or materials will be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be coordinated with the CO for shipping instructions and delivered to the Corps of Engineers Division Laboratory, f.o.b., at the following address:

For delivery by mail:

Waterways Experiment Station
P.O. Box 631
Vicksburg, Mississippi 39180

For other deliveries:

Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, Mississippi

h. Completion Inspection. At the completion of all work or any increment thereof established by a completion time stated in the paragraph entitled "Commencement, Prosecution, and Completion of Work" or stated elsewhere in the specifications, the CQC System Manager shall conduct a completion inspection of the work and develop a 'punch list' of items which do not conform to the approved plans and specifications. Such a list shall be included in the CQC documentation as required by paragraph i. below and shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or his staff shall make a second completion inspection to ascertain that all deficiencies have been corrected and so notify the Contracting Officer's Representative. The completion inspection and any deficiency corrections required by this paragraph will be accomplished within the time stated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

i. Documentation.

(1) The Contractor shall maintain current records of quality control operations, activities, and tests performed including the work of suppliers and subcontractors. These records shall be on an acceptable form and shall include factual evidence that required activities or tests have been performed, including but not limited to the following:

- (a) Type and number of control activities and tests involved.
- (b) Results of control activities and tests.
- (c) Nature of defects, causes of rejection, etc.
- (d) Proposed remedial action.
- (e) Corrective actions taken.

In addition, these records shall indicate a description of trades working on the project, the numbers of personnel working, and the weather conditions encountered, and acknowledgement of instructions given by the Government Representative.

(2) These records shall cover both conforming and defective or deficient features and shall include a statement that supplies and materials incorporated in the work comply with the contract. Legible copies of these records shall be furnished to the CO daily.

j. Safety. The Contractor shall perform a daily safety inspection of the jobsite, equipment, or separate segments thereof. The inspection shall be performed by the Contractor's job supervisory staff, a company safety specialist, a safety

consultant, or a safety representative of the compensation insurance carrier. The results shall be documented, along with any corrective action taken, on the quality control report or on a form attached to the quality control report, such as a Corps of Engineers Safety Inspection Checklist or insurance carrier's inspection format.

k. Notification of Noncompliance. The Contracting Officer will notify the Contractor of any noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his representative at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

l. Payment. Separate payment will not be made for providing and maintaining an effective Quality Control program as required above, and all costs associated therewith shall be included in the applicable unit prices or lump sum prices contained in the Bidding Schedule. (ER 1180-1-6)

H-5 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE.
(EFARS 31.105--JUL 89).

a. Allowable cost for construction and marine plant and equipment in sound workable condition, owned or controlled and furnished by a Contractor or Subcontractor at any tier shall be based on actual cost data when the Government can determine both ownership and operating costs for each piece of equipment or equipment groups of similar serial and series from the Contractor's accounting records. When both ownership and operating costs cannot be determined from the Contractor's accounting records, equipment costs shall be based upon the applicable provisions of EP 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region III. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retrospective pricing, the schedule in effect at the time the work was performed shall apply.

b. Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d) (2) (ii) and FAR 31.205-36, substantiated by certified copies of paid invoices. Rates for equipment rented from an organization under common control, lease-

purchase or sale-leaseback arrangements will be determined using the schedule except that rental costs leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated leases are allowable. Costs for major repairs and overhaul are unallowable.

c. When actual equipment costs are proposed and the total amount of the pricing action is over \$25,000, cost or pricing data shall be submitted on Standard Form 1411, "Contract Pricing Proposal Cover Sheet." By submitting cost or pricing data, the Contractor grants to the Contracting Officer or an authorizing representative the right to examine those books, records, documents and other supporting data that will permit evaluation of the proposed equipment costs. After price agreement the Contractor shall certify that the equipment costs or pricing data submitted are accurate, complete and current.

NOTE: A copy of the manual can be obtained from the Government Printing Office (GPO) by calling (202) 783-3238. The cost will be \$9.50. (Stock number: Volume 3, # S/N-008-022-00256-1.)

H-6 PHYSICAL DATA (FAR 52.236-4 - 1984 APR). Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

a. The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys and borings.

b. Field notes, representative soil samples, field and laboratory test results, and other data on which this information is based are available at U.S. Army Engineer District, New Orleans, Corps of Engineers, Attn: CELMN-ED, Foot of Prytania Street, P.O. Box 60267, New Orleans, Louisiana 70160-0267, and access thereto may be had upon request.

c. Weather Conditions. Data on weather conditions may be obtained from the National Weather Service.

d. Transportation Facilities. The job is located in New Orleans, LA on the east levee of the 17th Street Outfall Canal from the Orleans Lakefront East-West Return Levee (near Lake Pontchartrain) to the Southern Railroad Crossing of the Canal. For further information on access and trucking regulations, see the Special Clause entitled "Access and Trucking Requirements".

e. Vehicular and Road Requirements.

(1). In addition to all other Contract Clauses, the Contractor shall take note of the Contract Clauses entitled "Permits and Responsibilities" and "Operations and Storage Areas" in the performance of the work required herein. The Contractor should also be aware that truck routes and truck speed limits are subject to change and he should check with the appropriate state and/or parish officials for the applicable regulations in performance of this construction work. In addition to the requirements stated above, the Contractor shall keep any public street used free and clean of mud and other debris resulting from his operations. This is necessary to insure safe operation of all vehicles using public streets.

(2) The Contractor shall water down the access roads which are within the construction easement area as necessary to keep dust from being wind blown or drifting into the adjacent subdivision. As a minimum, the water truck shall meet the requirements in C2A-7 (3).

(3) Except in an emergency, all vehicles operating within the construction easement area shall not exceed 15 mph.

H-7 LAYOUT OF WORK. (FAR 52.236-17--APR 1984). The Contractor shall lay out its work from the existing centerline of the sheet pile wall as described and shown on the contract drawings. The Contractor shall furnish, at its own expense, such stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades shown in the contract drawings. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

H-8 DAMAGE TO WORK. The responsibility for damage to any part of the permanent work shall be as set forth in the Contract Clauses of the contract entitled "Permits and Responsibilities." However, if, in the judgement of the Contracting Officer, any part of the permanent work performed by the Contractor is damaged by flood, earthquake, hurricane or tornado, which damage is not due to the failure of the Contractor to take reasonable precautions or to exercise sound engineering and construction practices in the conduct of the work, the Contractor shall make the repairs as ordered by the Contracting Officer and full compensation for such repairs will be made at the applicable contract unit price or lump sum prices as fixed and established in the contract. If, in the opinion of the Contracting Officer, there are no contract unit or

lump sum prices applicable to any part of such work, an equitable adjustment pursuant to the Contract Clause entitled, "Changes" will be made as full compensation for the repairs of that part of the permanent work for which there are no applicable contract unit or lump sum prices. Except as herein provided, damage to all work (including temporary construction), utilities, materials, equipment and plant shall be repaired to the satisfaction of the Contracting Officer at the Contractor's expense, regardless of the cause of such damage.

H-9 SAFETY PROVISIONS.

a. Accident Investigations and Reporting. Refer Oct 1992 edition of EM 385-1-1, Section 0.1D. Accidents shall be investigated and reports completed by the immediate supervisor of the employee(s) involved and reported to the Contracting Officer or his representative within one working day after the accident occurs. A written report of all mishaps occurring on the project shall be submitted to the Contracting Officer's Representative within four calendar days following the incident. All data reported must be complete, timely and accurate. A follow-up report shall be submitted when the estimated lost time days differs from the actual lost time days.

b. Accident Prevention Program. Refer to Contract Clause entitled "Accident Prevention" of this contract. Within 15 days after receipt of Notice to Award of the contract, and at least 7 days prior to the prework conference, four copies of the Accident Prevention Program shall be submitted to the Contracting Officer for review and approval. The program shall be prepared in the following format.

(1) An executed LMV Form 358-R, Administrative Plan (available upon request), see TABLE 1-1 of EM 385-1-1.

(2) An executed LMV Form 359-R, Activity Hazard Analysis (available upon request), see TABLE 1-1 of EM 385-1-1.

(3) A copy of company policy statement regarding accident prevention.

(4) When marine plant and equipment are in use under a contract, the method of fuel oil transfer shall be included on LMV Form 414R, Fuel Oil Transfer, (available upon request). (Refer to 33 CFR 156).

The Contractor shall not commence physical work at the site until the program has been approved by the Contracting Officer, or his authorized representative. At the Contracting Officer's discretion, the Contractor may submit his Activity Hazard Analysis only for the first phase of construction provided that it is accompanied by an outline of the remaining phases of construction.

All remaining phases shall be submitted and accepted prior to the beginning of work in each phase. Also refer to Section 1 of EM 385-1-1.

c. Comprehensive Hazard Communication Program. The Contractor shall develop, implement, and maintain at the workplace a written, Comprehensive Hazard Communication Program (See Section 01.B of EM 385-1-1) that includes identification of potential hazards as prescribed in 29 CFR Part 1910.1200, effects of exposure and control measures to be used for chemical products and physical agents that may be encountered during the performance of work on this contract, provisions for container labeling, Material Safety Data Sheets, and employee training program, and other criteria in accordance with 29 CFR Part 1910.1200. Training shall include communication methods and systems to be used (i.e., voice, hand signals, radios or other means), and training in the use and understanding of material safety data sheets and chemical product hazard warning labels. The Hazard Communication Program and the Material Safety Data Sheets shall be submitted to the Contracting Officer as part of his Accident Prevention Program.

d. Daily Inspections. The Contractor shall perform daily safety inspections and record them on the forms approved by the Contracting Officer. Reports of daily inspections shall be maintained at the jobsite in accordance with H-4, subparagraph j. The reports shall be records of the daily inspections and resulting actions. Each report shall include, as a minimum, the following:

- (1) Phase(s) of construction underway during the inspection.
- (2) Locations of areas where inspections were made.
- (3) Results of inspections, including nature of deficiencies observed and corrective actions taken, or to be taken, date, and signature of the person responsible for its contents.

e. Safety Sign. The Contractor shall furnish, erect, and maintain a safety sign at the site, as located by the Contracting Officer. The sign shall conform to the requirements of this paragraph and the drawing included at the end of these Special Clauses. The lettering shall be black, the castle red, and the background white. Upon request, the Government will furnish two decals of the engineer castle. When placed on a floating plant, the sign may be half size. The sign shall be erected as soon as practicable, but not later than 15 calendar days after the date established for commencement of work. The data required shall be current.

f. Machinery and Mechanized Equipment. Machinery and mechanized equipment used under this contract shall comply with the following:

(1) When a rubber-tired front-end loader, bulldozer, etc., is operated on a floating plant, either a bumper or curb with a minimum height of one-third of the outside diameter of the largest tire on this equipment, a barge tied alongside, or other means approved in writing by the Contracting Officer shall be used to prevent equipment from moving or falling into the water.

(2) The stability of crawler, truck, and wheel-mounted cranes shall be assured.

(a) The manufacturer's load-rating chart may be used to determine the maximum allowable working loading for each particular crane's boom angle provided a test load, with a boom angle of 20 degrees, confirms the manufacturer's load-rating table.

(b) Stability tests are required if: 1. there is no manufacturer's loading chart securely fixed to the operator's cab; 2. there has been a change in boom or other structural members; or, 3. there has been a change in the counter-weight. The test shall consist of lifting a load with the boom in the least stable undercarriage position and at an angle of 20 degrees above the horizontal. The test shall be conducted under close supervision on a firm, level surface. The load that tilts the machine shall be identified as the test load. The test load moment (in ft-lbs) shall then be calculated by multiplying the horizontal distance (in ft) from the center of rotation of the machine to the test load, times the test load (in lbs). Three-fourths of this test load moment shall then be used to compute the maximum allowable operating loads for the boom at 20, 40, 60, and 80 degrees above horizontal. From these maximum allowable operating loads, a curve shall be plotted and posted in the cab of the machine in sight of the operator.

These values shall not be exceeded except in the performance test described below. The test load shall never exceed 110 percent of the manufacturer's maximum rated capacity.

(c) In lieu of the test and computations above, the crane may be load tested for stability at each of the four boom positions listed above.

(3) Performance tests shall be performed in accordance with Section 16 of EM 385-1-1. Performance test shall be conducted after each stability test, when the crane is placed in service on a project, and at least every 12 months.

(4) Inspections shall be made which will ensure a safe and economical operation of both cranes and draglines. Specific inspections and their frequencies are listed on the appropriate checklists noted below. Results of inspections and tests for cranes shall be recorded on the Safety Inspection Check List, LMV Form 326R (available upon request), and inspection results for draglines shall be recorded on LMV Form 373R (available upon request). Copies of the inspections and tests shall be available at the jobsite for review. All stability and performance tests on cranes and all complete dragline inspections shall be witnessed by the Contracting Officer or his authorized representative.

(5) A complete dragline inspection shall be made: (a) at least annually; (b) prior to the dragline being placed in operation; and (c) after the dragline has been out of service for more than 6 months.

g. Haul Roads. Whenever practical, one-way haul roads shall be used on this contract. Haul roads built and maintained for this work shall comply with the following:

(1) One-way haul roads for off-the-road equipment; e.g., belly dumps, scrapers, and off-the-road trucks shall have a minimum usable width of 25 ft. One-way haul roads for over-the-road haulage equipment only (e.g., dump trucks, etc.) may be reduced to a usable width of 15 ft. When the Contracting Officer determines that it is impractical to obtain the required width for one-way haul roads (e.g., a road on top of a levee), a usable width of not less than 10 feet may be approved by the Contracting Officer, provided a positive means of traffic control is implemented. Such positive means shall be signs, signals, and/or signalmen and an effective means of speed control.

(2) Haul roads shall be graded and otherwise maintained to keep the surface free from potholes, ruts, and similar conditions that could result in unsafe operation.

(3) Grades and curves shall allow a minimum sight distance of 200 feet for one-way roads and 300 feet for two-way roads. Sight distance is defined as the centerline distance an equipment operator (4.5 feet above the road surface) can see an object 4.5 feet above the road surface. When conditions make it impractical to obtain the required sight distance (e.g., ramps over levees), a positive means of traffic control shall be implemented.

(4) Dust abatement shall permit observation of objects on the roadway at a minimum distance of 300 feet.

(5) Haul roads shall have the edges of the usable portion marked with posts at intervals of 50 feet on curves and

200 feet (maximum) elsewhere. Such markers shall extend 6 feet above the road surface and, for nighttime haulage, be provided with reflectors in both directions.

h. Safety Fence. The Contractor shall provide, erect, and maintain a temporary safety fence around the construction staging areas; storage areas on eastside of 17th Street Outfall Canal; and construction areas as shown on the drawings. The fabric for the safety fence shall be zinc coated hog wire mesh at least 42 inches in height. Posts shall be round wood posts and shall be at least 6-1/2 feet long, 3-1/2 inches in diameter, and may be untreated. Posts shall extend at least 42 inches above ground and shall be spaced at 10 feet on center. Swing gates, if required, shall be at least 12 feet wide by 42 inches high. The swing gate frame shall be fabricated of either 1-3/8 inch O.D. tubular steel, or 1/4 inch angle iron brace with an adjustable brace wire to prevent sagging. Gates shall be fitted with hinges and shall be supported by 1-3/8 inch O.D. tubular steel posts embedded in 3 feet of concrete. The fabric for the gates shall be the same as that for the fence. All gates shall be closed and padlocked at the end of each work day. The Contractor shall provide and maintain on the fence "KEEP OUT" signs every 100 feet facing out from the work. Details of the safety fencing and location shall be submitted to the Contracting Officer for approval. No separate measurement or payment will be made for this work. Payment for all work associated with the safety fence shall be distributed amongst the existing bid items.

i. Means of Escape for Personnel Quartered, or Working on Floating Plant. Two means of escape shall be provided for assembly, sleeping, and messing areas on floating plants. For areas involving 10 or more persons, both means of egress shall be through standard size doors opening to different exit routes. Where nine or fewer persons are involved, one of the means of escape may be a window (minimum dimensions 24 in. by 36 in.) which leads to a different exit route. Refer to Section 19 of EM 385-1-1.

j. Emergency Alarms and Signals.

(1) Alarms. Emergency alarms shall be installed and maintained on all floating plant requiring a crew where it is possible for either a passenger or crewman to be out of sight or hearing from any other person. The alarm system shall be operated from the primary electrical system with standby batteries on trickle charge that will automatically furnish the required energy during an electrical-system failure. A sufficient number of signaling devices shall be placed on each deck so that the sound can be heard distinctly at any point above the usual background noise. All signaling devices shall be so interconnected that actuation can occur from at least one strategic point on each deck.

(2) Signals.

(a) Fire Alarm Signals. The general fire alarm signal shall be in accordance with paragraph 97.13-15b of the Coast Guard Rules and Regulations for Cargo and Miscellaneous Vessels, Sub-Chapter I, 1 Sep 77 (CG 257).

(b) Abandon Ship Signals. The signal for abandon ship shall be in accordance with paragraph 97.13-15c of the reference cited in (a) above.

(c) Man-Overboard Signal. Hail and pass the word to the bridge. All personnel and vessels capable of rendering assistance shall respond.

k. Hurricane Plan. A detailed plan for protection and evacuation of personnel and plant, as well as for closure of gaps in flood protection created by driving sheet pile to required grade, in the event of an impending hurricane or storm, is required as an enclosure to the Contractor's Accident Prevention Program. This plan shall be submitted to the Contracting Officer, or his representative, for review prior to the preconstruction conference. The plan shall include at least the following:

(1) The time each phase of the plan will be put in effect. The time shall be the number of hours remaining for the storm to reach the worksite if it continues at the predicted speed and direction.

(2) The safe harbor for personnel and plant specifically identified.

(3) The name of the boat which will be used to move the plant, its type, capacity, speed, and availability.

(4) The estimated time necessary to move the plant to the safe harbor after movement is started.

(5) Requirements for closing gaps in flood protection created by lowering the top of sheets by driving shall be as stated in C2E-9.

H-10 INSPECTOR'S FIELD OFFICE.

a. The Contractor shall furnish, throughout the contract period, for the exclusive use of the Government employees, a temporary waterproof building, or trailer, to be utilized as a field office. It shall be conveniently located at the site of construction and shall be independent of any building, or trailer, used by the Contractor. Toilet facilities and potable water shall be provided within the Inspector's office or adjacent thereto. It shall be equipped with approved electrical wiring, private telephone service, at least one ceiling lamp receptacle, at least

one double convenience outlet, and the required switches and fuses, to provide 110-volt power for lighting and operating a desk calculator. It shall be equipped with an air conditioning unit to provide cooling in warm or hot weather, and a heater, properly installed and vented in accordance with the National Fire Protection Association Code, for heating in cold weather, as required. The Contractor shall make the necessary arrangements to obtain or to generate the power required to operate the air conditioning unit, lights, and electric calculators and the power or fuel required for the heater, and shall bear the cost thereof. A drafting table providing a working surface having dimensions of at least 4 feet by 6 feet (which may consist of a piece of plywood, at least 3/4-inch thick, hinged to a wall of the building with hinged legs) shall be installed in the building. The building shall have a built-in locker, extending from the floor to the ceiling, having dimensions of at least 2 feet by 5 feet, with a shelf 12 inches from the top, and one door equipped with two hinges, a hasp and a padlock. The outside door of the building and the window frames shall be equipped with iron security guards. The door shall also be equipped with butt hinges and a cylinder lock. One draftsman's stool, two strong chairs and one desk shall be provided. The building or trailer shall conform to the following minimum requirements:

Ceiling height, not less than	6 feet 9 inches
Floor space, no less than	240 square feet
Windows, not less than	2
Doors, outside	1
Rooms	1

Screens over doors and windows; walls and ceilings shall be insulated; and interior walls finished.

b. The building, or trailer, shall be removed by the Contractor after completion of all work under this contract and before final acceptance thereof. No separate payment will be made for furnishing, maintaining, providing the prescribed utilities, and removing the inspector's field office, but the cost of the same shall be distributed throughout the existing bid items. In the event the Contractor fails to furnish the required facilities, the Government may elect to procure the required facilities and deduct all costs from amounts due or to become due under this contract.

c. The Contractor shall provide daily janitorial services for this and other buildings at the site throughout the life of the contract. The cost of this service shall be distributed throughout the existing bid items and there shall be no separate payment.

H-11 CONSTRUCTION SIGNS. The use of signs to identify Corps managed or supervised design, construction, and rehabilitation projects - both for military and civil works is an important part of efforts to keep the public informed of Corps work. For this purpose, a construction project sign package has been adopted. This package consists of a project identification sign.

The sign shall be displayed and mounted for reading by passing viewers. The sign placement location will be designated by the Contracting Officer.

The panel sizes and graphic formats have been standardized for visual consistency throughout all Corps operations.

Panels are fabricated using HDO plywood with dimensional lumber uprights and bracing. The sign faces are non-reflective vinyl.

All legends are to be die-cut or computer-cut in the sizes and typefaces specified and applied to the white panel background following the graphic formats shown in Appendix A thru D to these Special Clauses.

Mounting and fabrication details, and a display of this sign is shown in Appendix A thru D.

Special applications or situations not covered in these guidelines should be referred to the Contracting Officer.

See Appendix A thru D at the end of these Special Clauses for the construction project sign package.

Project Sign Information: (refer to page 16.2 of Appendix A)

- a. Legend Group 1, Corps relationship to project:

"Construction
Supervised by:"

- b. Legend Group 2:

"U.S. ARMY
CORPS OF ENGINEERS
NEW ORLEANS DISTRICT."

- c. Legend Group 3, Project Title:

d. Legend Group 4, Project Locations:

e. Legend Group 5, Contractor:

f. Legend Group 6, Project Sponsor:

H-12 RIGHTS-OF-WAY.

a. Rights-of-way for construction purposes will be furnished by the Government without cost to the Contractor, as shown on the contract drawings. If the right-of-way for access is used by the Contractor, he shall, at his expense, be required to do all work necessary to make such right-of-way suitable for traveling to and from the work site. Upon completion of the contract work, any such access roadway and right-of-way furnished by the Government shall be left in a condition satisfactory to the Contracting Officer.

b. The Contractor shall procure, without expense or liability to the Government, all additional lands, access roads, or rights-of-way desired for his own convenience in the performance of the work. The Contractor shall notify the Contracting Officer of his intention and, if required by the Contracting Officer, secure clearances from both the Louisiana State Historical Preservation Office and the Louisiana Archaeological and Antiquities Commission. Any agreements or permits with levee boards, parishes, or political subdivisions for moving material and equipment will also be the responsibility of the Contractor. Any delays to the Contractor resulting from delays in procuring such additional lands, access roads, right-of-way, or permits for moving material and equipment for his own use will not be made a basis of any claim for increase in the cost or time of performance of the work. The Contractor shall make his own investigations to determine the conditions, restrictions, and difficulties which may be encountered in the transportation of material and equipment to the work site.

c. Obstructions to the right-of-way are as follows:

<u>Station</u>	<u>Item</u>	<u>Disposition</u>
99+71	U.S. Sprint Fiber Optic Cable	See Special Clause entitled "UTILITIES AND IMPROVEMENTS"
35+82	LP&L Power Line	See Special Clause entitled "UTILITIES AND IMPROVEMENTS"

H-13 SUBMITTALS. Within 15 days after receipt of notice to proceed, the Contractor shall complete and submit to the Contracting Officer, in duplicate, submittal register ENG Form 4288 listing all submittals and dates. In addition to those items listed on ENG Form 4288, the Contractor shall furnish submittals for any deviation from the plans or specifications. The scheduled need dates must be recorded on the document for each item for control purposes. In preparing the document, adequate time (minimum of 30 days or more) will be allowed for review and approval and possible resubmittal. Scheduling shall be coordinated with the approved progress schedule. The Contractor's Quality Control representative shall review the listing at least every 30 days and take appropriate action to maintain an effective system. Copies of updated or corrected listings shall be submitted to the Contracting Officer upon request, in the quantity specified. Payment will not be made for any material or equipment which does not comply with contract requirements. (ER 415-1-10 May 1984)

NOTE: The submittal listing in tabular form, of technical items the Contractor shall submit to the Contracting Officer, as indicated in the contract requirements is attached at the end of the Special Clauses. This register is not necessarily complete, and the Contractor shall be responsible for developing a comprehensive register.

H-14 CERTIFICATES OF COMPLIANCE. Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in 3 copies. Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material, if, after tests are performed on selected samples, the material is found not to meet specified requirements.

H-15 RESERVED.

H-16 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION (DFARS 252.236-7004 (b) (2) - 1991 DEC.).

a. The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.

(1) Sixty percent (60%) of the lump sum price upon completion of the Contractor's mobilization at the work site.

(2) The remaining forty percent (40%) upon completion of demobilization.

b. The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs a.(1) and (2) of this clause do not bear a reasonable relation to the cost of the work in this contract.

(1) Failure to justify such price to the satisfaction of the Contracting Officer will result on payment of--

(a) Actual mobilization costs at the completion of mobilization;

(b) Actual demobilization costs at the completion of demobilization; and

(c) The remainder of this item in the final payment under this contract.

(2) The Contracting Officer's determination of the actual costs in paragraphs b.(1) of this clause is not subject to appeal.

H-17 ENVIRONMENTAL LITIGATION (1974 NOV OCE).

a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the "Suspension of Work" clause of this contract. The period of such suspension, delay or interruption shall be

considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

b. The term "environmental litigation", as used herein, means a lawsuit alleging that the work has an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

H-18 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER.

a. This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the contract clause entitled "Default (Fixed Price Construction)". In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied.

1. The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

2. The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

b. The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

**MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK
DAYS BASED ON (5) DAY WORK WEEK**

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
(7)	(6)	(4)	(4)	(4)	(6)	(6)	(6)	(4)	(4)	(4)	(5)

c. Upon acknowledgement of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day.

The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in pervious month), be calculated chronologically from the first to the last day of each month, and be recorded as full

days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph b, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause entitled "Default (Fixed Price Construction)". (ER 415-1-15 dated 31 Mar 89).

H-19 PERFORMANCE OF WORK BY CONTRACTOR (FAR 52.236-1 -1984 APR). The Contractor shall perform on the site, and within his own organization, work equivalent to at least twenty percent (20%) of the total amount of the work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract, if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

H-20 UTILITIES AND IMPROVEMENTS.

a. The Contractor shall note the presence of a Louisiana Power and Light aerial transmission line crossing the canal from 36th Street on the Orleans side to West Esplanade Avenue on the Jefferson side (Sta. 35+82). This line can be de-energized only and cannot be taken down. The line cannot be de-energized prior to April 1, 1993 nor during the time period of May 1st through September 15 of any year. The Contractor shall schedule his work such that it does not conflict with this time period. The Contractor shall coordinate with Tony Trapani, telephone 840-2627. The Contractor shall also note that a U.S. Sprint fiber optic line opposite Station 99+71 is to be passed through the concrete cap in accordance with the details shown on the contract drawings and as described in C2C-4.6.4.

b. Any unidentified pipes or structures which may be found within the limits of the work during the course of construction shall not be disturbed nor shall construction or excavation be performed at these locations unless and until approved by the Contracting Officer. Payment for ordered excavation, if any, will be made in accordance with the Contract Clause entitled "Differing Site Conditions".

H-21 PERMISSIBLE HOURS OF OPERATION. The Contractor shall limit his hours of operation to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday.

Prior to 7:00 a.m., the Contractor shall not:

- start up any equipment.
- have any trucks - delivery, service, hauling, etc. - arrive at the job site. Trucks shall remain on designated truck routes until 7:00 a.m.

H-22 HANDBOOK FOR CONCRETE AND CEMENT (CRD-C). The handbook for concrete and cement can be obtained from U.S. Army Engineer Waterways Experiment Station, ATTN: Publications Specification, Information Services Branch, P.O. Box 631, Vicksburg, Mississippi 39180.

Complete Ed. (Vol. 1 and 2) \$10.00

Supplements and revisions to the Handbook are sold on a subscription basis at the price of \$8.00 per year per copy of Handbook. Separate CRD-C Specifications are available for distribution without charge in limited quantities only.

H-23 AGGREGATE SOURCES.

(SEP 91)

a. Concrete aggregates meeting the quality requirements of these specifications have been produced from the sources listed below:

<u>Producer</u>	<u>Nearest Town To Pit *</u>	<u>Pit Designation</u>
A.B. Chisum Sand & Gravel Co.	Sicily Island, LA	A.B. Chisum Sand & Gravel
American Sand & Gravel Co.	Hattiesburg, MS	Plant A
American Sand & Gravel Co.	Hattiesburg, MS	Plant E
B & B Gravel, Inc.	Grangeville, LA	Hornsby Pit
B & B Gravel, Inc.	Grangeville, LA	Naquin Pit
Blain Sand & Gravel, Inc.	Crystal Springs, MS	Jones Pit
Dravo Basic Materials Co., Inc.	Smithland KY	Three Rivers Quarry
D. & J. Construction	Aimwell, LA	Aimwell Pit
Feliciano Sand & Gravel Co.	Jackson, LA	Harvey Pit
Feliciano Sand & Gravel Co.	Jackson, LA	McKowen Pit
Jackson Ready-Mix Concrete Co.	Crystal Springs, MS	Pit #715-11
Lambert Gravel Co., Inc.	Bains, LA	G-2
Ia. Industries, Inc.	Hickory, LA	Hickory Plant
Ia. Industries, Inc.	Perryville, LA	Perryville Pit
Ia. Industries, Inc.	Ball, LA	Paradise Pit
Ia. Industries, Inc.	Grangeville, LA	Hornsby Plant
Ia. Industries, Inc.	Grangeville, LA	Hatcher-Wales Plant
Ia. Industries, Inc.	Woodworth, LA	Woodworth Plant
Ia. Industries, Inc.	Sun, LA	Price Plant
Ia. Industries, Inc.	DeRidder, LA	Anacoco Pit
Mears Sand and Gravel Co.	Watson, LA	Penny & Easterly Leases
Mid State Material Co.	Woodworth, LA	Woodworth Plant
Mid State Sand & Gravel Co., Inc.	Gardner, LA	Gardner-Hot Wells Plant
Quick Sand & Gravel, Inc.	Watson, LA	Bailey & Addison Leases
Rebel Sand & Gravel	Watson, LA	Plant 5
Rebel Sand & Gravel	Watson, LA	Plant 6
Rebel Sand & Gravel	Watson, LA	Plant 9
Reed Crushed Stone Co., Inc.	Gilbertsville, KY	Gilbertsville Quarry

Standard Gravel Co.	Pearl River, LA	Nicholson Pit
Standard Gravel Co.	Enon, LA	Enon Pit
Thomas Sand & Gravel Co. Inc	Grangeville, LA	Carter #2 Pit
T.L. James & Co.	Pearl River, LA	Pit #1
T.L. James & Co.	Pearl River, LA	Pit #3

* "Nearest Town to Pit" according to LDOTD Official State Highway Map.

Further information on these pits can be obtained from the Geology Section of the U.S. Army Corps of Engineers District Office in New Orleans.

b. Concrete aggregates may be furnished from any of the above listed sources or at the option of the Contractor may be furnished from any other source designated by the Contractor and approved by the Contracting Officer, subject to the conditions hereinafter stated and as specified in C3D-3.

c. After the award of the contract, the Contractor shall designate in writing only one source or one combination of sources from which he proposes to furnish aggregates. If the Contractor proposes to furnish aggregates from a source or from sources not listed above, he may designate only a single source or single combination of sources of aggregates. If a source for coarse and/or fine aggregate so designated by the Contractor is not approved for use by the Contracting Officer, the Contractor may not submit for approval other sources but shall furnish the coarse and/or fine aggregate, as the case may be, from a source listed above at no additional cost to the Government.

d. Approval of a source of concrete aggregate is not to be construed as approval of all material from that source. The right is reserved to reject materials from certain localized areas, zones, strata, or channels, when such materials do not conform to the quality requirements of ASTM C 33-86 (CRD-C 133), Concrete Aggregates. Aggregate gradation shall be in accordance with the specified requirements of section C3D-6.2. Materials produced from any source, including those listed above, shall also meet all the requirements of section C3D-3 of the Technical Specifications.

e. It is the Contractor's responsibility to determine that the aggregate source or combination of sources selected is capable of supplying the quantities and gradation needed and at the rates needed to maintain the scheduled progress of the work. The inability of a source or combination of sources to maintain the necessary volume shall not be the basis for any claim for a time extension.

H-24 CONTINUING CONTRACTS (EFARS 52.232-10001 - 1985 JAN HO USACE).

a. This is a continuing contract, as authorized by Section 10 of the River and Harbor Act of September 22, 1922, (33 US Code 621). The payment of some portion of the contract price is dependent upon reservations of funds from future appropriations. The responsibilities of the Government are limited by this clause notwithstanding any contrary provision of "Payment under Fixed-Price Construction Contracts" or any other clause of this contract.

b. (1) The sum of \$ 350,000.00 has been reserved for this continuing contract and is available for payments to the Contractor during fiscal year 1993. The Energy and Water Development Appropriations Act, 1993, (PL 102-377, 2 October 1992) directed that a continuing contract be awarded to undertake this work. If Congress does not appropriate funds in future years for such work, the contract may be terminated for the convenience of the Government.

(2) Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not entitle the Contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (d) and (e) below. No such failure shall constitute a breach of this contract, except that this provision shall not bar a breach-of contract action if an amount finally determined to be due as a termination allowance remains unpaid for one year due solely to a failure to reserve sufficient additional funds therefore.

c. (1) The Government may at any time reserve additional funds for payments under the contract if there are funds available for such purpose. The Contracting Officer will promptly notify the Contractor in writing of any additional funds reserved for the contract by issuing an administrative change order to the contract.

(2) If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the Contractor shall give written notice to the Contracting Officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under the contract during that fiscal year. This notice shall be given not less than 45 nor more than 60 days prior to the estimated date of exhaustion.

d. (1) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. The Contractor shall be entitled to simple interest on any payment that the Contracting Officer determines was actually earned under the terms of the contract and would have been made except for exhaustion of funds. Interest shall be computed from

the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, for the Renegotiation board, as in effect on the first day of the delay in such payment.

(2) Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the Contractor to any price adjustment under the "Suspension of Work" clause or in any other manner under this contract.

(3) An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable anticipation of exhaustion of funds.

e. If, upon the expiration of sixty (60) calendar days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the Contractor, by written notice delivered to the Contracting Officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been terminated. Such a termination shall be considered a termination for the convenience of the Government.

f. If at any time, it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due the Contractor because of work performed and to be performed under the contract during the fiscal year, the Government reserves the right, after notice to the Contractor, to reduce said reservation by the amount of such excess.

H-25 OBSTRUCTION OF NAVIGABLE WATERWAYS (DFARS 252.236-7002-DEC 91).

a. The Contractor shall:

(1) Promptly recover and remove any material, plant, machinery, or appliance which the Contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;

(2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and

(3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.

b. The Contracting Officer may:

(1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph a. of this clause; and

(2) Deduct the cost of removal from any monies due or to become due to the Contractor; or

(3) Recover the cost of removal under the Contractor's bond.

c. The Contractor's liability for the removal of a vessel wrecked or sunk without fault or negligence is limited to that provided in Sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C.410 et.seq.).

H-26 SIGNAL LIGHTS. While the 17th Street Canal is not officially considered a navigable waterway, illicit navigation sometimes occurs. In order to safeguard the interests of the Contractor, he shall display signal lights and conduct his operations in accordance with U. S. Coast Guard regulations governing lights and day signals to be displayed, as set forth in Commandant, U. S. Coast Guard Instruction M16672.2, Navigation Rules, International - Inland (COMDTINST M16672); 33 CFR 81, Appendix A (International); and 33 CFR 84 through 33 CFR 90 (Inland) as applicable.

H-27 AS-BUILT DRAWINGS. Upon completion of the contract, the Contractor shall furnish "as-built" drawings consisting of one set of prints, marked up to reflect any and all deviations from the original plans.

H-28 ACCESS AND TRUCKING REQUIREMENTS.

a. Access Routes. Access to the job site will be provided to the Contractor at the following locations (also shown in the contract drawings). Access to and from each access site shall be via the following routes:

1. North of Hammond Highway. Trucks leaving this access site shall exit onto Hammond Highway and travel via designated truck routes to their destination and vice-versa on the return.

2. South of Hammond Highway. Trucks leaving this access site shall exit onto Bellaire Drive (not Hammond Highway), proceed to Hammond Highway, and travel designated truck routes to their destination and vice versa on the return.

3. Intersection of West Harrison Avenue and Bellaire Drive. Trucks leaving this access site shall exit onto West Harrison Avenue and proceed from there to Pontchartrain/West End Boulevard and vice versa on the return.

4. Access Sites North Of I-10 West and South of I-10 East. Trucks leaving this access site shall exit onto the North Frontage Road, proceed to Academy Drive, and then travel designated truck routes to their destination and vice-versa on the return.

5. Access Via 17th Street Canal. Access via the 17th Street Canal is available for the Contractor's use. This access does not, however, permit the Contractor to work off any of the bridges in the Canal.

b. On-Site Access. The Contractor will be permitted to degrade the levee 1 foot below the protected side levee crown to establish a temporary access road on the levee crown as shown on the contract drawings.

The access road shall be built in accordance with H-9(f). The maximum width of the access road shall be 15 feet east of the centerline of the sheet pile. Degraded levee material shall be stored in accordance with C2C-5. Backfill of the levee shall be in accordance with C2C-4.2.

c. Access Ramps. Access ramps shall be built as shown on the contract drawings.

d. Trucking Requirements. The following requirements apply to trucking operations on this project:

1. The Contractor shall provide a portable timber ramp at the curb of each access site. The timber ramp shall not extend more than 12 inches into the street and shall be removed from the street each night or during periods when there is no loading activity.

2. Upon completion of work at each of the access points, the Contractor shall repair the access site to remove all evidence that the site was used as an area of truck access. All debris and dead vegetation shall be cleared from the site, which shall then be graded to drain to the street and then fertilized and seeded in accordance with Section C2D. Care shall be exercised to prevent damage to existing curbs, but if so damaged, shall be repaired/replaced to the satisfaction of the Contracting Officer.

3. Trucks used for hauling shall not exceed the weight limits specified by the New Orleans Department of Streets, nor shall they exceed 24 cubic yards in capacity. Weight limits for trucks operating on the streets of the City of New Orleans are provided in Appendix H-1 at the end of the Special Clauses.

4. On each truck's first haul, it shall be loaded to its full capacity and weighed to verify that it does not exceed the legal weight limits of the Department of Streets. Once this has been verified, the truck will be given a designating mark that is clearly visible to show that it is an approved truck for use on

this job. A written description of this mark shall be furnished to the Contracting Officer and to the New Orleans Department of Streets at least 15 days prior to any hauling operations. On subsequent hauls, the truck will not have to be weighed. Any trucks found to exceed the weight limits of the Department of Streets when carrying a full load shall not be used in this job. The Contractor shall provide the Department of Streets with weight tickets for all trucks which have been weighed, including those which are rejected. In addition, the Contractor shall provide the Contracting Officer with a copy of the weight tickets. The Contractor shall be fully responsible for making sure that no trucks leave the job site without having previously been weighed and found to be within the legal limits.

5. The streets between the loading areas and designated truck routes shall be kept clean of mud from tires, etc. Prior to leaving access sites, the wheels and undercarriage of every truck shall be sufficiently clean so as to prevent tracking mud onto these streets. When deemed necessary and so directed by the Contracting Officer, the Contractor shall hose off or otherwise clean off the wheels and the undercarriage of the trucks in order to achieve a sufficiently clean condition. The Contracting Officer will have sole discretion as to what is considered a sufficiently clean condition. The Contractor shall have on the job site or immediately accessible, a sweeper and sufficient personnel to sweep the streets twice each day during trucking operations. At the end of each day and as directed by the Chief Maintenance Engineer of the New Orleans Department of Streets, the Contractor shall scrape up any residual mud tracked by the trucks' tires and hose down the streets. The streets shall be scraped clean before any hosing is done.

6. The Contractor shall perform, under the supervision of the Contracting Officer, periodic inspections of the drains along the above referenced streets, in order to make sure they are not getting clogged.

7. Trucks travelling between the access locations and designated trucks routes shall not exceed a speed of 15 m.p.h. Random speed checks will be made by enforcement agencies throughout the duration of the project.

8. The Contractor shall take immediate action to clean up any spilled haul material on any street between the loading areas and disposal sites. Failure to do so may result in having construction activities shut down by the Contracting Officer, until all spillage is cleaned up.

9. Violation of any of the above conditions may result in a "Stop Work" order or suspension of hauling permits until violations are corrected and procedures instituted to prevent further violations.

No separate payment will be made for any of the requirements of this clause. Payment shall be distributed amongst the other bid items.

H-29 OFF-SITE STORAGE. Storage of materials off-site will be allowed by the Contracting Officer. The Contractor must secure all rights-of-way. The Contractor must satisfy and meet all local, state, and federal regulations concerning the storage of the material. The material shall be stored to allow for compliance with C2E-9. The Contractor is liable for all payments or liens concerning the material storage. The material will be measured and paid for under the conditions of C2C-6 and C2C-7.

H-30 COORDINATION WITH OTHER WORK IN AREA. The Contractor is hereby notified that the East Jefferson Levee District has a contract (No. 92-1) currently under construction on the Jefferson side of the canal. An estimation of the work scheduled on Contract 92-1 for 1993 is as follows (dates are approximate and subject to change):

North of Hammond Hwy. The Contractor for 92-1 should not be in canal in 1993. He will be installing a floodwall and reconstructing the levee approximately 280 feet north of Hammond Hwy. and for 250 feet west along the Jefferson Lakefront Levee. He will also be reconstructing Orpheum Ave. for 430 feet north of Hammond Hwy. All approximately from early May 1993 to mid-July 1993.

Between Hammond Hwy and Veterans Hwy. Dredging of canal and removal at access siste South of Hammond Highway through April 1993.

Between Veterans Hwy. and Interstate-10. Dredging from canal through May 1993.

South of I-10. Construction of floodwall with reconstruction of levee and construction of a portion of a pumping station from through April 1993.

H-31 WEEKENDS, HOLIDAYS, AND NIGHTS. When the Contractor elects to work on weekends, holidays, and nights, notice shall be given to the Contracting Officer, in writing, sufficiently in advance of commencement of such operations to permit suitable arrangements for inspection to be made. Adequate lighting for thorough inspection of night operations shall be provided by the Contractor at his own expense.

H-32 CULTURAL RESOURCES INVESTIGATION.

a. The Government will conduct archeological monitoring of the inspection trench along its entire length.

b. Initial coordination regarding required cultural resources investigations will take place during the preconstruction meeting. Coordination will involve the NOD archeologist, Mr. Van Button, telephone (504) 862-1760, the NOD project engineer and the safety inspector, and the construction Contractor. The monitoring plan will be discussed.

c. The Contractor shall notify the Contracting Officer 10 days prior to beginning excavation of the inspection trench so that proper officials regarding cultural resources investigations can be notified. Excavation of the inspection trench shall proceed uninterrupted except as stated herein, but monitoring areas indicated above shall not proceed until the Contracting Officer notifies the Contractor that the subject investigation has been completed. Archeological monitoring will provide an opportunity to identify significant cultural resources that will remain preserved in place landward of the subject floodwall.

d. In addition to the special investigation of the inspection trench discussed above, all other construction activities shall be monitored by the Contractor to detect any items of historic or archeological interest. If discovered, the Contractor shall immediately cease work in that area and the item(s) and area(s) shall be carefully protected until research is completed. The Contractor shall not begin working again in any such area until receipt from the Contracting Officer of official notification that work in the area may commence. Payment for any delays caused as a result of work stoppages to allow investigation of potentially significant cultural resources shall be made at an equitable price as determined by the Contracting Officer in accordance with the "Changes" of the Contract Clauses.

H-33 TRAFFIC CONTROL. The Contractor shall be responsible for traffic control as follows:

a. The Contractor shall prepare a traffic control plan in accordance with applicable provisions of Section 97-TRAFFIC ACCOMMODATIONS, of "General Specifications for Street Paving and Temporary Surfacing" published by the City of New Orleans and Part VI - "Traffic Controls for Street and Highway Construction Maintenance, Utility and Emergency Operations" of the "Manual of Uniform Traffic Control Devices" by the Federal Highway Administration, as adopted by Louisiana Department of Transportation and Development. The Contractor shall keep the portion of the project being used by public traffic, whether through or local, in such condition that traffic (including mail delivery) will be adequately accommodated. The Contractor shall also provide and maintain in safe condition all required temporary approaches or crossings, intersections with roads, streets, residences and garages. The Contractor shall be responsible for supplying, maintaining and moving, when necessary, adequate barricades, warning signs and lights to safely inform the traveling public as to the location of the work at all times.

b. The Contractor shall meet with Mr. Elmer N. Dowin, Chief Engineer, or Mr. Bhong Lee, Assistant Chief Engineer, City of New Orleans, Traffic Planning Division, or his authorized representative, to discuss the traffic control plan.

Prior to the beginning of the construction, the Contractor shall provide the Contracting Officer with the traffic control plan for approval:

(1) A plan for the proposed route on which construction materials and equipment are to be transported to or from the construction site.

(2) A detour plan showing proposed routes for local traffic and transient traffic on which locations of detour traffic control devices and construction zone or work zone traffic control devices are shown. Traffic control device applications and methods shall be in compliance with Part VI of the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(3) Locations where flagmen will be required.

General Decision Number LA930013

Superseded General Decision No. LA910013

State: Louisiana

Construction Type:
Heavy

County(ies):

JEFFERSON
ORLEANS

ST BERNARD
ST CHARLES

ST JOHN THE BAP
ST TAMMANY

HEAVY CONSTRUCTION PROJECTS (Excluding Work on Treatment Plants)

Modification Number
0

Publication Date
02/19/1993

COUNTY(ies):

JEFFERSON
ORLEANS

ST BERNARD
ST CHARLES

ST JOHN THE BAP
ST TAMMANY

SULA2026A 09/05/1991

	Rates	Fringes
CARPENTERS	12.21	2.60
CONCRETE FINISHERS	13.22	1.68
ELECTRICIANS	12.62	1.68
LABORERS:		
Common	7.54	
PAINTERS	11.83	1.18
PIPELAYERS	8.29	
REINFORCING STEEL SETTERS	12.69	3.08
TRUCK DRIVERS	7.76	
POWER EQUIPMENT OPERATORS:		
Backhoes	10.37	
Bulldozers	10.00	
Front End Loaders	11.61	2.50

WELDERS: Receive rate prescribed for craft performing
operation to which welding is incidental.

Unlisted classifications needed for work not included within the
scope of the classifications listed may be added after award only
as provided in the labor standards contract clauses (29 CFR
5.5(a) 1(ii)).

END OF GENERAL DECISION

SUBMITTAL REGISTER

(ER 415-110)

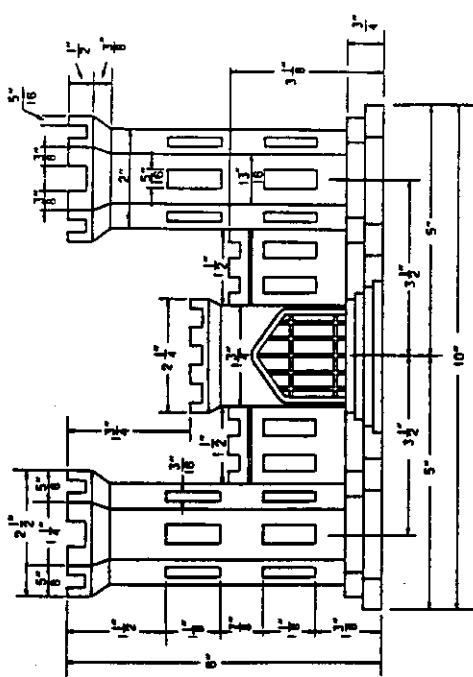
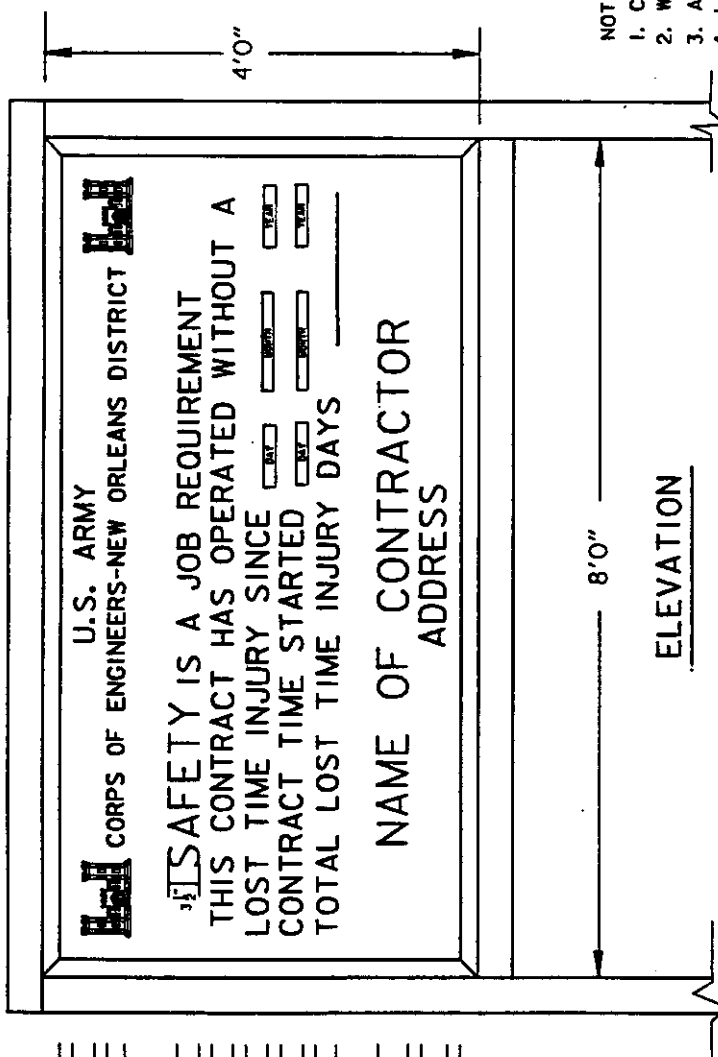
CONTRACTOR

CONTRACT NO.

SPECIFICATION SECTION

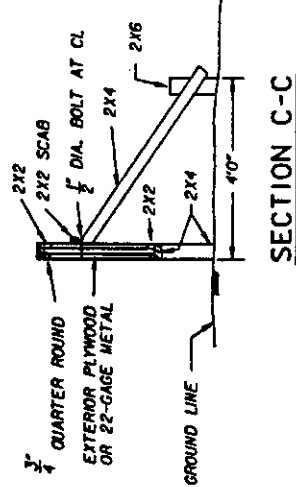
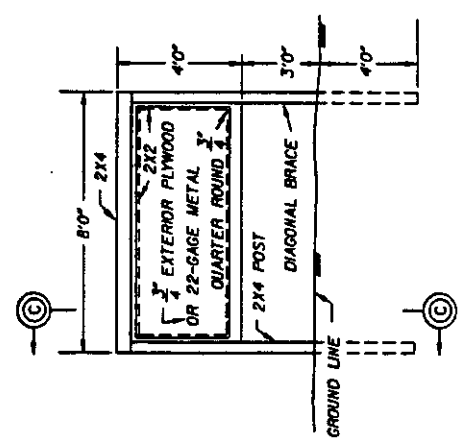
TITLES AND LOCATION	ITEM NO.	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL												CLASSIFICATION			CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS									
				DATA	INSTRUCTIONS	SCHEMATIC	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	PERFORMANCE ONLY	GOVERNMENT APPROVED	REVIEWER	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE	DATE														
EXCAVATION AND FLOOD PROTECTION - 17TH ST. CANAL CAPPING OF FLOODWALLS NEW ORLEANS, LA	1	C2C-4.5	SHORING OF EXCAVATION	X	X																															
	2	C2C-4.7	SEEPAGE CONTROL PLAN	X	X																															
	3	C2D-6.2.1	FERTILIZER				X																													
	4	C2D-6.2.2	SEED				X																													
	5	C2D-6.2.3	MULCH				X																													
	6	C2E-3.1	PILE DRIVING EQUIPMENT				X																													
	7	C2E-3.2	PILE DRIVING RECORDS					X																												
	8	C2E-3.3	SAFETY AND HEALTH					X																												
	9	C2E-7.2	COFFERDAM	X	X																															
	10	C3A-3	FORMWORK	X	X																															
	11	C3B-5	REINFORCING STEEL	X	X																															
	12	C3C-5.1	EXP. JOINT FILLER						X																											
	13	C3C-5.2	WATERSTOP							X																										
	14	C3D-5.1.1	CONC. MIX PROPORTIONS	X					X																											
	15	C3D-5.1.2	CEMENT & POZZOLAN					X																												

1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 5/8"	1 3/4"	1 7/8"	2"	2 1/8"	2 1/4"	2 3/8"	2 1/2"	2 5/8"	2 3/4"	2 7/8"	3"	3 1/8"	3 1/4"	3 3/8"	3 1/2"	3 5/8"	3 3/4"	3 7/8"	4"	4 1/8"	4 1/4"	4 3/8"	4 1/2"	4 5/8"	4 3/4"	4 7/8"	5"	5 1/8"	5 1/4"	5 3/8"	5 1/2"	5 5/8"	5 3/4"	5 7/8"	6"	6 1/8"	6 1/4"	6 3/8"	6 1/2"	6 5/8"	6 3/4"	6 7/8"	7"	7 1/8"	7 1/4"	7 3/8"	7 1/2"	7 5/8"	7 3/4"	7 7/8"	8"	8 1/8"	8 1/4"	8 3/8"	8 1/2"	8 5/8"	8 3/4"	8 7/8"	9"	9 1/8"	9 1/4"	9 3/8"	9 1/2"	9 5/8"	9 3/4"	9 7/8"	10"
------	------	------	------	------	------	------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	----	--------	--------	--------	--------	--------	--------	--------	-----



ENGINEER CASTLE DETAIL

- NOTES:
1. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN A DURABLE SIGN AS SHOWN.
 2. WOOD IN CONTACT WITH GROUND SHALL BE TREATED LUMBER.
 3. ALL EXPOSED SURFACES SHALL BE WHITE HOUSE PAINT.
 4. LETTERING SHALL BE BLACK.
 5. ENGINEER CASTLE SHALL BE RED. DECALS FURNISHED BY GOVERNMENT MAY BE USED IN LIEU OF DETAIL.
 6. 22 GA. STEEL METAL MAY BE USED IN LIEU OF PLYWOOD.



SCALE: NONE

1 FEB 1992

U S ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS LOUISIANA



SAFETY SIGN

ELEVATION

Below are two samples of the construction project identification sign showing how this panel is adaptable for use to identify either military (top), or civil works projects (bottom). The graphic format for this 4' x 6' sign panel follows the legend guidelines and layout as specified below. The large

4' x 4' section of the panel on the right is to be white with black legend. The 2' x 4' section of the sign on the left with the full Corps signature (reverse version) is to be screen printed Communications Red on the white background.

page- Mounting and fabrication details are provided on page 16.4.

Special applications or situations not covered in these guidelines should be referred to the District/Division sign coordinator.

~~This sign is to be placed with the Safety-Performance Sign shown on the following~~

Legend Group 1: One- to two-line description of Corps relationship to project.

Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

Legend Group 2: Division or District Name (optional). Placed below 10.5" Reverse Signature (6" Castle).

Color: White
Typeface: 1.25" Helvetica Regular

Legend Group 3: One- to three-line project title legend describes the work being done under this contract.

Color: Black
Typeface: 3" Helvetica Bold
Maximum line length: 42"

Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military).

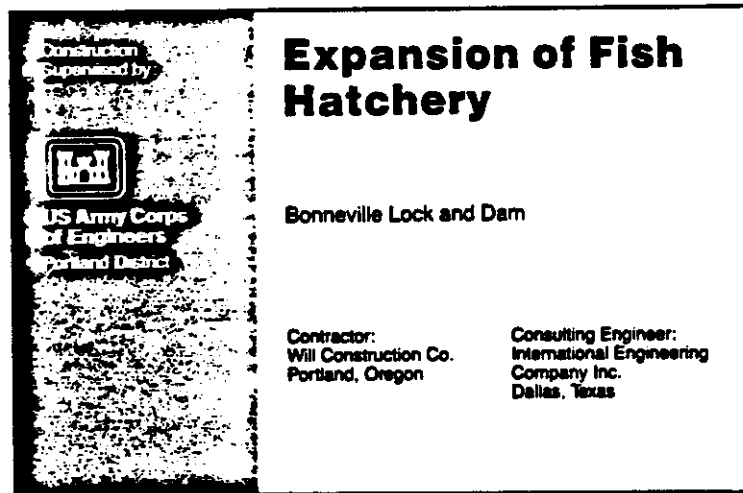
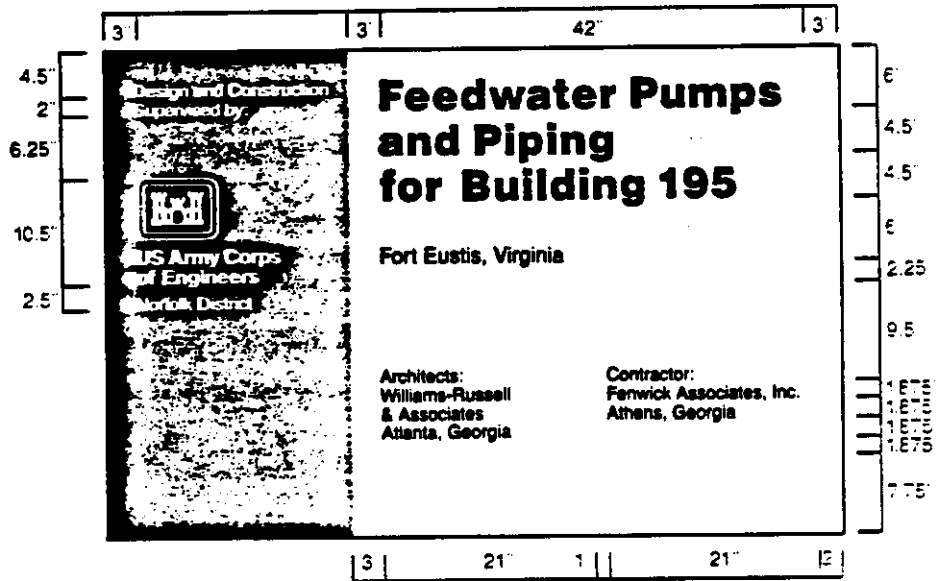
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Cross-align the first line of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Groups 5a-b: One- to five-line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional.

Color: Black
Typeface: 1.25" Helvetica Regular
Maximum line length: 21"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-01	various	4' x 6"	4" x 4"	HDO-3	48"	WH-RD/BK

All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer and shall conform to the size, format, and typographic standards shown on

pages 16.2-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

For additional information on the proper method to prepare sign panel graphics, contact the District sign coordinator.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white non-reflective vinyl film with positionable adhesive backing.

All graphics except for the Communications Red background with Corps signature on the project sign are to be die-cut or computer-cut non-reflective vinyl, pre-spaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16.2-3.

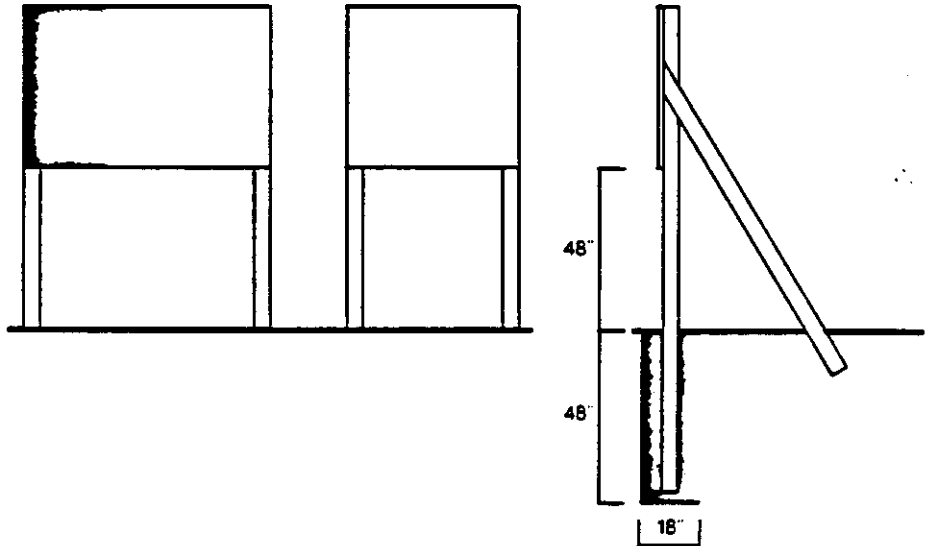
The 2' x 4' Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the District or Division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction artwork for the signature is provided on page 4.8 (photographically enlarge from 6.875" to 10.5").

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2' x 4" struts on inside face of uprights to reinforce installation as shown.



Construction Project Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5a: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

~~Safety Performance Sign
Legend Group 1: Project Title~~

1. _____
2. _____

~~Legend Group 2: Contractor/A&E~~

1. _____
2. _____

**Specifications: General Conditions
(Cont'd.)**

B.2b

6. Engineering Criteria (Cont'd)

The required footing size and depth as specified in the two right columns of the diagram below, will depend on the criteria listed in the aforementioned columns. Use the diagram to select the appropriate footing configuration. Any conditions that go beyond the criteria shown below shall be engineered on a site-by-site basis.

Footing Diagram

Post Size	Frost Depth	Post Number	HAGL	Panel Size (sq. ft.)	Panel Height	Footing Cross Section	Footing Depth
4" x 4", 4" x 6", 6" x 6"	0" - 30"	1	42"	≤9	≤4' - 6"	1' - 6"	2' - 6"
					>4' - 6"	1' - 6"	4' - 0"
				>9	na	1' - 6"	4' - 0"
		60"	≤7	≤3' - 6"	1' - 6"	2' - 6"	
				>3' - 6"	1' - 6"	4' - 0"	
			>7	na	1' - 6"	4' - 0"	
	2	42"		≤20	≤5' - 0"	1' - 6"	2' - 6"
					>5' - 0"	1' - 6"	4' - 0"
				>20	na	1' - 6"	4' - 0"
		60"	≤16	≤4' - 0"	1' - 6"	2' - 6"	
				>4' - 0"	1' - 6"	4' - 0"	
			>16	na	1' - 6"	4' - 0"	
4" x 4", 4" x 6", 6" x 6"	30" - 36"	1	42"	≤10	≤5' - 0"	1' - 6"	3' - 0"
					>5' - 0"	1' - 6"	4' - 0"
				>10	na	1' - 6"	4' - 0"
		60"	≤9	≤4' - 6"	1' - 6"	3' - 0"	
				>4' - 6"	1' - 6"	4' - 0"	
			>9	na	1' - 6"	4' - 0"	
	2	42"		≤24	≤6' - 0"	1' - 6"	3' - 0"
					>6' - 0"	1' - 6"	4' - 0"
				>24	na	1' - 6"	4' - 0"
		60"	≤20	≤5' - 0"	1' - 6"	3' - 0"	
				>5' - 0"	1' - 6"	4' - 0"	
			>20	na	1' - 6"	4' - 0"	
4" x 4", 4" x 6", 6" x 6"	36" - 48"	1,2	na	na	na	1' - 6"	4' - 0"
	0" - 48"	1,2,3	na	na	na	2' - 0"	4' - 0"

1.1 Sign

1. Materials

Panel shall be fabricated from HDO plywood, 60-60 non-oiled resin impregnated fiber, black in color. All Douglas Fir exterior marine-grade, to meet product standard PSI-83; or all exterior plywood PSI-83 group 1, with B grade veneers on both sides. Each panel should be edge-branded marine-grade HDO EXT PSI-83; or HDO B-B G I EXT PSI-83, 7 PLY.

Panel shall be .75" thick unless otherwise specified. Panel dimensions shall have a tolerance of ±.125". No cleats or joints shall be permitted for panels with a dimension smaller than or equal to 10'-5".

Panel shall have corners with a safety radius of .187" unless otherwise specified.

Edges shall be rounded or beveled to a radius of .09375".

All surfaces shall be flat and smooth. Core gaps to be filled with polyester body filler, Bondo, or approved equal. Finish-sand all edges and panel face. Back surface shall be sanded with 50-60 grit sand paper.

All drilling shall be done with high-speed drills, using solid backing to avoid chipping.

All cutting shall be done with high-speed saws. Rotary saw blades to be carbide tipped. Power saws shall have little or no set and as much lead as possible. Blades on table saws shall not extend more than 1", and not less than .5" through panel. Panels will be fed through slowly to avoid damage to overlay.

Panel to be stored shall be stacked flat on a clean surface in an enclosed and well-ventilated area; do not store on concrete surfaces.

Wood frame shall be constructed of construction heart Redwood lumber. Dimension length of frame 2" longer than finished panel, to create a reveal. Lumber sizes vary depending on post dimensions.

Post Size	Lumber
6"	2" x 4"
9"	4" x 4"
12"	4" x 4"

Intermediate support members shall be installed for large size panels.

Panel Size	Support Member(s)
0'-0" to 5'-11"	0
6'-0" to 11'-11"	1
12'-0" to 17'-11"	2
18'-0" and up	3

Metal frame shall be fabricated from Aluminum 6061-T6 "Z" bar, 3" x 2.6875" x 2.6875". Construction, attachment and placement is described on specific sign panel pages where reinforcement may be required.

Solid post shall be fabricated of one piece construction heart Redwood lumber, per grading rules of the California Redwood Association, or better. For dimensions larger than 4" x 4", treated Douglas Fir No.1 or better; Southern Yellow Pine No.1 or better shall be used. All post sizes shall be .5" less than nominal dimensions, and will be sanded smooth prior to finishing. All materials shall be well-seasoned and free of any defects. Douglas Fir and Yellow Pine shall be weathered a minimum of one (1) year after installation prior to stain application.

Glue-laminated post can be used as an alternate for dimensions 4" x 6" or larger and shall be constructed of clear heart, kiln-dried Redwood only.

All complete sign panel and post assemblies must be pre-drilled and assembled in the shop prior to shipment to check alignment and ensure proper fit once installed. Panels manufactured as separate units shall be pre-drilled with hardware inserted in place.

1.2 Hardware

Panel attachment to post or brace shall be 3/8" socket head cap screws, 3/8" washers and 4-prong straight barrel T-nuts. T-nut to be countersunk and back-filled with Bondo, or approved equal, flush to front of panel. Cap screw head to be countersunk a minimum of .25" below the surface of post.

Panel attachment to frame shall be
 - 2" x 2" aluminum keyhole receiving plate, to be attached to panel with four (4) No.12 flat head wood screws. A slot of .5" deep shall be routed to receive hex bolt.
 - .375" lag bolt with .5625" hex head and .5625" hex nut. Bolt shall be threaded through frame leaving .125" of shaft expos-

ed on either side after attaching hex nut. Panel with keyholes is hung on hex head or nut. Four (4) keyholes shall be used per panel for dimensions up to 8'-0". Larger panels must use six (6) plates per panel.

Wood frame assembly hardware shall be 2" x 2" or 3" x 3" aluminum angle bracket, to be attached to frame with six (6) .375" lag bolts, or approved equal.

Wood frame attachment hardware shall be .5" x 6" lag bolts to attach frame to sign posts.

1.3 Laminates

Adhesive for post construction and duplex HDO panels shall be phenolic resorcinol moisture resistant, or approved equal. Application must be performed within 15 minutes between the first glue application and the final setting of the clamps. The surface of each joint face shall be completely covered with adhesive.

Air temperature shall be between 70-90 degrees Fahrenheit during drying of

boards, glue application and curing process. Lumber to be dried not less than 24 hours prior to gluing.

Moisture contents of lumber to be glued shall be between 12-15%, with a 3% margin between wettest and driest piece.

Surface joints shall be smooth and true, free from machine joining marks and chipped or loosened grain.

1.4 Finishes

Paint shall be Benjamin Moore No.120-60 poly-silicone enamel, or approved equal. Apply one (1) coat to the back and edge of the panel as a primer, prior to application of retro-reflective sheeting, and one (1) coat after application to seal the edge. Sheeting shall be masked before painting, and shall be removed immediately after enamel application. A minimum of $4 \pm .25$ mil. dry film thickness shall be applied (two generous coats). Front of panel where retro-reflective sheeting will be applied shall not be painted.

Stain shall be semi-transparent waterproof, anti-bacterial redwood stain to match Corps Brown, Olympic brand redwood stain No. 715, or approved equal. Apply with brush or roller to posts. Stain shall be thoroughly mixed prior to and during application to ensure even pigmentation. Posts will be dried a minimum of 24 hours prior to shipping.

Paint room facilities shall be well-ventilated, dust-free and enclosed. Air temperature shall not be less than 65 degrees Fahrenheit during application of paint.

Cleaning of the panels shall be performed prior to application of paint or retro-reflective sheeting, to remove parting agent on panel surface. Areas to be painted shall be scrubbed with petroleum hydrocarbon solvent, Toluene, Socal No. 1, or approved equal, using an abrasive synthetic fiber pad. Wipe the surface clean with mineral spirits.

Finished sanding shall be performed prior to the application of the first and second coat of paint. Paint must be thoroughly dried before sanding. All sanding residue shall be removed from the sign with tack cloth. Do not sand panel after applying the second coat of finish paint.

2. Graphics

2.1 Retro-reflective sheeting

Background and legend shall be engineer grade, premium quality, wide angularity enclosed lens retro-reflective material to meet or exceed the standards of:

- General Services Administration, Federal Supply Service specification *L-S-300-C, Reflectivity 1*.

- U.S. Department of Transportation, Federal Highway Administration, *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects*, current edition *FP-85 Sections 633.06 and 718.01*.

Background and legend shall use sheeting from the same manufacturer. Mixing of sheeting from different manufacturers shall not be permitted.

No more than twelve (12) months will have elapsed from date of purchase to the date of application.

Background application to HDO Plywood shall be as described by the manufacturer and approved by the designated representative of the Corps of Engineers. Corps Brown and all highway colors may be either pressure-sensitive or heat-activated applied. Special waterway colors are only available with pressure-sensitive adhesive.

Panels shall be covered with one unspliced sheet, unless the dimension is

larger than 48" in vertical direction. Splices shall be positioned so as not to fall within legends. Top piece shall overlap bottom piece by a minimum of .5", but not more than .75". Spliced sheets shall be color matched.

Background shall be adhered to front of sign panel prior to legend application.

Legend application shall be as described by the manufacturer and approved by the designated representative of the Corps of Engineers and may be either pressure-sensitive or heat-activated applied. No loose or curled edges, bubbles or blisters shall be permitted.

Legend shall be adhered to sign panel after application of background sheeting.

Top edge treatment shall be Avery No.961, 3M No.639 clear film 3" wide, or approved equal. Film shall be applied in 24" strips, beginning from each outside edge and taping toward center of sign. Film shall overlap at least 2" at each joint.

Heat-activated sheeting shall be double-cycled through the vacuum applicator, one time when applying the background sheeting and one time when applying the legend.

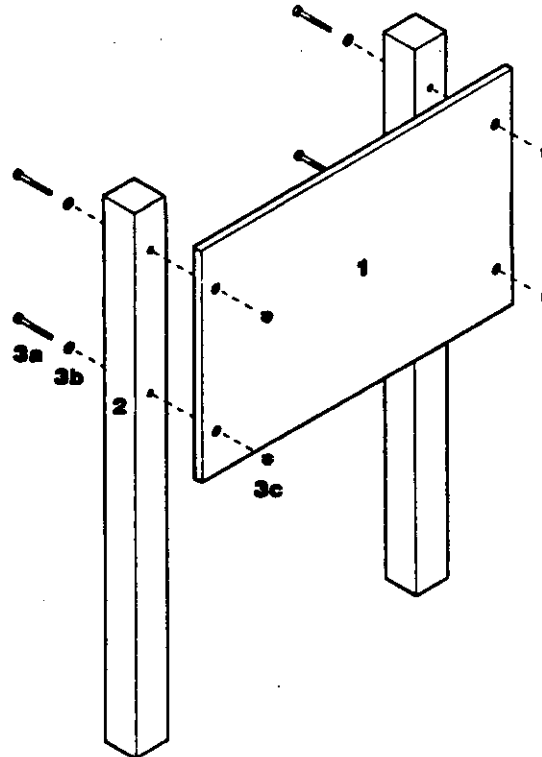
~~All items listed below shall conform to material specifications as described on page B.4-4b for HDO plywood signs, unless otherwise instructed on this page.~~

1 Panel, .75" thick.

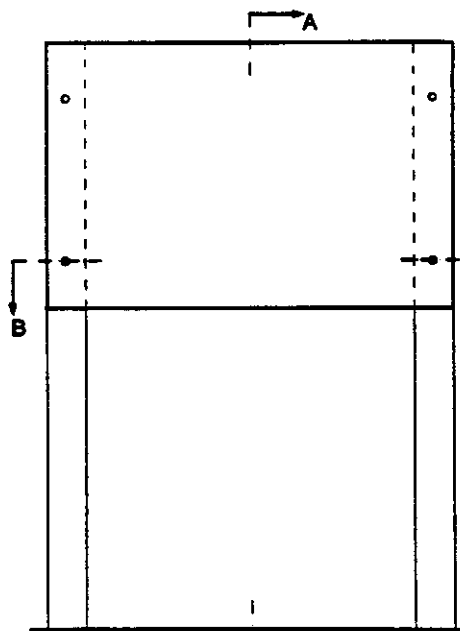
2 Solid or glue laminated post, 4" x 4", 4" x 6", 6" x 8", or 8" x 8". Post size shown here reflects the HAGL and does not include the section under ground. For footing see page B.2a-b.

3a-c Panel attachment hardware. For attachment see detail 5, page B.7-2.

~~NOTE: Double faced signs shall be installed identical to single faced signs, with a second sign panel mounted flush to the back of the sign post, see detail 6, page B.7-2. After mounting, cover socket head cap screw with circular patch of retro reflective sheeting matching panel sign face.~~



Exploded View



Front View



Cross Section A-A



Cross Section B-B

~~All items listed below shall conform to material specifications as described on page B.4-4a for HDO plywood signs, unless otherwise instructed on this page.~~

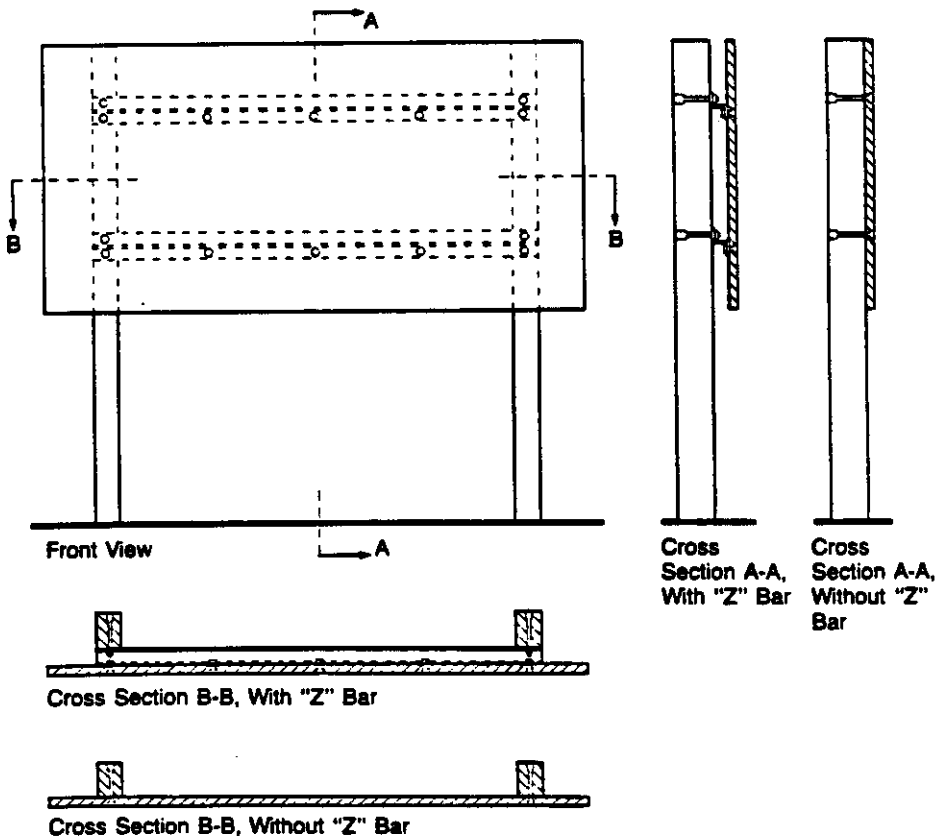
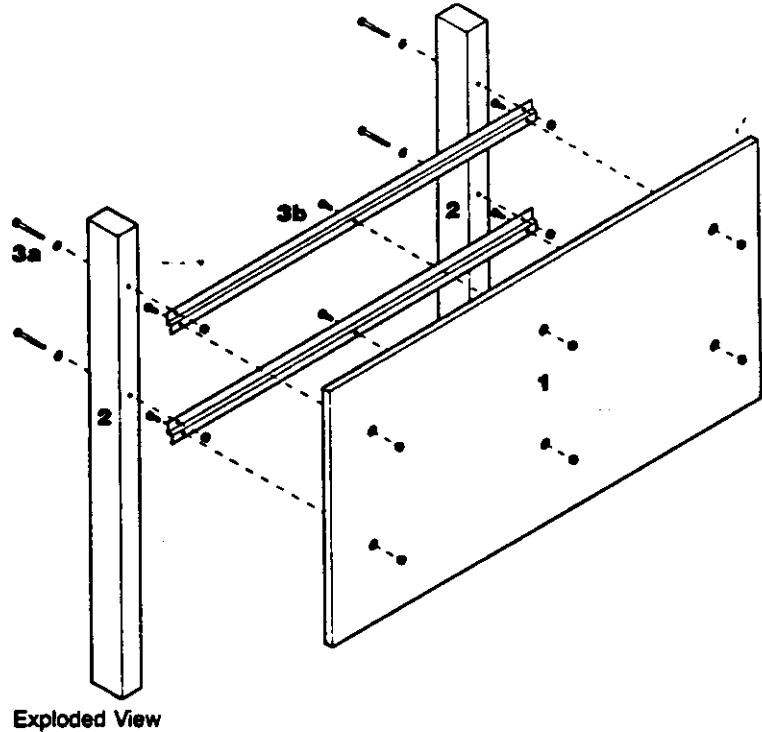
1 Panel, .75" thick. Panel may require reinforcement, using a "Z" bar attached to the back of the sign panel. See page B.4-4a for further specifications. Splices shall be fabricated as per manufacturers' instructions. In case a splice occurs at location of a "Z" bar, apply .75" HDO back piece(s) to act as full-length shims at location of other "Z" bar(s).

2 Solid or glue laminated post, 4" x 4", 4" x 6", 6" x 6", or 6" x 8". Post size shown here reflects the HAGL and does not include the section under ground. For footing and numbers of posts see pages B.2a-b and B.4-4a. An additional third post shall be positioned equally between the two other posts.

3a Panel attachment hardware, .375" socket head cap screws, .375" washers and 4-prong straight barrel T-nuts. T-nut to be countersunk and backfilled with Bondo or approved equal, flush to front of panel. Cap screw head to be countersunk a minimum of .25" below the surface of post. For attachment, see detail 5, page B.7-2.

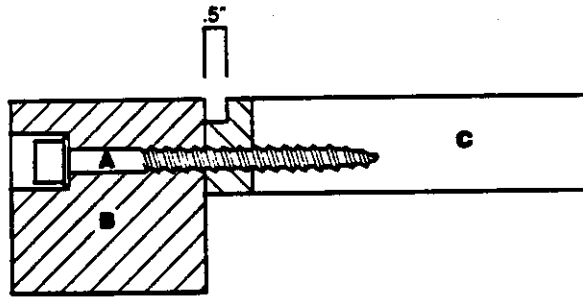
3b Additional panel hardware, 3" x 2.6875" x 2.6875" "Z" bar .25" thick, .375" washers, .375" hex nuts, .25" 4-prong T-nuts, and .25" hex head cap screws. To be used when "Z" bar is applied for reinforcement, as specified in the diagram on page B.4-4a. For attachment, see detail 6, page B.7-3.

NOTE: Sign construction and panel attachment varies with panel size. For correct placement see following page B.4-4a.



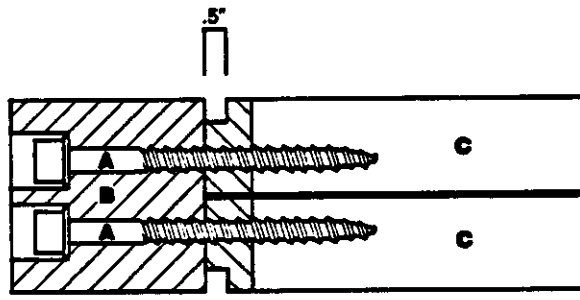
Detail 3

- A .3125" socket head cap screw and .3125" washer, countersunk at least .25" from the surface of the sign post.
- B Solid or glue laminated post.
- C Sign panel with 2" x 1.25" routed endstrip creating a .5" reveal.



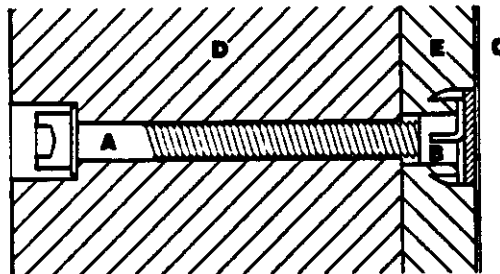
Detail 4

- A .3125" socket head cap screw and .3125" washer, countersunk at least .25" from the surface of the sign post.
- B Solid or glue laminated post.
- C Sign panel with 2" x 1.25" routed endstrip creating a .5" reveal.



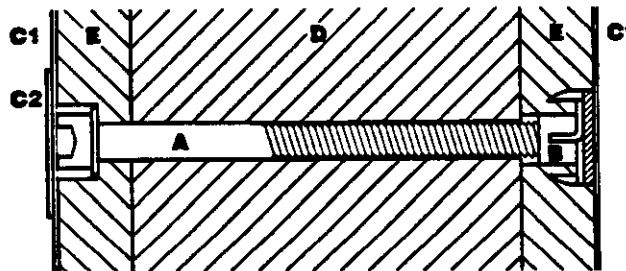
Detail 5

- A .375" socket head cap screws and .375" washer, countersunk at least .25" from the surface of the sign post.
- B .375" 4-prong straight barrel T-nut, countersunk and back-filled with Bondo or approved equal, flush to the front of the panel.
- C Retro-reflective sheeting, applied after insertion of the hardware to the sign panel.
- D Solid or glue laminated post.
- E HDO sign panel.



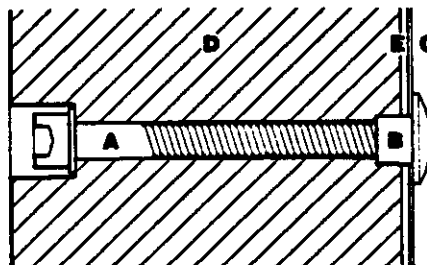
Detail 6

- A .375" socket head cap screw and .375" washer, countersunk flush to the front of the sign panel.
- B .375" 4-prong straight barrel T-nut, countersunk and back-filled with Bondo or approved equal, flush to the front of the panel.
- C1 Retro-reflective sheeting, applied after insertion of the hardware to the sign panel.
- C2 Retro-reflective circular patch matching panel sign face.
- D Solid or glue laminated post.
- E HDO sign panel.



Detail 7

- A .375" socket head cap screw and .375" washer, countersunk at least .25" from the surface of the sign face.
- B .375" metal or plastic capped nut.
- C Retro-reflective sheeting.
- D Solid or glue laminated post.
- E Aluminum sign panel.



Detail 8

A .25" stainless steel hex head cap screw with .25" flat stainless steel and .25" PVC washer.

B .25" 4-prong straight barrel T-nut, countersunk and back-filled with Bondo or approved equal, flush to the front of the panel.

C 3" x 2.6875" x 2.6875" aluminum 8061-T6 "Z" bar, .25" thick.

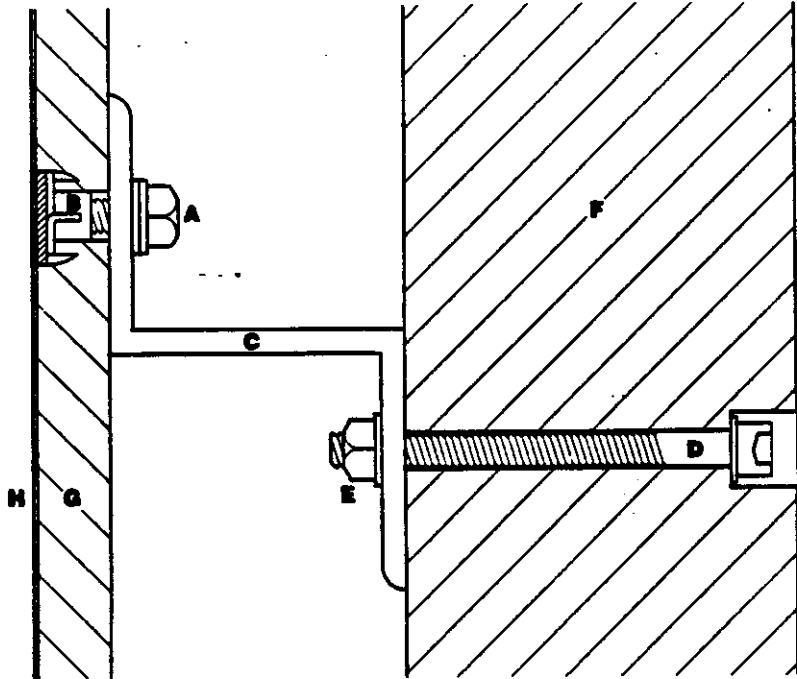
D .375" socket head cap screw and .375" washer, countersunk at least .25" from the surface of the sign post.

E .375" zinc-plated hex nut with .375" zinc-plated flat washer.

F Glue laminated or solid post.

G HDO sign panel.

H Retro-reflective sheeting, applied after insertion of the hardware to the sign panel.



A 4" reverse version of the Corps of Engineers Communication Mark/Signature is shown on the inside of this foldout. This artwork has been prepared for applications to signage only and is not intended for other applications.

Some notes to remember when using the Mark:

- Reproduce art for signs using a distortion-free photo-mechanical process. Do not re-size the art by hand.
- Enlarge or reduce the Mark as a complete unit. Do not re-assemble as parts.

The height and width of sign panels for most of the signs in this manual are based on the size of the lettering (legend size) and length of the longest message line. The legend size, known as A, is determined by the viewing distance required. Using the sign format grid for the given

sign type, the panel height can then be established.

Legend length depends on the amount and length of words in the legend. Standardized signs have established legends; their lengths have been measured and the panel widths calculated. The dimen-

sions are shown in the matrix for each sign. For site specific signs (identification and directionals), legend lengths must be calculated on an individual basis. The system explained below will accurately determine the length of a given legend.

Step 1: Using the worksheet for the appropriate typeface (Helvetica Bold, page D.3; Helvetica Medium, page D.5), write out the legend, placing one character in each of the legend squares. A character is a letter-form, number or punctuation mark. Leave a blank square between each word. Write out the legend exactly as it will appear on the sign panel, using upper and lower case letters.

Letter-space																				
Legend		J	.		P	e	r	c	y		P	r	i	e	s	.				
Letter-width																				

Letter-space																				
Legend		D	a	m		R		L	a	k	e									
Letter-width																				

Step 2: In the space under each letter, put in the corresponding letter-width dimension from the table on the left of the worksheet. In the area above the space between letters, put in the value from the letter-spacing matrix for that typeface. (Helvetica Bold, page D.9; Helvetica Medium, page D.12). Note that some of the values in the matrix are negative. Below the blank space between words, put the value for the spacing square for that typeface (Helvetica Bold, .63, Helvetica Medium, .44). Treat the spacing square like any other character, putting in the appropriate letter-space from the matrix before and after it.

Letter-space		.23	.09	.36	.19	.23	.14	.05	.23	.36	.19	.23	.23	.19	.09	.33				
Legend		J	.		P	e	r	c	y		P	r	i	e	s	.				
Letter-width		1.48	.56	.63	1.77	1.58	1.06	1.52	1.64	.63	1.77	1.06	.55	1.56	1.47	1.0				

Letter-space		.36	.19	.33	.36	.23	.05	.36	.19	.33	.05									
Legend		D	a	m		R		L	a	k	e									
Letter-width		.63	1.89	1.52	2.42	.63	2.0	.63	1.46	1.52	1.56	1.56								

Step 3: Add up all of the values in the top and bottom squares for each word. For long legends, it is helpful first to make subtotals for each word and word-space, mark them down, and then total all of the word lengths plus the word-spaces. This way, if the legends must be placed on more than one line, or the line break changes, the calculations for the new lines will be simple.

Letter-space		.23	.09	.36	.19	.23	.14	.05	.23	.36	.19	.23	.23	.19	.09	.33					
Legend		J	.		P	e	r	c	y		P	r	i	e	s	.					
Letter-width		1.48	.56	.63	1.77	1.58	1.06	1.52	1.64	.63	1.77	1.06	.55	1.56	1.47	1.0					
		2.27			1.1			8.18			1.24			8.09							

Letter-space		.36	.19	.33	.36	.23	.05	.36	.19	.33	.05										
Legend		D	a	m		R		L	a	k	e										
Letter-width		.63	1.89	1.52	2.42	.63	2.0	.63	1.46	1.52	1.56	1.56									
		1.94		6.35			1.24		2.0		1.06		6.75								

Step 4: Add up all of the subtotals, both words and word-spaces. Divide this sum by 2. The result represents the legend length in relationship to A, legend size.

Total : 40.2
 $40.2 \div 2 = 20.1 A$

Step 5: To determine panel sizes for identification signs, use the worksheet on page D.4. For directional signs, use the worksheet on page D.6. For other signs, multiply the legend length by the legend size, A, to be used on the sign; round off to the nearest .125". This total will be the actual legend length. Refer to the appropriate grid to determine the actual panel size.

If A = 4' ; $20.1 \times 4' = 80.4'$
 Round off to 80.5"

Upper case	Lower case	Letter-space	Legend	Letter-width
A 1.81	a 1.34			
B 1.64	b 1.45			
C 1.88	c 1.41			
D 1.70	d 1.44			
E 1.51	e 1.47			
F 1.45	f 0.84			
G 1.88	g 1.44			
H 1.64	h 1.33			
I 0.44	i 0.38			
J 1.3	j 0.39			
K 1.75	k 1.44			
L 1.40	l 0.39			
M 2.00	m 2.16			
N 1.66	n 1.33			
O 1.94	o 1.52			
P 1.53	p 1.45			
Q 1.94	q 1.45			
R 1.59	r 0.83			
S 1.67	s 1.31			
T 1.66	t 0.88			
U 1.61	u 1.30			
V 1.70	v 1.36			
W 2.56	w 2.10			
X 1.78	x 1.48			
Y 1.70	y 1.42			
Z 1.70	z 1.27			
Numerals	Punctuation	Letter-space	Legend	Letter-width
1 0.91	\$ 1.63			
2 1.44	& 1.78			
3 1.53	- 0.78			
4 1.59	: 0.44			
5 1.53	, 0.44			
6 1.59	. 0.44			
7 1.41				
8 1.59				
9 1.56				
0 1.66				
Spacing Square		Letter-space	Legend	Letter-width
□ 0.44				
		Letter-space	Legend	Letter-width

In cases where computer-generated letter systems are not available, a letter-spacing guide and legend preparation system may be obtained through the Corps national sign coordinator.

The Corps letter-spacing guide uses a transparent letter assembly system. Letters, numerals and punctuation are printed on separate pieces of acetate. The

capital letters are 2" high; the lower case letters and punctuation are at their corresponding sizes. The legends are assembled at this capital letter height and photographically enlarged or reduced to create camera-ready artwork for any size sign. The acetate cells can be re-used indefinitely.

On the letter cells, printed above and

below the letters are alignment lines with marks indicating the right and left outermost edges of each letter (see Illustration a). The illustrations and instructions below will explain how to use the cells.

Please be sure to indicate the weight of Helvetica required (Bold, Medium, Regular) when requesting a set of cells.



Illustration a

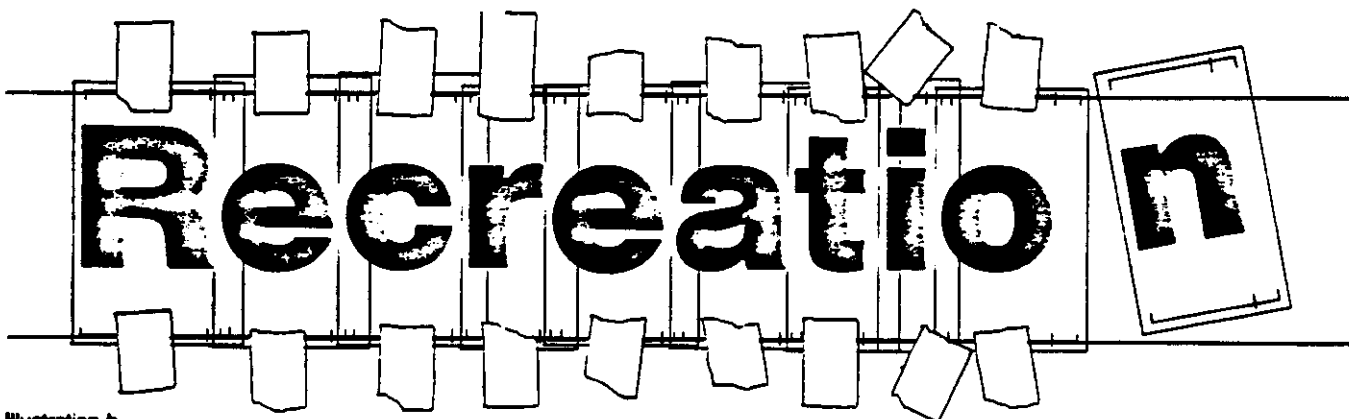


Illustration b

Recreation

Illustration c

Letter-spacing Guide Instructions

Step 1: Draw two horizontal parallel lines, 3.5" apart and long enough to accommodate the words to be assembled. These lines will serve as a guide for aligning the corresponding lines on the acetate cells.

Step 2: Tape the first letter in place by aligning the lines on the acetate cells with the lines drawn in step one.

Step 3: Tape each subsequent letter in place by referring to the letter-spacing matrix for that typestyle: Helvetica Bold (page D.9),

Helvetica Medium (page D.12), and Helvetica Regular (page D.15).

Example: The first letter is capital "R". The next is a lower case "e". The matrix for Helvetica Bold on page D.9 indicates that the proper space between the "R" and the "e" is .19". Place the mark on the left side of the "e" .19" from the mark on the right side of the "R" cell. The next letter is a "c". The space between a "c" and an "e" is .19". Place the "c" so the left mark is .19" from the "e". Be sure that the lines above and below the letters are aligned with the lines drawn on the page.

Continue taping down all of the letters in place inserting the values shown in the matrix

between each letter.

Please note that a few of the values in the matrix are negative (such as "A" to "w"). In this case, the left mark of the "w" is to the left of the right mark of the "A", a distance of .13". Some values are zero (such as "v" to "e"). In this case, the left mark in the "e" will sit directly on the right mark of the "v"

Step 4: The taped acetate letters are then photographed with a photostat camera and the track lines are blocked out on the film negative. Illustration c shows the finished piece of photostat art.

To place one word after another with the proper word-space, place the spacing square (□), with the spacing indicated on the matrix, after the last letter of the first word, as shown in Illustration a below. Place the first letter of the second word the appropriate distance from the square,

as indicated in the matrix (Illustration b). After the first letter of the second word is in place, remove the square (Illustration c).



Illustration a



Illustration b

Recreation Area

Illustration c

Flush left alignment: When making a flush left alignment between two lines of type, a visual compensation must be made for certain letter forms. For example, if a line of type begins with a capital "N" and a second line of type begins with a capital "C", the second line will have to be positioned farther to the left than the first line in order to appear as though it is aligning (see Illustration d). All letters that require a compensation have a special increment on the letter cell marked "FL" for flush left (see Illustration e).

No Fish Cleaning

Flush Left Alignment

Illustration d

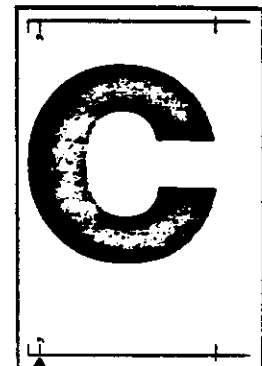


Illustration e

Helvetica Bold: Letter-spacing Matrix

This typestyle is used for the legends of identification, recreation area, and industrial safety signs and as a headline typeface for construction, boundary and interpretive signs. Refer to each respective section for examples of its use on the various types of signs.

A full display of this alphabet is shown on the inside of this foldout. For use of the letter-spacing guide, follow instructions on pages D.7 and 8.

Use only the Helvetica Bold typeface as specified in this manual. Do not substitute another typestyle or any other typeface when preparing signs that specify Helvetica Bold.

Use only the specified methods for typesetting. All enlargements and/or reductions are to use a high-quality photographic process. All letter forms are to be sharp, crisp, and distortion-free.

	cc go qs	bh kl	mp nu	wy	tl	x	z	1	2 356 890	4	7	-	-	□	DE FG HI LM OP RST UV W	A	J	T	Y			
aghnqu	.23	.33	.33	.14	.19	.19	.28					.28	.28	.28	.38							
bceops	.19	.23	.23	.05	.09	.05	.19					.23	.23	.23	.28	.28	.19	.05	.05	.14	.05	.19
wy	.05	.23	.19	.05	.19							.09	.05	.23	.23							
tz	.19	.33	.33	.23	.19		.28					.19	.28	.28	.33							
lx	.05	.28	.19	.09	.14							.0	.23	.23	.33							
r	.14	.23	.23	.19	.14							.14	.09	.23	.28							
dlij	.23	.32	.32	.19	.23	.23	.33					.28	.28	.28	.38							
14	.28	.37	.37	.28	.28	.23	.33	.28	.28	.32	.28	.23	.23	.23	.38							
2356890	.19	.33	.33	.23	.19	.09	.19	.19	.19	.23	.23	.19	.19	.23	.33	.33						
7	.05	.23	.19	.14			.05	.05	.14	.05	.28	.14	.14	.05	.38							
&															.05							
-	.23	.28	.28	.09	.19	0	.23	.23	.23	.09	.23	.19			.19							
..							.14	.23	.28	.09	.33				.09							
:							.28	.23	.33	.19	.33				.09							
\$.28	.28	.23	.28	.28											
□	.28	.38	.38	.28	.28	.23	.33	.28	.28	.33	.28	.23	.19	.23	.23	.38	.23	.23	.19	.19	.28	.14
GHIJMN	.28	.38	.38	.28	.28	.23	.33	.28	.28	.33	.28			.23								
BCDOQS	.19	.23	.23	.14	.19	.09	.19	.19	.14	.19	.19			.09								
R	.19	.23	.23	.14	.19	.09	.19	.19	.14	.19	.19			.19								
VW	.05	.23	.09	.05			-.05	.05						.14								
IX	.0	.19	.05	0			0	0						.09								
A	.05	.19	.19	-.09	0	.09	.19	.05	-.09	.19	0			.14								
E	.19	.33	.33	.19	.23	.19	.28	.19	.19	.28	.23			.23								
F	.05	.28	.19	.19			.05	.19						.09								
L	.19	.28	.23	.14			.19	.14						.23								
P	.05	.23	.19	.14			.05	.14						.14								
T	.05	.28	.19	.14			-.05	.14						.14								
Y	.19	.14	0	-.09	0	-.14	.09	-.19	-.09	.09	0			.18								
Z	.23	.33	.28	.19			.23	.19						.23								

SECTION I
CONTRACT CLAUSES

I.1

BASIS FOR SETTLEMENT OF PROPOSALS (EFARS 49.113(100))

"Actual costs will be used to determine equipment cost for a settlement proposal submitted on the total cost basis under FAR 49.206-2b. In evaluating a termination settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

(1) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.

(2) If equipment cost have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.

(3) Recorded job costs adjusted for unallowable and unallocable expenses will be used to determine equipment operating expenses.

(4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to provisions of FAR 31.205-11).

(5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate."

I.2 52.202-0001 I

DEFINITIONS (SEPT 1991)--ALTERNATE I (APR 1984)

(a) "Head of the agency" (also called "agency head") or "Secretary" means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency; and the term "authorized representative" means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(End of clause)

(R 7-503.1)

(R 7-602.1 1964 JUN)

(R 7-605.38)
(R 7-607.1)
(R 7-2101.1)
(R 1-7.602-1)

1.3 52.202-1000 1

EFARS 52.202-10001 DEFINITIONS.

(a) The term "head of the agency" or "Secretary" as used herein means the Secretary of the Army; and the term "his duly authorized representative" means the Chief of Engineers, Department of the Army, or an individual or board designated by him.

(b) The agency board of contract appeals having jurisdiction over all appeals from final decisions of the Contracting Officer under the Contract Disputes Act of 1978 is the Corps of Engineers Board of Contract Appeals, Office of the Chief of Engineers, Pulaski Building, 20 Massachusetts Avenue, N.W., Washington, D.C. 20314-1000.

1.4 52.203-0001

OFFICIALS NOT TO BENEFIT (APR 1984)

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit arising from it. However, this clause does not apply to this contract to the extent that this contract is made with a corporation for the corporation's general benefit.

(End of clause)
(R 7-103.19 1949 JUL)
(R 1-7.102-17)

1.5 52.203-0003

GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

- (1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and
- (2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) above, the Government is entitled--

- (1) To pursue the same remedies as in a breach of the contract; and
- (2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

(R 7-104.16 1952 MAR)

1.6 52.203-0005

COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a Contractor and subject to the Contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

(R 7-103.20 1958 JAN)

(R 1-1.503)

(R 1-7.102-18)

1.7 52.203-0006

RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1985)

(a) Except as provided in (b) below, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under

this contract or under any follow-on production contract.

(b) The prohibition in (a) above does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract.

(End of clause)

I.8 52.203-0007

ANTI-KICKBACK PROCEDURES (OCT 1988)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor" as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from--

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in

the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract.

(End of clause)

1.9 52.203-0009

**REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION
(NOV 1990)**

(a) Definitions. The definitions set forth in FAR 3.104-4 are hereby incorporated in this clause.

(b) The Contractor agrees that it will execute the certification set forth in paragraph (c) of this clause when requested by the Contracting Officer in connection with the execution of any modification of this contract.

(c) Certification. As required in paragraph (b) of this clause, the officer or employee responsible for the modification proposal shall execute the following certification:

CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (NOV 1990)

(1) I, _____ [Name of certifier] am the officer or employee responsible for the preparation of this modification proposal

and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certification, I have no information concerning a violation or possible violation of subsection 27(a), (b), (d) or (f) of the Office of Federal Procurement Policy Act, as amended+ (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement _____(contract and modification number).

(2) As required by subsection 27(e)(1)(B) of the Act, I further certify that to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of _____ [Name of Offeror] who has participated personally and substantially in the preparation or submission of this proposal has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.

(3) Violations or possible violations: (Continue on plain bond paper if necessary and label Certificate of Procurement Integrity--Modification (Continuation Sheet), ENTER "NONE" IF NONE EXISTS)

[Signature of the officer or employee responsible for the modification proposal and date]

[Typed name of the officer or employee responsible for the modification proposal]

+ Subsections 27(a), (b), and (d) are effective on December 1, 1990. Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

(End of certification)

(d) In making the certification in paragraph (2) of the certificate, the officer or employee of the competing Contractor responsible for the offer or bid, may rely upon a one-time certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the Contractor. If a

Contractor decides to rely on a certification executed prior to the suspension of section 27 (i.e., prior to December 1, 1989), the Contractor shall ensure that an individual who has so certified is notified that section 27 has been reinstated. These certifications shall be maintained by the Contractor for a period of 6 years from the date a certifying employee's employment with the company ends or, for an agency, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.

(e) The certification required by paragraph (c) of this clause is a material representation of fact upon which reliance will be placed in executing this modification.

(End of clause)

I.10 52.203-0010

PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (SEP 1990)

(a) The Government, at its election, may reduce the price of a fixed-price type contract or contract modification and the total cost and fee under a cost-type contract or contract modification by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or his or her designee determines that there was a violation of subsection 27(a) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in the FAR. In the case of a contract modification, the fee subject to reduction is the fee specified in the particular contract modification at the time of execution, except as provided in subparagraph (b)(5) of this clause.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may--

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely

affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts or contract modifications, by 10 percent of the initial contract price; 10 percent of the contract modification price; or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award or modification.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

I.11 52.203-0012

LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JAN 1990)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

(a) The awarding of any Federal contract.

(b) The making of any Federal grant.

(c) The making of any Federal loan.

(d) The entering into of any cooperative agreement.

(e) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in

connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

(a) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.

(b) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.

(c) A special Government employee, as defined in section 202, title 18, United States Code.

(d) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less

than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or

services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or

proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or

expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

I.12 52.203-7000

STATUTORY PROHIBITION ON COMPENSATION TO FORMER DEPARTMENT OF DEFENSE EMPLOYEES (DEC 1991)

(a) Definitions. As used in this clause--

(1) "Armed Forces" means the uniformed military services, excluding the U.S. Coast Guard.

(2) "Compensation" means any payment, gift, benefit, reward, favor, or gratuity which is provided directly or indirectly for services rendered by the person accepting such payment, gift, benefit, reward, favor, or gratuity, and which has a fair market value in excess of \$250.

Compensation is indirectly provided if it is paid to an entity other than

the individual, specifically in exchange for services performed by the individual.

(3) "Defense contractor" means an entity (including affiliates and subsidiaries which clearly engage in the performance of Department of Defense (DoD) contracts) that contracts directly with the DoD to supply goods or services. "Defense contractor" does not include a State or local government.

(4) "Designated agency ethics official" means a DoD officer or employee who has been appointed to administer the provisions of the Ethics in Government Act, as amended.

(5) "Former DoD employee" means a person who served in the DoD in a civilian position for which the rate of pay was equal to or greater than the minimum rate of pay for grade GS-13 of the General Schedule, or served in the Armed Forces in a pay grade of O4 or higher.

(6) "Former DoD official" means--

(i) A former DoD employee who spent the majority of working days during the last two years of DoD service performing a procurement function relating to:

(A) A DoD contract, at a site or plant that was owned or operated by the Contractor, and which was the principal location of such person's performance of that procurement function; or

(B) A major defense system and, in the performance of such function, participated on any occasion personally and substantially in a manner involving decision making responsibilities with respect to a contract for that system through contact with the Contractor;

(ii) An individual who served in a civilian position for which the rate of pay is equal to or greater than the minimum rate of pay for a Senior Executive Service position or other executive position at the same or higher level, and an individual who served in the Armed Forces in the pay grade of O7 or higher, if such individual during the last two years of DoD service--

(A) Acted as one of the primary Government representatives in the negotiation with a defense contractor of a DoD contractual action in an amount in excess of \$10 million; or

(B) Acted as one of the primary Government representatives in the negotiation of a settlement of an unresolved claim of such a defense contractor in an amount in excess of \$10 million. An unresolved claim shall be, for the purposes of this section, valued by the greater of the amount of the claim or the amount of the settlement.

(7) "Major defense contractor" means any business entity which, during the Government fiscal year preceding the Government fiscal year in which compensation was first provided to a former DoD employee, was awarded DoD contracts in a total amount of \$10 million or more.

(8) "Major defense system" means a combination of elements that will

function together to produce the capability required to fulfill a mission need. Elements may include hardware, equipment, software, or any combination thereof, but exclude construction or other improvements to real property. A system shall be considered a major defense system if--

(i) The DoD is responsible for the system and the total expenditures (based on fiscal year 1980 constant dollars) for research, development, test and evaluation for the system, are estimated to exceed \$75 million or the eventual total expenditure for procurement is estimated to exceed \$300 million; or

(ii) The system is designated a major system by the head of the agency responsible for the system.

(9) "Negotiation" means exchanges of positions between representatives of the Government and a contractor with the view of reaching agreement regarding respective liabilities of the parties on a particular contract or claim. It includes deliberations regarding contract specifications, terms of delivery, allowability of costs, pricing of change orders, etc.

(10) "Primary Government representative" means, if more than one Government representative is involved in any particular transaction, the official or officials supervising the Government's effort in the matter. To act as a "representative" requires personal and substantial participation in the transaction, by personal presence, telephone conversation, or similar involvement with representatives of a Contractor.

(11) "Procurement-related function" (or "procurement function") means any function relating to--

(i) The negotiation, award, administration, or approval of a contract;

(ii) The selection of a Contractor;

(iii) The approval of a change in a contract;

(iv) The performance of quality assurance, operational and developmental testing, the approval of payment, or auditing under a contract; or

(v) The management of a procurement program.

(b) Prohibition on compensation. (1) 10 U.S.C. 2397b and 2397c prohibit a major defense Contractor from offering or providing any compensation valued in excess of \$250 to a former DoD official who left DoD service on or after April 16, 1987, and who, while employed by DoD, performed procurement-related functions in connection with that defense Contractor. This prohibition runs for the two year period beginning on the date of the official's separation from service in DoD.

(2) The Contractor, if a major defense Contractor, agrees not to provide, for the two year period, any compensation to the former DoD official.

(3) DoD employees may request from their Designated Agency Ethics

Official (DAEO) a written opinion on the applicability of 10 U.S.C. 2397b prior to the acceptance of compensation. If the opinion of the DAEO is that the law is not applicable, and that the individual may accept compensation from the Contractor, there shall be a conclusive presumption that the offering and the acceptance of such compensation is not a violation of the statute.

(c) Report concerning former DoD employees. (1) The Contractor shall submit a separate written report, as described in paragraph (c)(2) of this clause, for each calendar year covered by this contract (extending through final payment) if the calendar year commenced after the end of a Government fiscal year in which the Contractor was awarded one or more DoD contracts aggregating \$10 million or more. In multidivisional corporations, the corporate headquarters, and each segment which contracts directly with the Government, shall report separately. Each report shall list those persons employed or otherwise compensated, who are former DoD employees who left service on or after April 16, 1987, if--

(i) They were compensated by the Contractor during the reporting period; and

(ii) The compensation was provided within two years after the person left service in the DoD.

(2) The report shall contain:

(i) Each person's name and the agency in which the person was employed or served on active duty during the last two years of service with DoD;

(ii) Each person's job title(s) during the last two years of service with DoD, and a list of major defense systems on which each person performed any work;

(iii) A complete description (exclusive of proprietary information) of any work that each person is performing, or did perform, on behalf of the Contractor during the calendar year covered by the report. If the work is classified, the Contractor may use a generalized description which will not compromise its classified nature;

(iv) An identification of each major defense system on which each individual has performed any work on behalf of the Contractor.

(3) Submit each report not later than April 1 of the year following the end of the calendar year for which the report is being made. Send reports to the Office of the Assistant General Counsel (Legal Counsel), Standards of Conduct Office, ATTN: OAGC/LC, Pentagon, Washington, DC 20301-1600.

(4) A properly executed DD Form 1787 (Employment, Report of DoD and Defense Related) may be submitted to satisfy the reporting requirement as to any single person.

(5) The Contractor need not submit duplicate reports to the Government. Submission of a report meeting the requirements of this clause, under

another, concurrent contract with DoD will satisfy the reporting requirement of this contract.

(d) Penalties for failure to comply--(1) Civil fines. A Contractor who knowingly offers or provides any compensation to a former DoD official in violation of the statute, and who knew or should have known that the acceptance of such compensation would be in violation of such statute, shall be subject to a civil fine, not to exceed \$500,000.

(2) Liquidated damages.

(i) For each knowing violation of the statutory prohibition on providing compensation, the Contractor agrees to pay to the Government as liquidated damages the greater of either \$100,000, or three times the total amount of compensation paid by the Contractor to the former DoD official during the period in which such compensation was in violation of the statutory prohibition.

(ii) Liability for liquidated damages under this clause survives final payment under this contract and may be recouped against payments due under other contracts with the Contractor.

(iii) Liquidated damages will be computed based upon the number of actual violations by the Contractor, and not on the number of contracts in which this clause appears.

(3) Administrative penalty. If the Contractor knowingly fails to file a report in accordance with paragraph (c) of this clause, the Contractor shall be subject to an administrative penalty not to exceed \$10,000. The final determination of the penalty to be charged to the Contractor shall be made by the Secretary of Defense or designee after the Contractor is afforded an opportunity for an agency hearing on the record in accordance with agency hearing procedures. The Secretary's determination shall form a part of the record and shall be subject to judicial review under Chapter 7 of Title 5, United States Code.

(e) The rights and remedies under this clause are in addition to, and do not limit, any rights afforded the Government under this contract or as otherwise provided by law.

(End of clause)

1.13 52.203-7001

SPECIAL PROHIBITION ON EMPLOYMENT (DEC 1991)

(a) Definitions.

As used in this clause--

(1) "Arising out of a contract with the DoD" means any act in connection with--

(i) Attempting to obtain,

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) "Conviction of fraud or any other felony" means any conviction for

fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nolo contendere, for which sentence has been imposed.

(3) "Date of conviction" means the date judgment was entered against the individual.

(b) 10 U.S.C. 2408 provides that any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from:

(1) Working in a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) Serving on the board of directors of any DoD Contractor or first-tier subcontractor; or

(3) Serving as a consultant to any DoD Contractor or first-tier subcontractor.

(c) Unless waived, the prohibition in paragraph (b) applies for five years from the date of conviction.

(d) 10 U.S.C. 2408 further provides that a defense Contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly--

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the Contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as--

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibitions in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify--

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and,

(4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding \$25,000.

(End of clause)

PROHIBITION AGAINST RETALIATORY PERSONNEL ACTIONS (APR 1992)

(a) Definitions.

As used in this clause--

(1) "Appropriate Government official" means

(i) An officer or employee of the Department of Defense responsible for command, direct staff assistance to a commander, contract administration, program management, audit, inspection, investigation, or enforcement of any law or regulation relating to Government procurement or the subject matter of the contract;

(ii) A Member of Congress or an officer or employee of Congress, the General Accounting Office, the Congressional Budget Office, or the Office of Technology Assessment; and

(iii) Any other officer or employee of the United States whose duties include the investigation or enforcement of any law, rule, or regulation relating to Government procurement or the subject matter of the contract.

(2) "Information concerning a contract" means information about cost, price, compliance with specifications, meeting the user's requirements, user safety, use or disposition of services, real property or personal property acquired under the contract, the procurement process (including competition, negotiation, award, and administration), and relationships with Government personnel, competitors, or subcontractors.

(b) Prohibition.

In accordance with 10 U.S.C. 2409a, the Contractor shall not discharge or otherwise discriminate against any employee with respect to the employee's compensation or terms and conditions of employment because the employee (or any person acting pursuant to a request of the employee) discloses to an appropriate Government official information concerning a defense contract, which information the employee reasonably believes evidences a violation of any Federal law or regulation relating to defense procurement or the subject matter of this contract.

(c) The Government will notify the Contractor upon receipt of any complaint filed under the provisions of this clause and Subpart 203.71 of the Defense FAR Supplement. The Contractor agrees to cooperate with the Government during its investigation of any such complaint.

(d) The Contractor shall inform all employees of--

- (1) The prohibitions of this clause;
- (2) Employees' rights under 10 U.S.C. 2409a; and
- (3) Availability of procedures implementing the statute.

(End of clause)

PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)

(a) Definition.

"Cooperative agreement holder" means a State or local government; a private, nonprofit organization; a tribal organization (as defined in

section 4(c) of the Indian Self-Determination and Education Assistance Act (Pub. L. 93-268; 25 U.S.C. 450(c)); or an economic enterprise (as defined in section 3(e) of the Indian Financing Act of 1974 (Pub. L. 93-362; 25 U.S.C. 1452(e))) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Defense Logistics Agency to furnish procurement technical assistance to business entities.

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

I.16 52.209-0006

PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (NOV 1992)

(a) The Government suspends or debar Contractors to protect the Government's interest. The Contractor shall not enter into any subcontract in excess of the small purchase limitation at FAR 13.000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed the small purchase limitation at FAR 13.000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Procurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Procurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Procurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

1.17 52.212-0011

VARIATION IN ESTIMATED QUANTITY (APR 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

(End of clause)

(R 7-603.27 1968 APR)

1.18 52.212-0012

SUSPENSION OF WORK (APR 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract.

(c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in

writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

(R 7-602.46 1968 FEB)

I.19 52.214-0026

AUDIT--SEALED BIDDING (APR 1985)

(a) Cost or pricing data. If the Contractor has submitted cost or pricing data in connection with the pricing of any modification to this contract, unless the pricing was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation, the Contracting Officer or a representative who is an employee of the Government shall have the right to examine and audit all books, records, documents, and other data of the Contractor (including computations and projections) related to negotiating, pricing or performing the modification, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data. In the case of pricing any modification, the Comptroller General of the United States or a representative who is an employee of the Government shall have the same rights.

(b) Availability. The Contractor shall make available at its office at all reasonable times the materials described in paragraph (a) above, for examination, audit, or reproduction, until 3 years after final payment under this contract, or for any other period specified in Subpart 4.7 of the Federal Acquisition Regulation (FAR). FAR Subpart 4.7, Contractor Records Retention, in effect on the date of this contract, is incorporated by reference in its entirety and made a part of this contract.

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement.

(2) Records pertaining to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to the performance of this contract shall be made available until disposition of such appeals, litigation, or claims.

(c) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (c), in all subcontracts over \$10,000 under this contract, altering the clause only as necessary to identify properly the contracting parties and the contracting office under the Government prime contract.

(End of clause)

PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS--
SEALED BIDDING (DEC 1991)

(a) This clause shall become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, of more than \$100,000, or for the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, more than \$500,000, except that this clause does not apply to any modification for which the price is--

- (1) Based on adequate price competition;
- (2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- (3) Set by law or regulation.

(b) If any price, including profit, negotiated in connection with any modification under this clause, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) above.

(c) Any reduction in the contract price under paragraph (b) above due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

- (i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.
- (ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.
- (iii) The contract was based on an agreement about the total cost of

the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the date of agreement on the price of the contract (or price of the modification) and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data was known by the Contractor to be understated when the Certificate of Current Cost or Pricing Data was signed; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the date of agreement on price.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) For Department of Defense contracts only, a penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data which were incomplete, inaccurate, or noncurrent.

+The \$500,000 threshold shall revert to \$100,000 after December 31, 1995. Therefore, all subcontracts awarded after December 31, 1995, and/or all changes or modifications made after December 31, 1995, shall be subject to the \$100,000 threshold.

(End of clause)

1.21 52.214-0028

SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS--SEALED BIDDING
(DEC 1991)

(a) The requirements of paragraphs (b) and (c) of this clause shall (1) become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed \$100,000, or for the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, expected to exceed \$500,000, and (2) be limited to such modifications.

(b) Before awarding any subcontract expected to exceed \$100,000, or for the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, expected to exceed \$500,000 when entered into, or pricing any subcontract modification involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed \$100,000, or for the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, expected to exceed \$500,000, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless the price is--

- (1) Based on adequate price competition;
- (2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- (3) Set by law or regulation.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in subsection 15.804-4 of the Federal Acquisition Regulation that, to the best of its knowledge and belief, the data submitted under paragraph (b) above were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds \$100,000, or for the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, in each subcontract that exceeds \$500,000 when entered into.

(End of clause)

1.22 52.219-0008

UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL DISADVANTAGED BUSINESS CONCERNS (FEB 1990)

(a) It is the policy of the United States that small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their

subcontracts with small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) As used in this contract, the term "small business concern" shall mean a small business as defined pursuant to section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. The term "small business concern owned and controlled by socially and economically disadvantaged individuals" shall mean a small business concern (1) which is at least 51 percent unconditionally owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 per centum of the stock of which is unconditionally owned by one or more socially and economically disadvantaged individuals; and (2) whose management and daily business operations are controlled by one or more of such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one of these entities which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124. The Contractor shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and other minorities, or any other individual found to be disadvantaged by the Administration pursuant to section 8(a) of the Small Business Act. The Contractor shall presume that socially and economically disadvantaged entities also include Indian Tribes and Native Hawaiian Organizations.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as either a small business concern or a small business concern owned and controlled by socially and economically disadvantaged individuals.

(End of clause)

1.23 52.219-0009 I

SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS SUBCONTRACTING PLAN
(JAN 1991)--ALTERNATE I (AUG 1989)

(a) This clause does not apply to small business concerns.

(b) "Commercial product," as used in this clause, means a product in

regular production that is sold in substantial quantities to the general public and/or industry at established catalog or market prices. It also means a product which, in the opinion of the Contracting Officer, differs only insignificantly from the Contractor's commercial product.

"Subcontract," as used in this clause, means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan, where applicable, which separately addresses subcontracting with small business concerns and with small disadvantaged business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business concerns and with small disadvantaged business concerns with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business concerns and disadvantaged business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

- (i) Total dollars planned to be subcontracted;
- (ii) Total dollars planned to be subcontracted to small business concerns; and
- (iii) Total dollars planned to be subcontracted to small disadvantaged business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to (i) small business concerns and (ii) small disadvantaged business concerns.

(4) A description of the method used to develop the subcontracting goals in (1) above.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Automated Source System (PASS) of the Small Business Administration, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the

Minority Business Development Agency in the Department of Commerce, or small and small disadvantaged business concerns trade associations).

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with (i) small business concerns and (ii) small disadvantaged business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business concerns and small disadvantaged business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause in this contract entitled "Utilization of Small Business Concerns and Small Disadvantaged Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility), to adopt a plan similar to the plan agreed to by the offeror.

(10) Assurances that the offeror will (i) cooperate in any studies or surveys as may be required, (ii) submit periodic reports in order to allow the Government to determine the extent of compliance by the offeror with the subcontracting plan, (iii) submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with the instructions on the forms, and (iv) ensure that its subcontractors agree to submit Standard Forms 294 and 295.

(11) A recitation of the types of records the offeror will maintain to demonstrate procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of its efforts to locate small and small disadvantaged business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists, guides, and other data that identify small and small disadvantaged business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small or small disadvantaged business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating (A) whether small business concerns were solicited and if not, why not, (B) whether small disadvantaged business concerns were solicited and if not, why not, and (C) if applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact (A) trade associations, (B) business development organizations, and (C) conferences and trade fairs to locate small and small disadvantaged business sources.

(v) Records of internal guidance and encouragement provided to buyers through (A) workshops, seminars, training, etc., and (B) monitoring performance to evaluate compliance with the programs's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having company or division-wide annual plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business and small disadvantaged business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business and small disadvantaged subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business and small disadvantaged business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small and small disadvantaged business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small business or small disadvantaged business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master subcontracting plan on a plant or division-wide basis which contains all the elements required by (d) above, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided, (1) the master plan has been approved, (2) the offeror provides copies of the approved master plan and evidence of its approval to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g)(1) If a commercial product is offered, the subcontracting plan required by this clause may relate to the offeror's production generally,

for both commercial and noncommercial products, rather than solely to the Government contract. In these cases, the offeror shall, with the concurrence of the Contracting Officer, submit one company-wide or division-wide annual plan.

(2) The annual plan shall be reviewed for approval by the agency awarding the offeror its first prime contract requiring a subcontracting plan during the fiscal year, or by an agency satisfactory to the Contracting Officer.

(3) The approved plan shall remain in effect during the offeror's fiscal year for all of the offeror's commercial products.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization of Small Business Concerns and Small Disadvantaged Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(End of clause)

1.24 52.219-0013

UTILIZATION OF WOMEN-OWNED SMALL BUSINESSES (AUG 1986)

(a) "Women-owned small businesses," as used in this clause, means small business concerns that are at least 51 percent owned by women who are United States citizens and who also control and operate the business.

"Control," as used in this clause, means exercising the power to make policy decisions.

"Operate," as used in this clause, means being actively involved in the day-to-day management of the business.

"Small business concern," as used in this clause, means a concern including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) It is the policy of the United States that women-owned small businesses shall have the maximum practicable opportunity to participate in performing contracts awarded by any Federal agency.

(c) The Contractor agrees to use its best efforts to give women-owned small businesses the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with the efficient performance of its contract.

(d) The Contractor may rely on written representations by its subcontractors regarding their status as women-owned small businesses.

(End of clause)

(a) "Failure to make a good faith effort to comply with the subcontracting plan," as used in this subpart, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business and Small Disadvantaged Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) If, at contract completion, or in the case of a commercial products plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled Small and Small Disadvantaged Business Subcontracting Plans, the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply, shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal or, in the case of a commercial products plan, that portion of the dollar amount allocable to Government contracts by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial products plans; i.e., company-wide or division-wide subcontracting plans approved under paragraph (g) of the clause in this contract entitled, Small Business and Small Disadvantaged Business Subcontracting Plan, the Contracting Officer of the agency that originally approved the plan will exercise the functions of the Contracting Officer under this clause on behalf of all agencies that awarded contracts covered by that commercial products plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled, Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that Government may have.

(End of clause)

I.26 52.220-0003

UTILIZATION OF LABOR SURPLUS AREA CONCERNS (APR 1984)

(a) Applicability. This clause is applicable if this contract exceeds the appropriate small purchase limitation in Part 13 of the Federal Acquisition Regulation.

(b) Policy. It is the policy of the Government to award contracts to concerns that agree to perform substantially in labor surplus areas (LSA's) when this can be done consistent with the efficient performance of the contract and at prices no higher than are obtainable elsewhere. The Contractor agrees to use its best efforts to place subcontracts in accordance with this policy.

(c) Order of preference. In complying with paragraph (b) above and with paragraph (c) of the clause of this contract entitled Utilization of Small Business Concerns and Small Disadvantaged Business Concerns, the Contractor shall observe the following order of preference in awarding subcontracts: (1) small business concerns that are LSA concerns, (2) other small business concerns, and (3) other LSA concerns.

(d) Definitions. "Labor surplus area," as used in this clause, means a geographical area identified by the Department of Labor in accordance with 20 CFR 654, Subpart A, as an area of concentrated unemployment or underemployment or an area of labor surplus.

"Labor surplus area concern," as used in this clause, means a concern that together with its first-tier subcontractors will perform substantially in labor surplus areas. Performance is substantially in labor surplus areas if the costs incurred under the contract on account of manufacturing, production, or performance of appropriate services in labor surplus areas exceed 50 percent of the contract price.

(End of clause)

(R 1-1.805-3(a))

(R 7-104.20(a) 1981 MAY)

I.27 52.220-0004

LABOR SURPLUS AREA SUBCONTRACTING PROGRAM (APR 1984)

(a) See the Utilization of Labor Surplus Area Concerns clause of this contract for applicable definitions.

(b) The Contractor agrees to establish and conduct a program to encourage labor surplus area (LSA) concerns to compete for subcontracts within their capabilities when the subcontracts are consistent with the efficient performance of the contract at prices no higher than obtainable elsewhere. The Contractor shall--

(1) Designate a liaison officer who will (i) maintain liaison with authorized representatives of the Government on LSA matters, (ii) supervise compliance with the Utilization of Labor Surplus Area Concerns clause, and (iii) administer the Contractor's labor surplus area subcontracting program;

(2) Provide adequate and timely consideration of the potentialities of LSA concerns in all make-or-buy decisions;

(3) Ensure that LSA concerns have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of offers, quantities, specifications, and delivery schedules so as to facilitate the participation of LSA concerns;

(4) Include the Utilization of Labor Surplus Area Concerns clause in subcontracts that offer substantial LSA subcontracting opportunities; and

(5) Maintain records showing (i) the procedures adopted and (ii) the Contractor's performance, to comply with this clause. The records will be kept available for review by the Government until the expiration of 1 year after the award of this contract, or for such longer period as may be required by any other clause of this contract or by applicable law or regulations.

(c) The Contractor further agrees to insert in any related subcontract that may exceed \$500,000 and that contains the Utilization of Labor Surplus Area Concerns clause, terms that conform substantially to the language of this clause, including this paragraph (c), and to notify the Contracting Officer of the names of subcontractors.

(End of clause)

(R1-1.805-3(b))

(R 7-104.20(b) 1978 JUN)

1.28 52.222-0003

CONVICT LABOR (APR 1984)

The Contractor agrees not to employ any person undergoing sentence of imprisonment in performing this contract except as provided by 18 U.S.C. 4082(c)(2) and Executive Order 11755, December 29, 1973.

(End of clause)

(R 7-104.17 1975 OCT)

(R 7-607.12 1975 OCT)

(R 1-12.204)

1.29 52.222-0004

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT--OVERTIME COMPENSATION (MAR 1986)

(a) Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics (see Federal Acquisition Regulation (FAR) 22.300) shall require or permit any such laborers or mechanics in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than 1 1/2 times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(b) Violation; liability for unpaid wages; liquidated damages. In the

event of any violation of the provisions set forth in paragraph (a) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions set forth in paragraph (a) of this clause in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in paragraph (a) of this clause.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer shall upon his or her own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same Prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in paragraph (b) of this clause.

(d) Payrolls and basic records. (1) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of contract work and shall preserve them for a period of 3 years from the completion of the contract for all laborers and mechanics working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Nothing in this paragraph shall require the duplication of records required to be maintained for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The records to be maintained under paragraph (d)(1) of this clause shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit such representatives to interview employees during working hours on the job.

(e) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the provisions set forth in paragraphs (a) through (e) of this clause and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier

subcontractor with the provisions set forth in paragraphs (a) through (e) of this clause.

(End of clause)

1.30 52.222-0005

OPEN BIDDING ON FEDERAL CONSTRUCTION CONTRACTS (NOV 1992)

"Labor organization," as used in this clause, shall have the same meaning it has in 42 U.S.C. 2000e(d).

(a) The Contractor shall not--

(1) Require prospective or actual subcontractors to enter into or adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or

(2) Otherwise discriminate against prospective or actual subcontractors for refusing to become or remain signatories or otherwise adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or

(3) Require any prospective or actual subcontractor to enter into, adhere to, or enforce any agreement that requires its employees, as a condition of employment, to--

(i) Become members of or affiliated with a labor organization; or

(ii) Pay dues or fees to a labor organization, over an employee's objection, in excess of the employee's share of labor organization costs relating to collective bargaining, contract administration, or grievance adjustment.

(b) This clause does not prohibit a Contractor or subcontractor from voluntarily entering into an otherwise lawful agreement with a labor organization regarding its own employees.

(c) If the Contractor does not perform in accordance with this clause, the Government may suspend or debar the Contractor, terminate the contract for default in whole or in part, and withhold payment.

(d) The Contractor and any subcontractor shall include this clause in every subcontract entered into in connection with this contract.

(End of clause)

1.31 52.222-0006

DAVIS-BACON ACT (NOV 1992)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made

or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) Except with respect to helpers, as defined in section 22.401 of the Federal Acquisition Regulation, the work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(iv) With respect to helpers, such a classification prevails in the area in which the work is performed.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The

Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

1.32 52.222-0007

WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers

and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

1.33 52.222-0008

PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

I.34 52.222-0009

APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed

pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall

not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(End of clause)

1.35 52.222-0010

COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

1.36 52.222-0011

SUBCONTRACTS (LABOR STANDARDS) (FEB 1988)

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination--Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower

tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(End of clause)

I.37 52.222-0012

CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

I.38 52.222-0013

COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

I.39 52.222-0014

DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees of their representatives.

(End of clause)

I.40 52.222-0015

CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29

CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

I.41 52.222-0018

NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES
(MAY 1992)

(a) During the term of this contract, the Contractor agrees to post a notice, of such size and in such form as the Secretary of Labor may prescribe, in conspicuous places in and about its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the last sentence shall not be included in notices posted in the plant or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)):

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact either a Regional Office of the National Labor Relations Board or: National Labor Relations Board, Division of Information, 1717 Pennsylvania Avenue, NW, Washington, DC 20507.

(b) The Contractor will comply with all provisions of Executive Order 12800 of April 13, 1992, and related rules, regulations, and orders of the Secretary of Labor.

(c) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (a) or (b) of this clause, this contract may be cancelled, terminated, or suspended in whole or in part,

and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in or adopted pursuant to Executive Order 12800 of April 13, 1992. Such other sanctions or remedies may be imposed as are provided in Executive Order 12800 of April 13, 1992, or by rule, regulation, or order of the Secretary of Labor, or as are otherwise provided by law.

(d) The Contractor will include the provisions of paragraphs (a) through (c) in every subcontract or purchase order entered into in connection with this contract unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 12800 of April 13, 1992, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any such subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance; provided, however, that if the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

(End of clause)

1.42 52.222-0026

EQUAL OPPORTUNITY (APR 1984)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) below. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for

employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. Standard Form 100 (EEO-1), or any successor form, is the prescribed form to be filed within 30 days following the award, unless filed within 12 months preceding the date of award.

(8) The Contractor shall permit access to its books, records, and accounts by the contracting agency or the Office of Federal Contract Compliance Programs (OFCCP) for the purposes of investigation to ascertain the Contractor's compliance with the applicable rules, regulations, and orders.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraph (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a

result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.
(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

(End of clause)

(R 7-103.18 1978 SEP)

(R 1-12.803-2)

(R 7-607.13 1978 SEP)

I.43 52.222-0027

AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (APR 1984)

(a) Definitions.

"Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Director," as used in this clause, means Director, Office of Federal Contract Compliance Programs (OFCCP), United States Department of Labor, or any person to whom the Director delegates authority.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the

Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or

its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) above.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all onsite supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16). The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member

and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16), provided the Contractor--

- (1) Actively participates in the group;
- (2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;
- (3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;
- (4) Makes a good-faith effort to meet its individual goals and timetables; and
- (5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) above, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Director shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

- (1) Monitor all employment-related activity to ensure that the

Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

(o) Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(End of clause)

(R 7-603.60 1978 SEP)

1.44 52.222-0035

AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS
(APR 1984)

(a) Definitions.

"Appropriate office of the State employment service system," as used in this clause, means the local office of the Federal-State national system of public employment offices assigned to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

"Openings that the Contractor proposes to fill from within its own organization," as used in this clause, means employment openings for which no one outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) will be considered and includes any openings that the Contractor proposes to fill from regularly established "recall" lists.

"Openings that the Contractor proposes to fill under a customary and traditional employer-union hiring arrangement," as used in this clause, means employment openings that the Contractor proposes to fill from union halls, under their customary and traditional employer-union hiring relationship.

"Suitable employment openings," as used in this clause--

(1) Includes, but is not limited to, openings that occur in jobs categorized as--

(i) Production and nonproduction;

(ii) Plant and office;

- (iii) Laborers and mechanics;
- (iv) Supervisory and nonsupervisory;
- (v) Technical; and

(vi) Executive, administrative, and professional positions compensated on a salary basis of less than \$25,000 a year; and

(2) Includes full-time employment, temporary employment of over 3 days, and part-time employment, but not openings that the Contractor proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement, nor openings in an educational institution that are restricted to students of that institution.

(b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a special disabled or Vietnam Era veteran. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled and Vietnam Era veterans without discrimination based upon their disability or veterans' status in all employment practices such as--

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings. (1) The Contractor agrees to list all suitable employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service.

(3) The listing of suitable employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans

and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(5) Under the most compelling circumstances, an employment opening may not be suitable for listing, including situations when (i) the Government's needs cannot reasonably be supplied, (ii) listing would be contrary to national security, or (iii) the requirement of listing would not be in the Government's interest.

(d) Applicability. (1) This clause does not apply to the listing of employment openings which occur and are filled outside the 50 States, the District of Columbia, Puerto Rico, Guam, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

(2) The terms of paragraph (c) above of this clause do not apply to openings that the Contractor proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of its own organization or employer-union arrangement for that opening.

(e) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified special disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor (Director), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified special disabled and Vietnam Era veterans.

(f) Noncompliance. If the Contractor does not comply with the

requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Director to enforce the terms, including action for noncompliance.

(End of clause)

(R 7-103.27 1976 JUL)

(R FPR Temp. Reg. 39)

1.45 52.222-0036

AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS (APR 1984)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental handicap. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as--

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped individuals and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor (Director), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to

employ, and advance in employment, qualified physically and mentally handicapped individuals.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$2,500 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Director to enforce the terms, including action for noncompliance.

(End of clause)

(R 7-103.28 1976 MAY)

(R FPR Temp. Reg. 38)

1.46 52.222-0037

EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1988)

(a) The contractor shall report at least annually, as required by the Secretary of Labor, on:

(1) The number of special disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of special disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than March 31 of each year beginning March 31, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each contractor subject to the reporting requirements at 38 U.S.C. 2012(d) shall invite all special disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 2012 to identify themselves to the contractor. The invitation shall state that the information is

voluntarily provided, that the information will be kept confidential, that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 2012.

(f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

1.47 52.223-0002

CLEAN AIR AND WATER (APR 1984)

(a) "Air Act", as used in this clause, means the Clean Air Act (42 U.S.C. 7401, et seq.).

"Clean air standards," as used in this clause, means--

(1) Any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, work practices, or other requirements contained in, issued under, or otherwise adopted under the Air Act or Executive Order 11738;

(2) An applicable implementation plan as described in section 110(d) of the Air Act (42 U.S.C. 7410(d));

(3) An approved implementation procedure or plan under section 111(c) or section 111(d) of the Air Act (42 U.S.C. 7411(c) or (d)); or

(4) An approved implementation procedure under section 112(d) of the Air Act (42 U.S.C. 7412(d)).

"Clean water standards," as used in this clause, means any enforceable limitation, control, condition, prohibition, standard, or other requirement promulgated under the Water Act or contained in a permit issued to a discharger by the EPA or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. 1342), or by local government to ensure compliance with pretreatment regulations as required by section 307 of the Water Act (33 U.S.C. 1317).

"Compliance," as used in this clause, means compliance with--

(1) Clean air or water standards; or

(2) A schedule or plan ordered or approved by a court of competent jurisdiction, the EPA, or an air or water pollution control agency under the requirements of the Air Act or Water Act and related regulations.

"Facility," as used in this clause, means any building, plant, installation, structure, mine, vessel or other floating craft, location, or site of operations, owned, leased, or supervised by a Contractor or subcontractor, used in the performance of a contract or subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the EPA determines that independent facilities are collocated in one geographical

area.

"Water Act," as used in this clause, means Clean Water Act (33 U.S.C. 1251, et seq.).

(b) The Contractor agrees--

(1) To comply with all the requirements of section 114 of the Clean Air Act (42 U.S.C. 7414) and section 308 of the Clean Water Act (33 U.S.C. 1318) relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Air Act and the Water Act, and all regulations and guidelines issued to implement those acts before the award of this contract;

(2) That no portion of the work required by this prime contract will be performed in a facility listed on the EPA List of Violating Facilities on the date when this contract was awarded unless and until the EPA eliminates the name of the facility from the listing;

(3) To use best efforts to comply with clean air standards and clean water standards at the facility in which the contract is being performed; and

(4) To insert the substance of this clause into any nonexempt subcontract, including this subparagraph (b)(4).

(End of clause)

(R 7-103.29 1975 OCT)

(R 1-1.2302)

I.48 52.223-0006

DRUG-FREE WORKPLACE (JUL 1990)

(a) Definitions. As used in this clause,

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract

performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall--within 30 calendar days after award (unless a longer period is agreed to in writing for contracts of 30 calendar days or more performance duration), or as soon as possible for contracts of less than 30 calendar days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 calendar days after such conviction.

(5) Notify the Contracting Officer in writing within 10 calendar days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 calendar days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the performance of this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

1.49 52.223-7004

DRUG-FREE WORK FORCE (SEP 1988)

(a) Definitions.

(1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security, health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.

(2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of Title 21 of the United States Code, the possession of which is unlawful under Chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

(b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.

(c) Contractor programs shall include the following, or appropriate alternatives:

(1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;

(2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;

(3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;

(4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing

programs shall be established taking account of the following:

(i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, the efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

(ii) In addition, the Contractor may establish a program for employee drug testing--

(A) When there is a reasonable suspicion that an employee uses illegal drugs; or

(B) When an employee has been involved in an accident or unsafe practice;

(C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;

(D) As part of a voluntary employee drug testing program.

(iii) The Contractor may establish a program to test applicants for employment for illegal drug use.

(iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2.1 of Subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11 1988)), issued by the Department of Health and Human Services.

(d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such time as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.

(e) The provisions of this clause pertaining to drug testing programs shall not apply to the extent they are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees that those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

1.50 52.225-0005

BUY AMERICAN ACT--CONSTRUCTION MATERIALS (MAY 1992)

(a) The Buy American Act (41 U.S.C. 10) provides that the Government give preference to domestic construction material.

"Components," as used in this clause, means those articles, materials, and supplies incorporated directly into construction materials.

"Construction materials," as used in this clause, means an article, material, or supply brought to the construction site for incorporation into the building or work. Construction material also includes an item brought to the site pre-assembled from articles, materials or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, which are discrete systems incorporated into a public building or work and which are produced as a complete system, shall be evaluated as a single and distinct construction material regardless of when or how the individual parts or components of such systems are delivered to the construction site.

"Domestic construction material," as used in this clause, means (1) an unmanufactured construction material mined or produced in the United States, or (2) a construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as the construction materials determined to be unavailable pursuant to subparagraph 25.202(a)(3) of the Federal Acquisition Regulation (FAR) shall be treated as domestic.

(b) The Contractor agrees that only domestic construction material will be used by the Contractor, subcontractors, materialmen, and suppliers in the performance of this contract, except for foreign construction materials, if any, listed in this contract. (The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954, as amended, and Subpart 25.2 of the FAR).

(End of clause)

I.51 52.225-0011

RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (MAY 1992)

(a) Unless advance written approval of the Contracting Officer is obtained, the Contractor shall not acquire for use in the performance of this contract--

(1) Any supplies or services originating from sources within the communist areas of North Korea, Vietnam, Cambodia, or Cuba;

(2) Any supplies that are or were located in or transported from or through North Korea, Vietnam, Cambodia, or Cuba; or

(3) Arms, ammunition, or military vehicles produced in South Africa, or manufacturing data for such articles.

(b) The Contractor shall not acquire for use in the performance of this contract supplies or services originating from sources within Iraq, any supplies that are or were located in or transported from or through Iraq, or any supplies or services from entities controlled by the Government of Iraq.

(c) The Contractor agrees to insert the provisions of this clause, including this paragraph (c), in all subcontracts hereunder.

(End of clause)

UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES
(AUG 1991)

(a) This clause applies only if the contract includes a subcontracting plan incorporated under the terms of the clause entitled, Small Business and Small Disadvantaged Business Subcontracting Plan. It does not apply to contracts awarded based on a subcontracting plan submitted and approved under paragraph (g) of the clause at 52.219-9.

(b) Definitions. As used in this clause:

"Indian organization" means the governing body of any Indian tribe (as defined by 25 U.S.C. 1452(c)) or entity established or recognized by the governing body for the purposes of 25 U.S.C., Chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership shall constitute not less than 51 percent of the enterprise.

(c) The Contractor agrees to use its best efforts to give Indian organizations and Indian-owned economic enterprises the (25 U.S.C. 1544) maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contractor may rely on the written representation of the Indian organization or Indian-owned economic enterprise.

(2) If the cost of subcontracting with an Indian organization or Indian-owned economic enterprise exceeds the cost of acquiring the supplies or services from a non-Indian source, the Contractor may request an adjustment to the following:

- (i) The estimated cost of a cost-type contract;
- (ii) The target cost of a cost-plus-incentive-fee prime contract;
- (iii) The target cost and ceiling price of a fixed-price incentive prime contract; or
- (iv) The price of a firm-fixed-price prime contract.

(3) The amount of the equitable adjustment to the prime contract shall be the lesser of--

- (i) The difference between the estimated cost, target cost or firm-fixed-price included in the subcontract initially awarded to the Indian organization or enterprise and the corresponding estimated cost, target cost or firm-fixed-price which would have been included in a subcontract with the otherwise low, non-Indian offeror; or
- (ii) Five percent of the estimated cost, target cost or firm-fixed-price included in the subcontract initially awarded to the Indian organization or enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(d) The Contracting Officer shall decide the amount of the adjustment and modify the contract accordingly. The Contracting Officer's decision is final and not subject to the Disputes clause of this contract.

(End of clause)

1.53 52.227-0001

AUTHORIZATION AND CONSENT (APR 1984)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed \$25,000); however, omission of this clause from any subcontract, under or over \$25,000, does not affect this authorization and consent.

(End of clause)

(R 7-103.22 1961 JAN)

1.54 52.227-0002

NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (APR 1984)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to

the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

(R 7-103.23 1965 JAN)

1.55 52.227-0004

PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

(End of clause)

(R 7-602.16 1964 JUN)

1.56 52.227-7033

RIGHTS IN SHOP DRAWINGS (APR 1966)

(a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

(End of clause)

1.57 52.228-0002

ADDITIONAL BOND SECURITY (APR 1984)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond furnished with this contract becomes unacceptable to the Government;

(b) Any surety fails to furnish reports on its financial condition as required by the Government; or

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer.

(End of clause)

(R 1-7.103-2)

(R 1-7.602-17)

(R 7-103.9 1949 JUL)

(R 7-602.17 1976 OCT)

1.58 52.228-0005

INSURANCE--WORK ON A GOVERNMENT INSTALLATION (SEP 1989)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall certify to the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

1.59 52.228-0011

PLEDGES OF ASSETS (FEB 1990)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

I.60 52.228-7006

PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS (SEP 1992)

In accordance with section 806(a)(3) of Pub. L. 102-190, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requestor.

(End of clause)

I.61 52.229-0003

FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment

taxes.

"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

I.62 52.229-0005

TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984)

The term "local taxes," as used in the Federal, State, and local taxes clause of this contract, includes taxes imposed by a possession of the United States or by Puerto Rico.

(End of clause)

(AV 7-103.10(c) 1963 NOV)

(AV 1-11.401-3(a))

I.63 52.231-7000

SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with Part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with Part 231 of the Defense FAR Supplement, in effect on the date of this contract.

(End of clause)

I.64 52.232-0005

PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (APR 1989)

(a) The Government shall pay the Contractor the contract price as provided in this contract.

(b) The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer. The Contractor shall furnish a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a basis for determining progress payments, in such detail as requested by the Contracting Officer. In the preparation of estimates the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site may also be taken into consideration if--

(1) Consideration is specifically authorized by this contract; and

(2) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Along with each request for progress payments, the contractor shall furnish the following certification, or payment shall not be made:

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code; and

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

(Name)

(Title)

(Date)

(d) If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in 31 U.S.C 3903(c)(1)) equal to interest on the unearned amount from the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of

this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) The Government shall pay the amount due the Contractor under this contract after--

- (1) Completion and acceptance of all work;
- (2) Presentation of a properly executed voucher; and
- (3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(End of clause)

1.65 52.232-0017

INTEREST (JAN 1991)

(a) Notwithstanding any other clause of this contract, all amounts, except amounts that are repayable and which bear interest under a Price Reduction for Defective Cost of Pricing Data clause, that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) Amounts shall be due at the earliest of the following dates:

- (1) The date fixed under this contract.
- (2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.
- (3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.
- (4) If this contract provides for revision of prices, the date of

written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

1.66 52.232-0023

ASSIGNMENT OF CLAIMS (JAN 1986)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

1.67 52.232-0027

PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (APR 1989)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or an electronic funds transfer is made. Definitions of pertinent terms are set forth in 32.902. All days referred to in this clause are calendar days, unless otherwise specified. The term "foreign vendor" means an incorporated concern not incorporated in the United States or an unincorporated concern having its principal place of business outside the United States.

(a) Invoice Payments.

(1) For purposes of this clause, there are several types of invoice payments which may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching

milestones in any project:

(A) The due date for making such payments shall be 14 days after receipt of the payment request by the designated billing office. However, if the designated billing office fails to annotate the payment request with the actual date of receipt, the payment due date shall be deemed to be the 14th day after the date the Contractor's payment request is dated, provided a proper payment request is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, shall be as specified in the contract or, if not specified, 30 days after approval for release to the Contractor by the Contracting Officer.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract):

(A) The due date for making such payments shall be either the 30th day after receipt by the designated billing office of a proper invoice from the Contractor, or the 30th day after Government acceptance of the work or services completed by the Contractor, whichever is later. However, if the designated billing office fails to annotate the invoice with the date of actual receipt, the invoice payment due date shall be deemed to be the 30th day after the date the Contractor's invoice is dated, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) On a final invoice where the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(2) An invoice is the Contractor's bill or written request for payment under the contract for work or services performed under the contract. An invoice shall be prepared and submitted to the designated billing office. A proper invoice must include the items listed in subdivisions (a)(2)(i) through (a)(2)(ix) of this clause. If the invoice does not comply with these requirements, the Contractor will be notified of the defect within 7 days after receipt of the invoice at the designated billing office. Untimely notification will be taken into account in the computation of any interest penalty owed the Contractor in the manner described in subparagraph (a)(4) of this clause:

- (i) Name and address of the Contractor.
- (ii) Invoice date.
- (iii) Contract number or other authorization for work or services performed (including order number and contract line item number).
- (iv) Description of work or services performed.
- (v) Delivery and payment terms (e.g., prompt payment discount terms).
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to be notified in event of a defective invoice.
- (viii) For payments described in subdivision (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.
- (ix) Any other information or documentation required by the contract.

(3) An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. An interest penalty shall not be paid on contracts awarded to foreign vendors outside the United States for work performed outside the United States.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority. This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice payment amount approved by the Government and be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice payment amount and be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor

of a defective invoice within the periods prescribed in subparagraph (a)(2) of this clause, then the due date on the corrected invoice will be adjusted by subtracting the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties, if requested by the Contractor.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in subdivision (a)(1)(ii) of this clause, Government acceptance or approval shall be deemed to have occurred constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. In the event that actual acceptance or approval occurs within the constructive acceptance or approval period, the determination of an interest penalty shall be based on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days.

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1.00 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(5) An interest penalty shall also be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated on the amount of discount taken for the period

beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(6) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with regulations issued by the Office of Management and Budget, shall be paid in addition to the interest penalty amount if the Contractor--

(i) Is owed an interest penalty;

(ii) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(iii) Makes a written demand, not later than 40 days after the date the invoice amount is paid, that the agency pay such a penalty.

(b) Contract Financing Payments.

(1) For purposes of this clause, if applicable, "contract financing payment" means a Government disbursement of monies to a Contractor under a contract clause or other authorization prior to acceptance of supplies or services by the Government, other than progress payments based on estimates of amount and value of work performed. Contract financing payments include advance payments and interim payments under cost-type contracts.

(2) If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the _____ day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified. For advance payments, loans, or other arrangements that do not involve recurrent submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) A payment clause which obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) An interest penalty clause which obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment

date and ending on the date on which payment of the amount due is made;
and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) A clause requiring each subcontractor to include a payment clause and an interest penalty clause conforming to the standards set forth in subparagraphs (c)(1) and (c)(2) of this clause in each of its subcontracts, and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) The clauses required by paragraph (c) of this clause shall not be construed to impair the right of Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions which--

(1) Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause has been previously furnished to the subcontractor; and

(ii) A copy of any notice issued by a Contractor pursuant to subdivision (d)(3)(i) of this clause has been furnished to the Contracting Officer.

(e) If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to subparagraph (e)(1) of this clause;

(3) Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under subparagraph (e)(1) of this clause;

(4) Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under subdivision (e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under subparagraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under subdivision (e)(5)(i) of this clause.

(f)(1) If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion

of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, then the Contractor may, without incurring an obligation to pay an interest penalty under subparagraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under subdivision (f)(1)(i) of this clause.

(2) As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall pay the amount withheld under subdivision (f)(1)(ii) of this clause to such first-tier subcontractor, or shall incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) A written notice of any withholding shall be issued to a subcontractor (with a copy to the Contracting Officer of any such notice issued by the Contractor), specifying--

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the United States is a party. The United States may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient

subcontract performance or nonperformance by a subcontractor.

(k) The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the United States for such interest penalty. A cost reimbursement claim may not include any amount for reimbursement of such interest penalty.

(End of clause)

I.68 52.232-7006

REDUCTION OR SUSPENSION OF CONTRACT PAYMENTS UPON FINDING OF FRAUD (AUG 1992)

(a) 10 U.S.C. 2307(e) permits the head of the agency to reduce or suspend further payments to the Contractor upon a written determination by the agency head that substantial evidence exists that the Contractor's request for advance, partial, or progress payments is based on fraud. The provisions of 10 U.S.C. 2307(e) are in addition to any other rights or remedies provided the Government by law or under contract.

(b) Actions taken by the Government in accordance with 10 U.S.C. 2307(e) shall not constitute an excusable delay under the Default clause of this contract or otherwise relieve the Contractor of its obligations to perform under this contract.

(End of clause)

I.69 52.233-0001

DISPUTES (DEC 1991)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$50,000 is not a claim under the Act until certified as required by subparagraph (d)(2) below. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by

the Contracting Officer.

(2) For Contractor claims exceeding \$50,000, the Contractor shall submit with the claim a certification that--

(i) The claim is made in good faith;

(ii) Supporting data are accurate and complete to the best of the Contractor's knowledge and belief; and

(iii) The amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable.

(3)(i) If the Contractor is an individual, the certification shall be executed by that individual.

(ii) If the Contractor is not an individual, the certification shall be executed by--

(A) A senior company official in charge at the contractor's plant or location involved; or

(B) An officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

(e) For Contractor claims of \$50,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$50,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) At the time a claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative means of dispute resolution. When using alternate dispute resolution procedures, any claim, regardless of amount, shall be accompanied by the certification described in paragraph (d)(2) of this clause, and executed in accordance with paragraph (d)(3) of this clause.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (properly certified if required), or (2) the date payment otherwise would be due, if that date is later, until the date of payment. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

1.70 52.233-0003

PROTEST AFTER AWARD (AUG 1989)

(a) Upon receipt of a notice of protest (as defined in 33.101 of the FAR) the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(End of clause)

1.71 52.233-7000

CERTIFICATION OF CLAIMS AND REQUESTS FOR ADJUSTMENT OR RELIEF (DEC 1991)

(a) Any contract claim, request for equitable adjustment to contract terms, request for relief under Pub. L. 85-804, or other similar request exceeding \$100,000 shall bear, at the time of submission, the following

certificate given by a senior company official in charge at the plant or location involved:

I certify that the claim is made in good faith, that the supporting data are accurate and complete to the best of my knowledge and belief; and that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable.

(Official's Name)

(Title)

(b) The certification in paragraph (a) of this clause requires full disclosure of all relevant facts, including cost and pricing data.

(c) The certification requirement in paragraph (a) of this clause does not apply to:

- (1) Requests for routine contract payments; for example, those for payment for accepted supplies and services, routine vouchers under cost-reimbursement type contracts, and progress payment invoices; or
- (2) Final adjustments under incentive provisions of contracts.

(d) In those situations where no claim certification for the purposes of 10 U.S.C. 2410 has been submitted prior to the inception of a contract dispute, a single certification, using the language prescribed by the Contract Disputes Act but signed by a senior company official in charge at the plant or location involved, will satisfy the certification requirements of both statutes.

(e) If this is a request for equitable adjustment under a substantially completed contract or a completed contract, the certification will be expanded to include the following:

This claim includes only costs for performing the alleged change, and does not include any costs which have already been reimbursed or which have been separately claimed. All indirect costs claimed are properly allocable to the alleged change in accordance with applicable acquisition regulations. I am aware that the submission of a false claim to the Government can result in the assessment of significant criminal and civil penalties and fines.

(End of clause)

1.72 52.236-0002

DIFFERING SITE CONDITIONS (APR 1984)

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown

physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

(End of clause)

(R 7-602.4 1968 FEB)

(R 1-7.602-4)

I.73 52.236-0003

SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

(R 7-602.14 1964 JUN)

(R 1-7.602-14)

(R 7-602.33 1965 JAN)

1.74 52.236-0005

MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(End of clause)

(R 7-602.9 1964 JUN)

1.75 52.236-0006

SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the work site a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)
(R 7-602.12 1978 OCT)
(R 1-7.602-12)

1.76 52.236-0007

PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

1.77 52.236-0008

OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

(End of clause)
(R 7-602.15 1964 JUN)
(R 1-7.602.15)

1.78 52.236-0009

PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or

branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site, and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

(R 7-602.34 1965 JAN)

(7-2101.13 1976 OCT)

1.79 52.236-0010

OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(End of clause)

(R 7-602.35 1965 JAN)

I.80 52.236-0011

USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

(R 7-602.39 1976 OCT)

(1-7.602.31)

I.81 52.236-0012

CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

(End of clause)

(R 7-602.40 1965 JAN)

(R 7-2101.21 1976 OCT)

I.82 52.236-0013

ACCIDENT PREVENTION (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will (1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities; (2) avoid interruptions of Government operations and delays in project completion dates; and (3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling,

demolition, or removal of improvements, the Contractor shall--

- (1) Provide appropriate safety barricades, signs, and signal lights;
- (2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and
- (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(End of clause)

I.83 52.236-0015

SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as

directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

(R 7-603.48 1965 JAN)

1.84 52.236-0021

SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (APR 1984)

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown," "as indicated", "as detailed", or words of similar

import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".

(d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

(h) This clause shall be included in all subcontracts at any tier.

(End of clause)

(7-602.2 JUNE 1964 and 1-7.602-2)

(7-602.41 JAN 1965)

1.85 52.236-7000

(7-602.47 APR 1966)

(7-602.54 OCT 1976 and 1-7.602-36)

MODIFICATION PROPOSALS--PRICE BREAKDOWN (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown--

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for--

- (i) Material;
- (ii) Labor;
- (iii) Equipment;
- (iv) Subcontracts; and
- (v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

(End of clause)

1.86 52.243-0004

CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating (1) the date, circumstances, and source of the order and (2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the

Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

1.87 52.243-7001

PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR Part 31 and DFARS Part 231, in effect on the date of this contract, apply.

(End of clause)

1.88 52.244-0001

SUBCONTRACTS (FIXED-PRICE CONTRACTS) (APR 1991)

(a) This clause does not apply to firm-fixed-price contracts and fixed-price contracts with economic price adjustment. However, it does apply to subcontracts resulting from unpriced modifications to such contracts.

(b) "Subcontract," as used in this clause, includes but is not limited to purchase orders, and changes and modifications to purchase orders. The Contractor shall notify the Contracting Officer reasonably in advance of entering into any subcontract if the Contractor does not have an approved purchasing system and if the subcontract--

(1) Is proposed to exceed \$100,000; or

(2) Is one of a number of subcontracts with a single subcontractor, under this contract, for the same or related supplies or services, that in the aggregate are expected to exceed \$100,000.

(c) The advance notification required by paragraph (b) above shall include--

(1) A description of the supplies or services to be subcontracted;

- (2) Identification of the type of subcontract to be used;
 - (3) Identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the competition obtained;
 - (4) The proposed subcontract price and the Contractor's cost or price analysis;
 - (5) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions;
 - (6) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract; and
 - (7) A negotiation memorandum reflecting--
 - (i) The principal elements of the subcontract price negotiations;
 - (ii) The most significant considerations controlling establishment of initial or revised prices;
 - (iii) The reason cost or pricing data were or were not required;
 - (iv) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;
 - (v) The extent, if any, to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and subcontractor; and the effect of any such defective data on the total price negotiated;
 - (vi) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
 - (vii) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (d) The Contractor shall obtain the Contracting Officer's written consent before placing any subcontract for which advance notification is required under paragraph (b) above. However, the Contracting Officer may ratify in writing any such subcontract. Ratification shall constitute the consent of the Contracting Officer.
- (e) Even if the Contractor's purchasing system has been approved, the Contractor shall obtain the Contracting Officer's written consent before placing subcontracts that have been selected for special surveillance and so identified in the Schedule of this contract.
- (f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination (1)

of the acceptability of any subcontract terms or conditions, (2) of the acceptability of any subcontract price or of any amount paid under any subcontract, or (3) to relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement subcontracts shall not exceed the fee limitations in subsection 15.903(d) of the Federal Acquisition Regulation (FAR).

(h) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(End of clause)

I.89 52.245-0002

GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS) (DEC 1989)

(a) Government-furnished property. (1) The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the Government-furnished property described in the Schedule or specifications together with any related data and information that the Contractor may request and is reasonably required for the intended use of the property (hereinafter referred to as "Government-furnished property").

(2) The delivery or performance dates for this contract are based upon the expectation that Government-furnished property suitable for use (except for property furnished "as is") will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient time to enable the Contractor to meet the contract's delivery or performance dates.

(3) If Government-furnished property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt of it, notify the Contracting Officer, detailing the facts, and, as directed by the Contracting Officer and at Government expense, either repair, modify, return, or otherwise dispose of the property. After completing the directed action and upon written request of the Contractor, the Contracting Officer shall make an equitable adjustment as provided in paragraph (h) of this clause.

(4) If Government-furnished property is not delivered to the Contractor by the required time, the Contracting Officer shall, upon the Contractor's timely written request, make a determination of the delay, if any, caused the Contractor and shall make an equitable adjustment in accordance with paragraph (h) of this clause.

(b) Changes in Government-furnished property. (1) The Contracting Officer may, by written notice, (i) decrease the Government-furnished property provided or to be provided under this contract, or (ii) substitute other Government-furnished property for the property to be provided by the Government, or to be acquired by the Contractor for the Government, under this contract. The Contractor shall promptly take such action as the

Contracting Officer may direct regarding the removal, shipment, or disposal of the property covered by such notice.

(2) Upon the Contractor's written request, the Contracting Officer shall make an equitable adjustment to the contract in accordance with paragraph (h) of this clause, if the Government has agreed in the Schedule to make the property available for performing this contract and there is any--

(i) Decrease or substitution in this property pursuant to subparagraph (b)(1) above; or

(ii) Withdrawal of authority to use this property, if provided under any other contract or lease.

(c) Title in Government property. (1) The Government shall retain title to all Government-furnished property.

(2) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), are subject to the provisions of this clause. However, special tooling accountable to this contract is subject to the provisions of the Special Tooling clause and is not subject to the provisions of this clause. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

(3) Title to each item of facilities and special test equipment acquired by the Contractor for the Government under this contract shall pass to and vest in the Government when its use in performing this contract commences or when the Government has paid for it, whichever is earlier, whether or not title previously vested in the Government.

(4) If this contract contains a provision directing the Contractor to purchase material for which the Government will reimburse the Contractor as a direct item of cost under this contract--

(i) Title to material purchased from a vendor shall pass to and vest in the Government upon the vendor's delivery of such material; and

(ii) Title to all other material shall pass to and vest in the Government upon--

(A) Issuance of the material for use in contract performance;

(B) Commencement of processing of the material or its use in contract performance; or

(C) Reimbursement of the cost of the material by the Government, whichever occurs first.

(d) Use of Government property. The Government property shall be used only for performing this contract, unless otherwise provided in this contract or approved by the Contracting Officer.

(e) Property administration. (1) The Contractor shall be responsible and

accountable for all Government property provided under this contract and shall comply with Federal Acquisition Regulation (FAR) Subpart 45.5, as in effect on the date of this contract.

(2) The Contractor shall establish and maintain a program for the use, maintenance, repair, protection, and preservation of Government property in accordance with sound industrial practice and the applicable provisions of Subpart 45.5 of the FAR.

(3) If damage occurs to Government property, the risk of which has been assumed by the Government under this contract, the Government shall replace the items or the Contractor shall make such repairs as the Government directs. However, if the Contractor cannot effect such repairs within the time required, the Contractor shall dispose of the property as directed by the Contracting Officer. When any property for which the Government is responsible is replaced or repaired, the Contracting Officer shall make an equitable adjustment in accordance with paragraph (h) of this clause.

(4) The Contractor represents that the contract price does not include any amount for repairs or replacement for which the Government is responsible. Repair or replacement of property for which the Contractor is responsible shall be accomplished by the Contractor at its own expense.

(f) Access. The Government and all its designees shall have access at all reasonable times to the premises in which any Government property is located for the purpose of inspecting the Government property.

(g) Risk of loss. Unless otherwise provided in this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of, or damage to, Government property upon its delivery to the Contractor or upon passage of title to the Government under paragraph (c) of this clause. However, the Contractor is not responsible for reasonable wear and tear to Government property or for Government property properly consumed in performing this contract.

(h) Equitable adjustment. When this clause specifies an equitable adjustment, it shall be made to any affected contract provision in accordance with the procedures of the Changes clause. When appropriate, the Contracting Officer may initiate an equitable adjustment in favor of the Government. The right to an equitable adjustment shall be the Contractor's exclusive remedy. The Government shall not be liable to suit for breach of contract for--

- (1) Any delay in delivery of Government-furnished property;
- (2) Delivery of Government-furnished property in a condition not suitable for its intended use;
- (3) A decrease in or substitution of Government-furnished property; or
- (4) Failure to repair or replace Government property for which the Government is responsible.

(i) Final accounting and disposition of Government property. Upon completing this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property (including any resulting scrap) not consumed in performing this contract or delivered to the Government. The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid to the Government as the Contracting Officer directs.

(j) Abandonment and restoration of Contractor's premises. Unless otherwise provided herein, the Government--

(1) May abandon any Government property in place, at which time all obligations of the Government regarding such abandoned property shall cease; and

(2) Has no obligation to restore or rehabilitate the Contractor's premises under any circumstances (e.g., abandonment, disposition upon completion of need, or upon contract completion). However, if the Government-furnished property (listed in the Schedule or specifications) is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (h) of this clause may properly include restoration or rehabilitation costs.

(k) Communications. All communications under this clause shall be in writing.

(l) Overseas contracts. If this contract is to be performed outside of the United States of America, its territories, or possessions, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

(End of clause)

1.90 52.245-0004

GOVERNMENT-FURNISHED PROPERTY (SHORT FORM) (APR 1984)

(a) The Government shall deliver to the Contractor, at the time and locations stated in this contract, the Government-furnished property described in the Schedule or specifications. If that property, suitable for its intended use, is not delivered to the Contractor, the Contracting Officer shall equitably adjust affected provisions of this contract in accordance with the Changes clause when--

(1) The Contractor submits a timely written request for an equitable adjustment; and

(2) The facts warrant an equitable adjustment.

(b) Title to Government-furnished property shall remain in the

Government. The Contractor shall use the Government-furnished property only in connection with this contract. The Contractor shall maintain adequate property control records in accordance with sound industrial practice and will make such records available for Government inspection at all reasonable times, unless the clause at Federal Acquisition Regulation 52.245-1, Property Records, is included in this contract.

(c) Upon delivery of Government-furnished property to the Contractor, the Contractor assumes the risk and responsibility for its loss or damage, except--

- (1) For reasonable wear and tear;
 - (2) To the extent property is consumed in performing this contract;
- or
- (3) As otherwise provided for by the provisions of this contract.

(d) Upon completing this contract, the Contractor shall follow the instructions of the Contracting Officer regarding the disposition of all Government-furnished property not consumed in performing this contract or previously delivered to the Government. The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property, as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid to the Government as directed by the Contracting Officer.

(e) If this contract is to be performed outside the United States of America, its territories, or possessions, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

(End of clause)

(R 7-104.24(f) 1964 NOV)

I.91 52.246-0012

INSPECTION OF CONSTRUCTION (JUL 1986)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

- (1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) below.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting

to fraud, or the Government's rights under any warranty or guarantee.

(End of clause)

1.92 52.247-0064 II

PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (APR 1984)--
ALTERNATE II (APR 1984)

(a) When ocean transportation is required to bring supplies, materials, or equipment to the construction site from the United States either for use in performance of, or for incorporation in, the work called for by this contract, the Contractor shall use privately owned U.S.-flag commercial vessels to the extent that such vessels are available at rates that are fair and reasonable for privately owned U.S.-flag commercial vessels.

(b) The Contractor shall not make any shipment exceeding 10 measurement tons (400 cubic feet) by vessels other than privately owned U.S.-flag commercial vessels without (1) notifying the Contracting Officer that U.S.-flag commercial vessels are not available at rates that are fair and reasonable for such vessels and (2) obtaining permission to ship in other vessels. If permission is granted, the contract price shall be equitably adjusted to reflect the difference in cost.

(c)(1) The Contractor shall submit one legible copy of a rated on-board ocean bill of lading for each shipment to both (i) the Contracting Officer and (ii) the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590. Subcontractor bills of lading shall be submitted through the Prime Contractor.

(2) The Contractor shall furnish these bill of lading copies (i) within 20 working days of the date of loading for shipments originating in the United States, or (ii) within 30 working days for shipments originating outside the United States. Each bill of lading copy shall contain the following information:

- (A) Sponsoring U.S. Government agency.
- (B) Name of vessel.
- (C) Vessel flag of registry.
- (D) Date of loading.
- (E) Port of loading.
- (F) Port of final discharge.
- (G) Description of commodity.
- (H) Gross weight in pounds and cubic feet if available.
- (I) Total ocean freight revenue in U.S. dollars.

(d) Except for small purchases as described in 48 CFR 13, the Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts or purchase orders under this contract.

(e) The requirement in paragraph (a) does not apply to--

- (1) Small purchases as defined in 48 CFR 13;

(2) Cargoes carried in vessels of the Panama Canal Commission or as required or authorized by law or treaty;

(3) Ocean transportation between foreign countries of supplies purchased with foreign currencies made available, or derived from funds that are made available, under the Foreign Assistance Act of 1961 (22 U.S.C. 2353); and

(4) Shipments of classified supplies when the classification prohibits the use of non-Government vessels.

(f) Guidance regarding fair and reasonable rates for privately owned U.S.-flag commercial vessels may be obtained from the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, Phone: 202-426-4610.

(End of clause)

(R 1-19.108-2(b))

(R 7-603.41 1979 JUN)

1.93 52.247-7024

NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (DEC 1991)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor--

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause, including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties, in all subcontracts hereunder.

(End of clause)

1.94 52.248-0003 I

VALUE ENGINEERING--CONSTRUCTION (MAR 1989)--ALTERNATE I (APR 1984)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this

clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

- (i) In deliverable end item quantities only; or
- (ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- (3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.
- (4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.
- (5) A prediction of any effects the proposed change would have on

collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action. (1) The Contracting Officer shall notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer shall notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer shall notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The Contracting Officer's decision to accept or reject all or part of any VECP shall be final and not subject to the Disputes clause or otherwise subject to litigation under the Contract Disputes Act of 1978 (41 U.S.C. 601-613).

(f) Sharing. (1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by (i) 45 percent for fixed-price contracts or (ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(h) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering--Construction clause of contract _____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations."

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

1.95 52.249-0002 I

TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (APR 1984)--
ALTERNATE I (APR 1984)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (6) above; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid

(c) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the

list, as necessary, before final settlement.

(d) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(e) Subject to paragraph (d) above, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (e) or paragraph (f) below, exclusive of costs shown in subparagraph (f)(3) below, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be amended, and the Contractor paid the agreed amount. Paragraph (f) below shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(f) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (e) above:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (i) above; and

(iii) A sum, as profit on (i) above, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated,

including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(g) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (f) above, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(h) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(i) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (d), (f), or (k), except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (d) or (k), and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under paragraph (d), (f), or (k), the Government shall pay the Contractor (1) the amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken, or (2) the amount finally determined on an appeal.

(j) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(k) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by

the Contracting Officer.

(1)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(m) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

(End of clause)

(R 1-8-701)

(R 7-103.21(b) 1974 OCT)

(R 1.8-703)

(R 7-602.29(a) 1974 APR)

1.96 52.249-0010

DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from

the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if-

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (i) acts of God or of the public enemy, (ii) acts of the Government in either its sovereign or contractual capacity, (iii) acts of another Contractor in the performance of a contract with the Government, (iv) fires, (v) floods, (vi) epidemics, (vii) quarantine restrictions, (viii) strikes, (ix) freight embargoes, (x) unusually severe weather, or (xi) delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

(d) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

(R 1-8.709-1)

(R 7-602.5 1969 AUG)

1.97 52.252-0006

AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any _____ (48 CFR _____) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

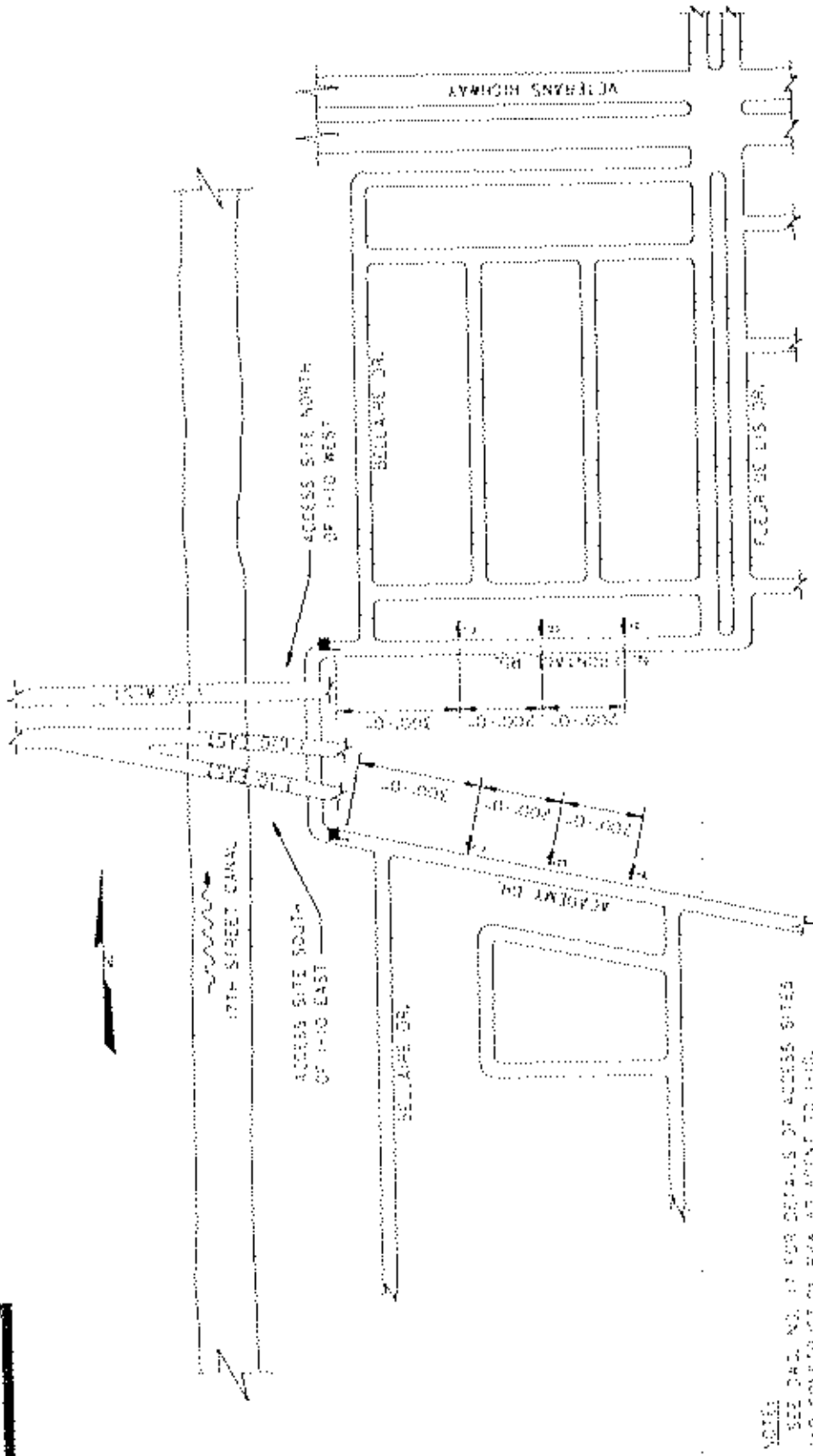
(End of clause)

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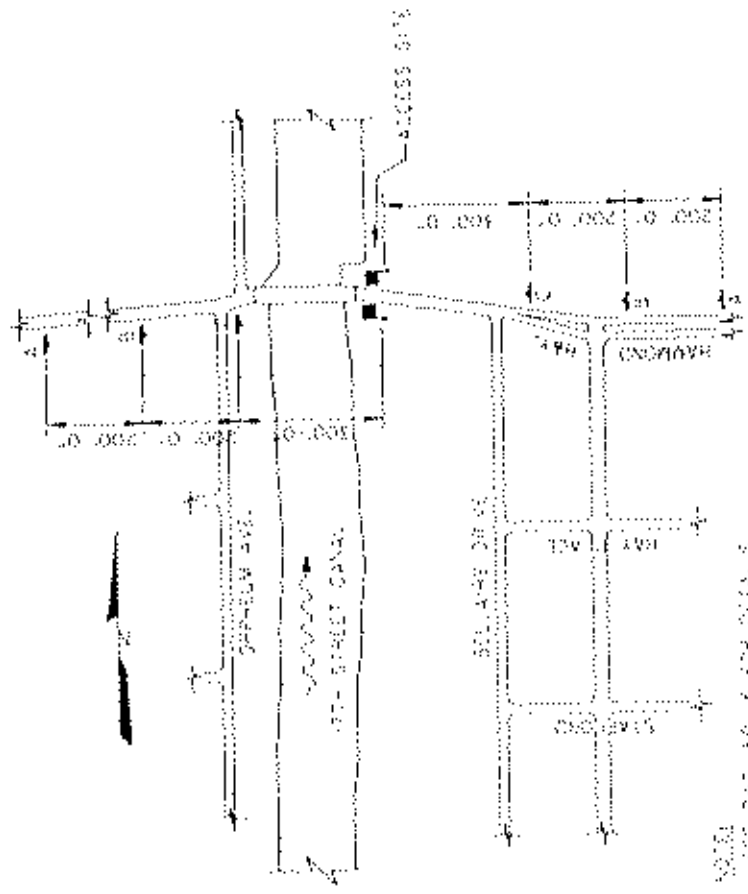
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Safety is a Part of Your Contract



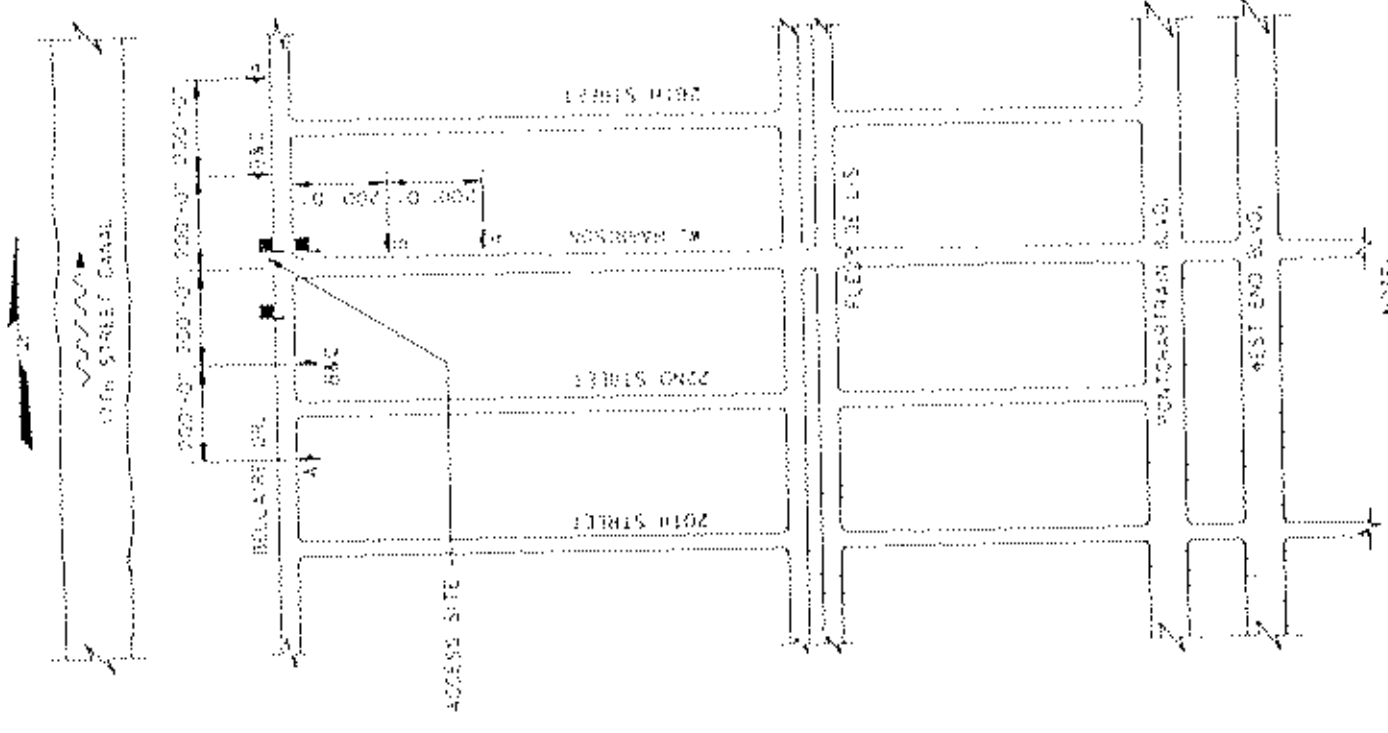
NOTE:
SEE Dwg. NO. 17 FOR DETAILS OF ACCESS SITES
AND CONSTRUCTION FOR ADJACENT TO 17-10.

SIGNING PLAN -
ADJACENT TO 17-10
SCALE: 1/4" = 100'-0"



NOTE:
SEE Dwg. NO. 17 FOR DETAILS
OF CONSTRUCTION FOR.

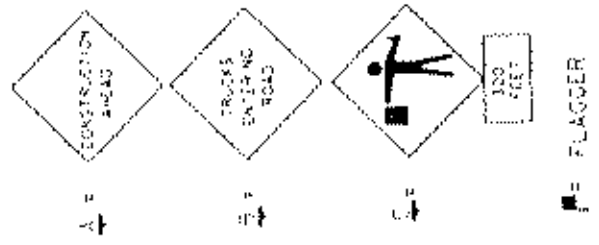
SIGNING PLAN -
DURING OPERATIONS NORTH OF HARRISON DR.
SCALE: 1/4" = 200'-0"



NOTE:
SEE Dwg. NO. 4 FOR DETAILS
OF CONSTRUCTION FOR.

SIGNING PLAN -
WEST HARRISON AVENUE
SCALE: 1/4" = 200'-0"

LEGEND:

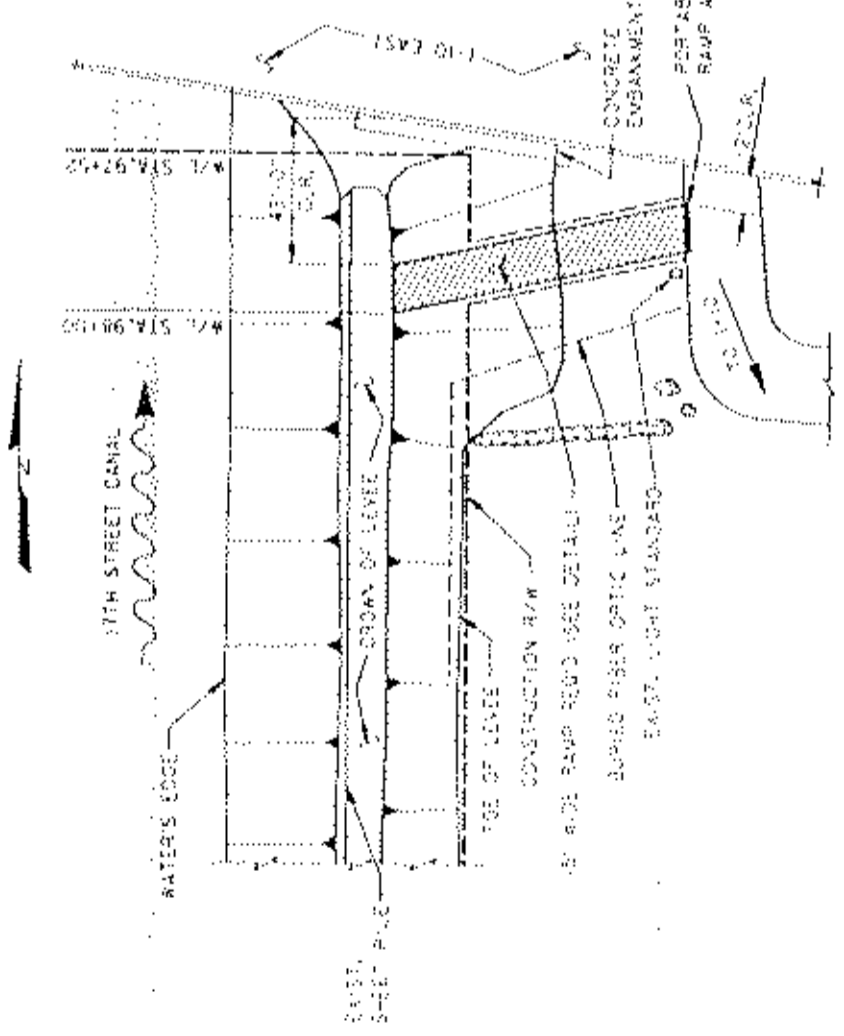


NOTES:
FOR GENERAL NOTES, SEE Dwg. NO. 2.
ALL ADVANCE FLAGGER SIGNS SHALL BE REMOVED
REMOVED OR COVERED WHENEVER FLAGGERS ARE
NOT AT THEIR STATIONS.
FLAGGERS SHALL BE POSTED 400 FEET THERE
IS TRUCK ACTIVITY AT THE ACCESS SITE.

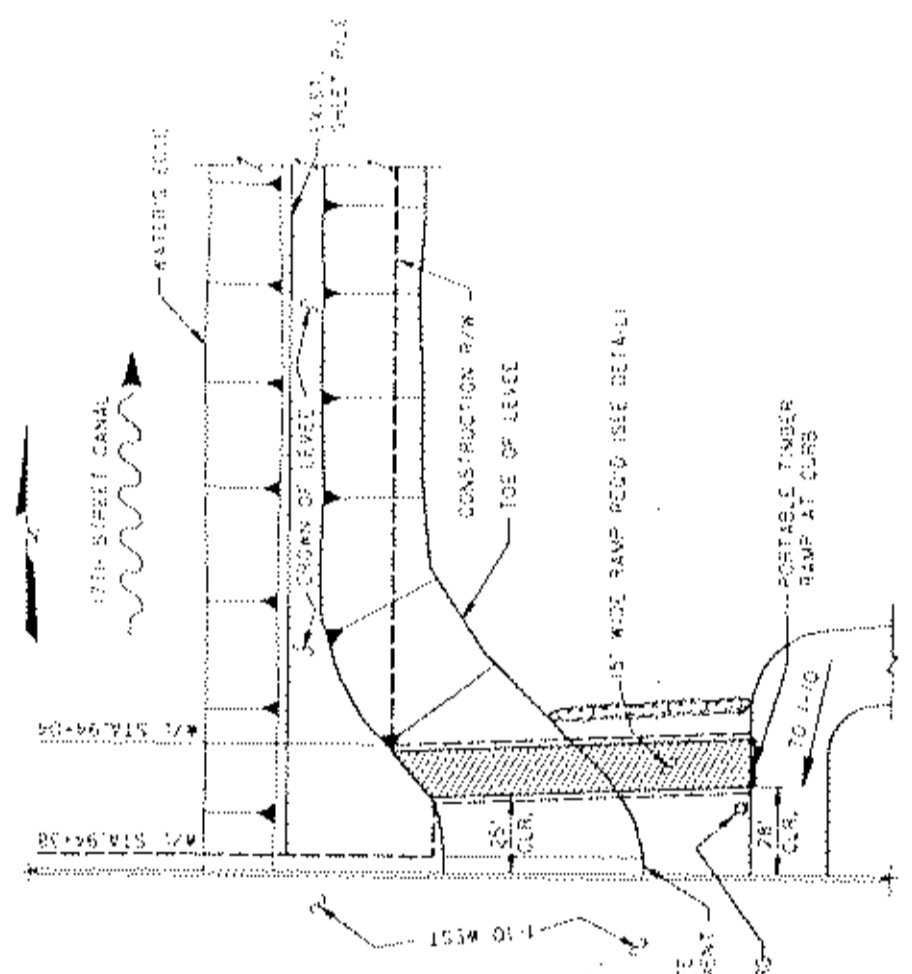
DESIGNED BY: J.A.	DATE: NOV. 1992	PROJECT NO.: 2400	DATE PLOTTED: APR. 1993
CHECKED BY: J.M.S.	DATE: NOV. 1992	PROJECT NO.: 2400	DATE PLOTTED: APR. 1993
DRAWN BY: J.M.S.	DATE: NOV. 1992	PROJECT NO.: 2400	DATE PLOTTED: APR. 1993
SCALE: 1/4" = 200'-0"	PROJECT NO.: 2400	PROJECT NO.: 2400	PROJECT NO.: 2400
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
17TH STREET CANAL EXCAVATION AND FLOODWALL PROTECTION CAPPING OF FLOODWALLS EAST SIDE LEVEE IMPROVEMENTS ACCESS SITES AND TRAFFIC CONTROL-1			
DRAWING NO.: DACW79-91-B-0025 SHEET NO.: 15 OF 18			



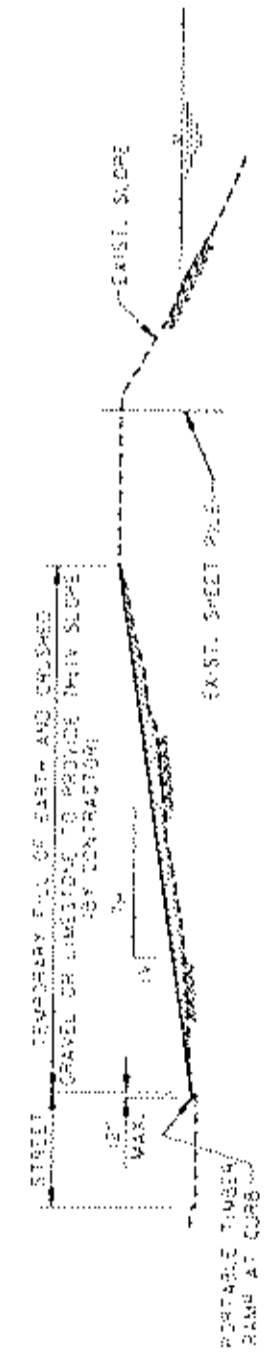
Safety is a Part
of Your Contract



DETAILS - ACCESS SITE SOUTH OF I-10 EAST
SCALE: 1" = 20'-0"



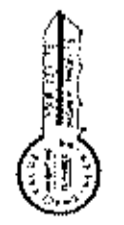
DETAILS - ACCESS SITE NORTH OF I-10 WEST
SCALE: 1" = 20'-0"



ACCESS RAMP DETAIL
SCALE: 1" = 20'-0"

RAMPS ADJACENT TO I-10 SHOW STA. 98+00 AND STA. 94+04
RAMP AT W. HARRISON AVE. (BT STA. 93+00) SIMILAR.
SEE SPECIAL CLAUSE "ACCESS AND TRUCKING REQUIREMENTS",
PART C, "ACCESS RAMPS".

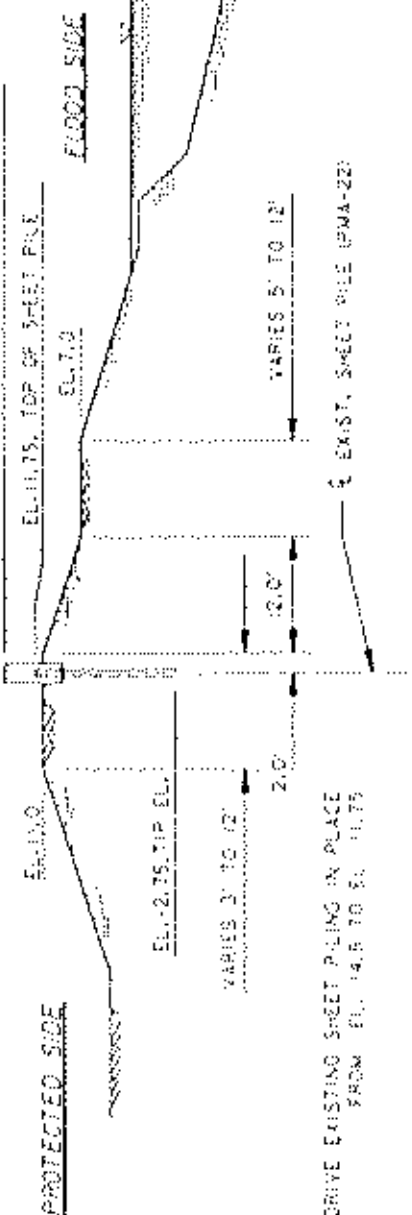
NOTES:
FOR GENERAL NOTES, SEE G.W. NO. 2.



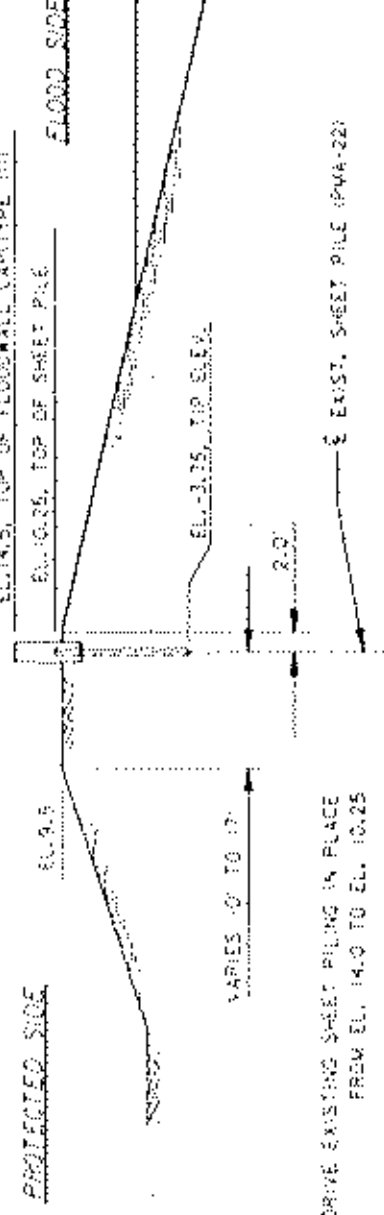
DESIGN	DESCRIPTION	DATE	BY	APP'D
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA				
PROJECT NAME HIGH LEVEL PLAN 17TH STREET CANAL EXCAVATION AND FLOODWALL PROTECTION CAPPING OF FLOODWALLS EAST SIDE LEVEE IMPROVEMENTS ACCESS SITES AND TRAFFIC CONTROL-2				
DESIGNED BY: P.A.	DATE: NOV. 1992	PROJECT NUMBER: 360	PROJECT DATE: APR. 1991	
DRAWN BY: M.L.S.	CAD FILE: 170210.dwg			
CHECKED BY: M.L.S.	SCALE: AS SHOWN			
DATE PLOTTED: 11/18/92	SCALE: AS SHOWN			
PROJECT NO.: DACP29-91-B-0005				
				H-4-40208
				REV. 18 OF 16

Safety is a Part
of Your Contract

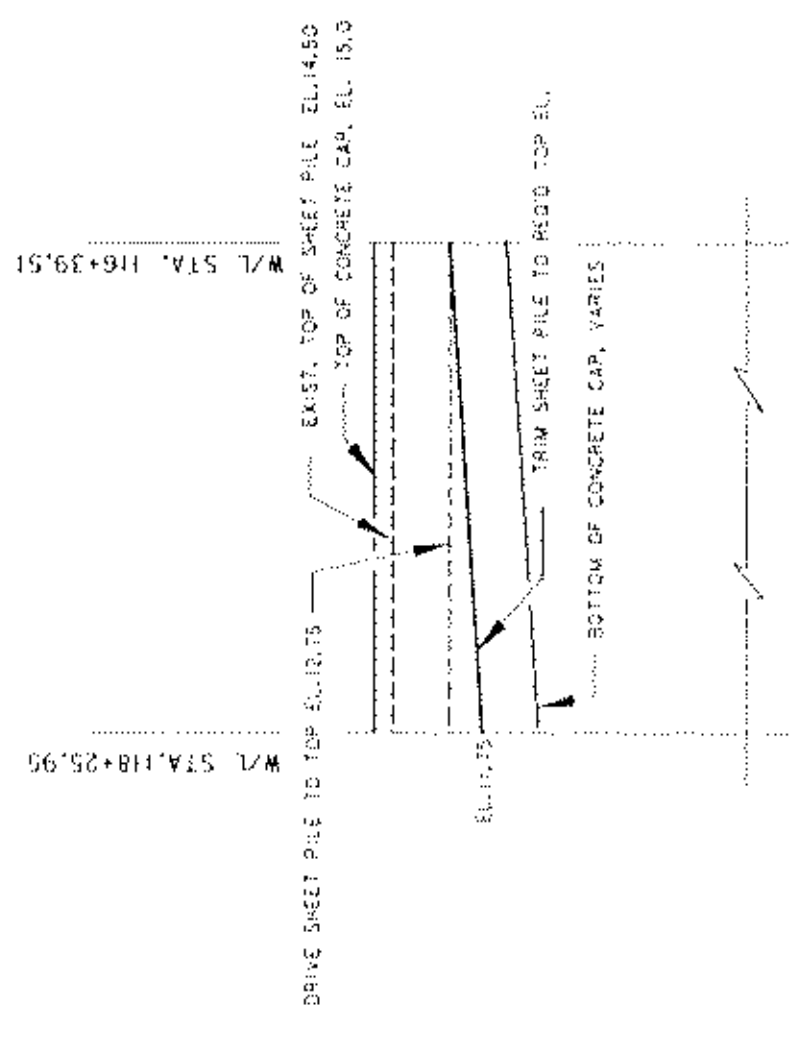
NOTE: CONTRACTOR SHALL NOT DRIVE THE 4 SHEETS NORTH OR SOUTH OF THE CENTERLINE OF THE U.S. SPRINKLER OPTIC LINE (APPROX. W/L STA. 99+78 TO W/L STA. 99+88). THESE SHEETS SHALL BE TRIMMED TO THE REQUIRED GRADE. (SEE DETAIL ON DWG. NO. 9)



W/L STA. 126+02.51 TO W/L STA. 118+25.95



W/L STA. 94+17.86 TO W/L STA. 91+07.14



TRANSITION - PMA22 SHEET PILE

W/L STA. 118+25.95 TO W/L STA. 116+39.51

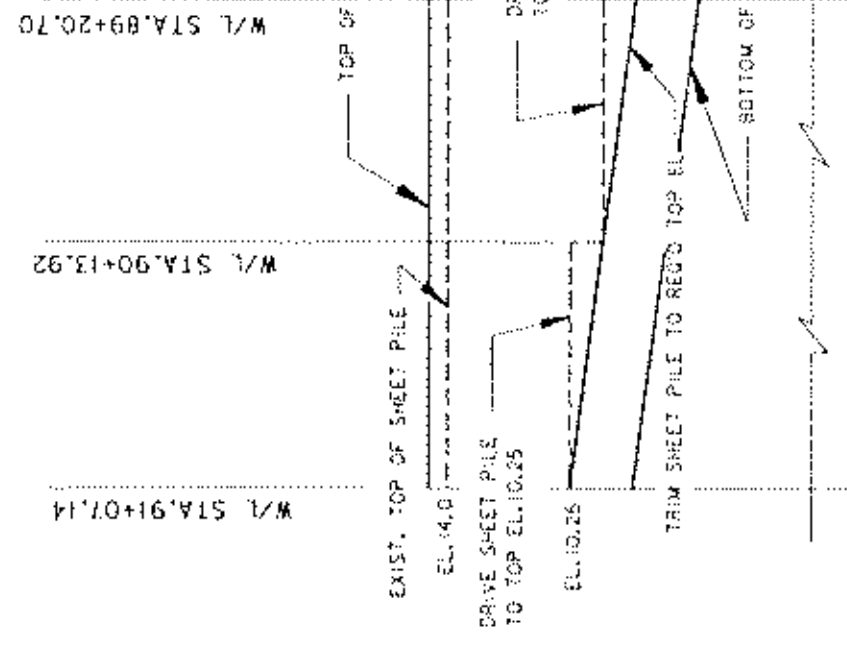
N.T.S.

FOR ELEVATIONS AND DIMENSIONS OF THE CONCRETE CAP, SEE DWGS. 8 AND 9.

N.T.S.

TRANSITION - PMA22 SHEET PILE

W/L STA. 91+07.14 TO W/L STA. 89+20.70



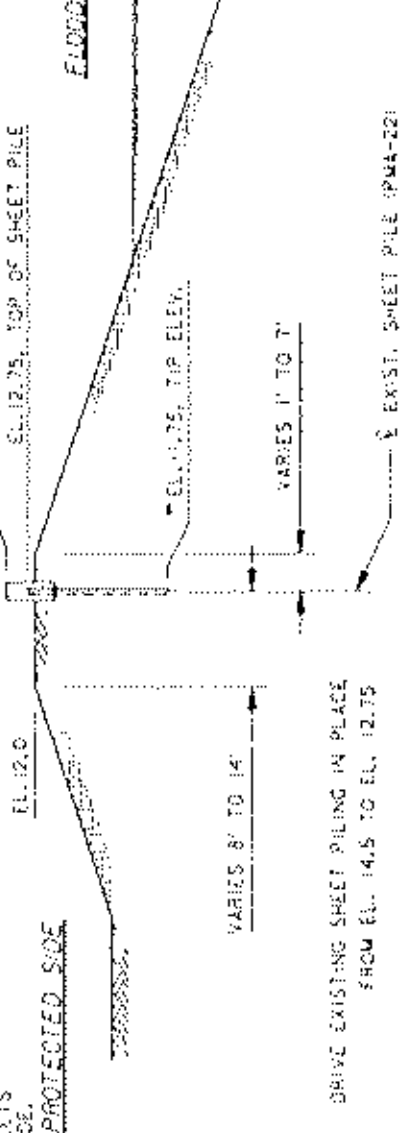
W/L STA. 89+20.70 TO W/L STA. 81+74.95

TRANSITION - PMA22 SHEET PILE

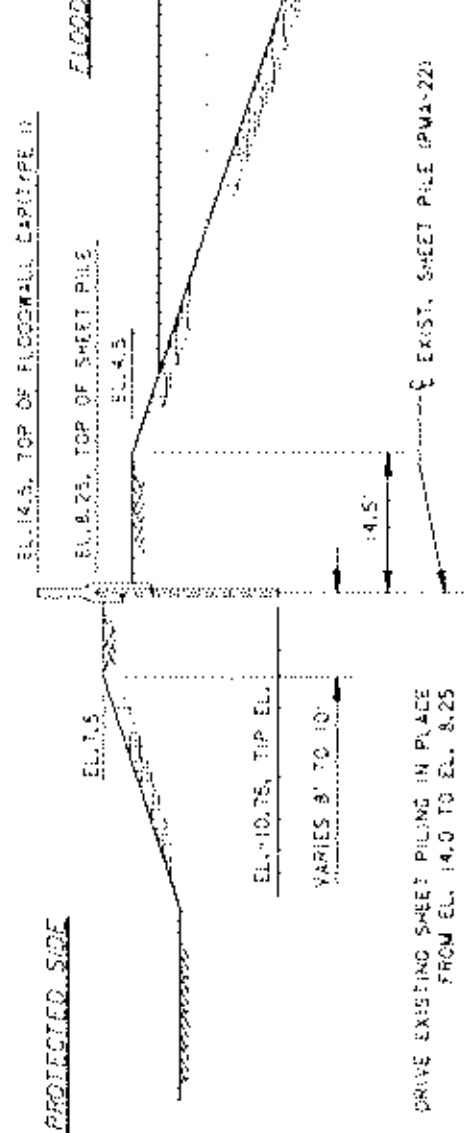
W/L STA. 91+07.14 TO W/L STA. 89+20.70

N.T.S.

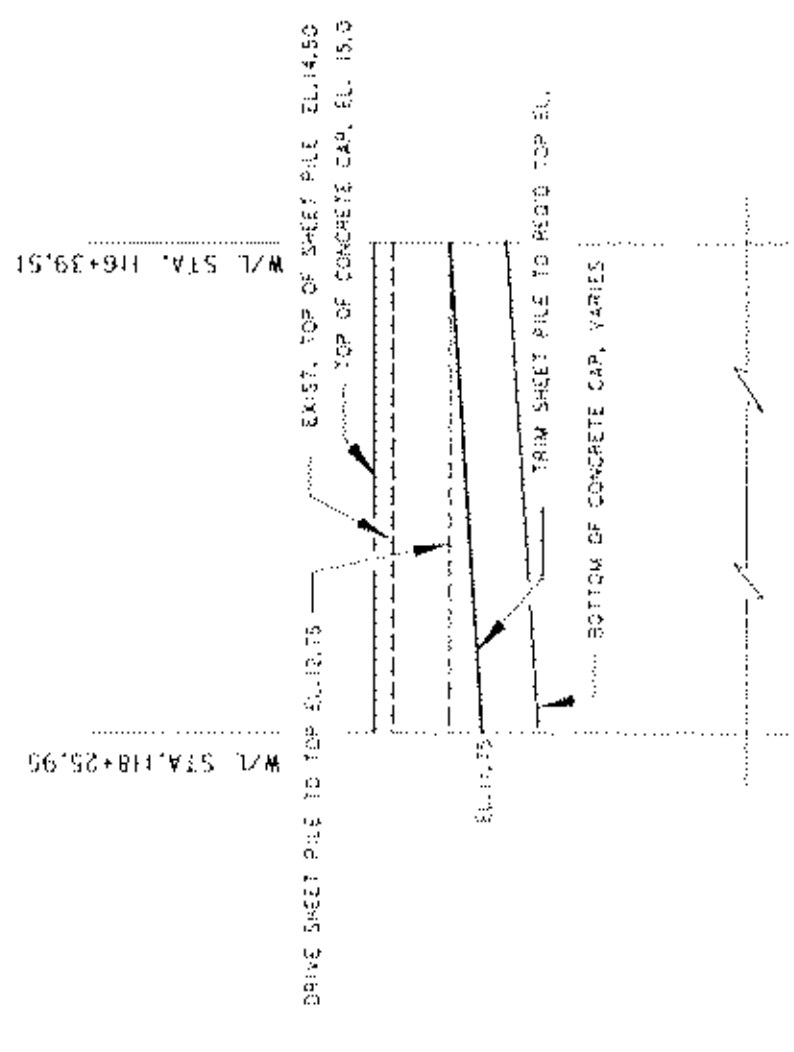
FOR ELEVATIONS AND DIMENSIONS OF THE CONCRETE CAP, SEE DWGS. 8 AND 9.



W/L STA. 116+39.51 TO W/L STA. 97+75.13



W/L STA. 94+17.86 TO W/L STA. 91+07.14

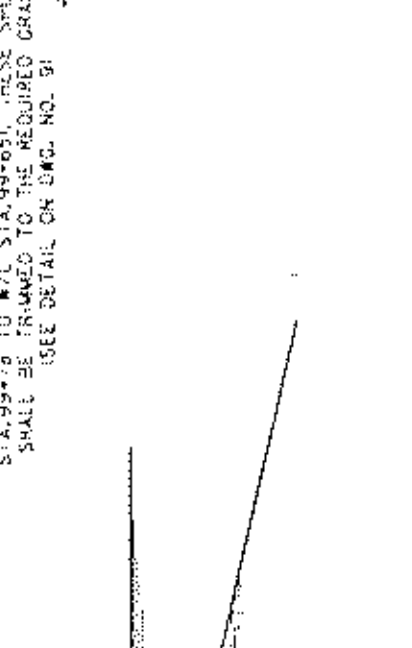


TRANSITION - PMA22 SHEET PILE

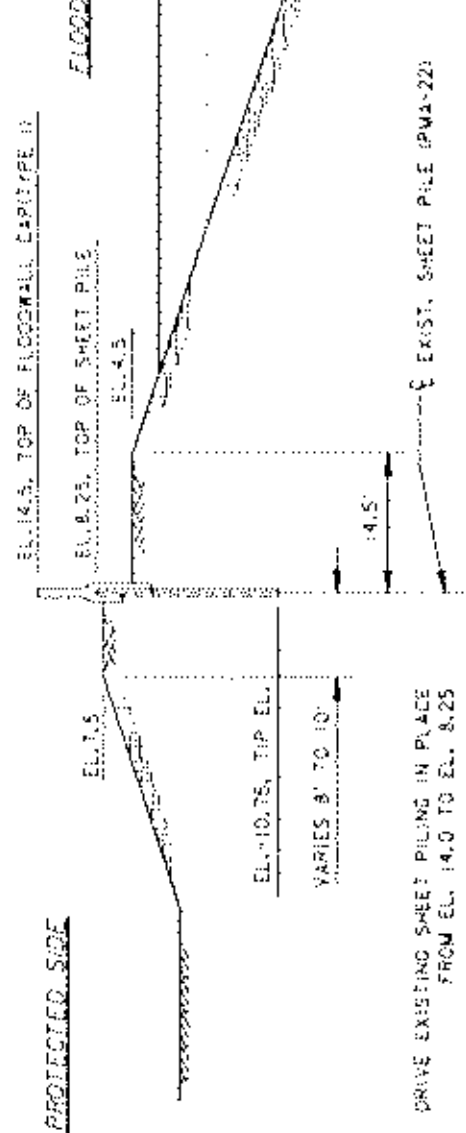
W/L STA. 118+25.95 TO W/L STA. 116+39.51

N.T.S.

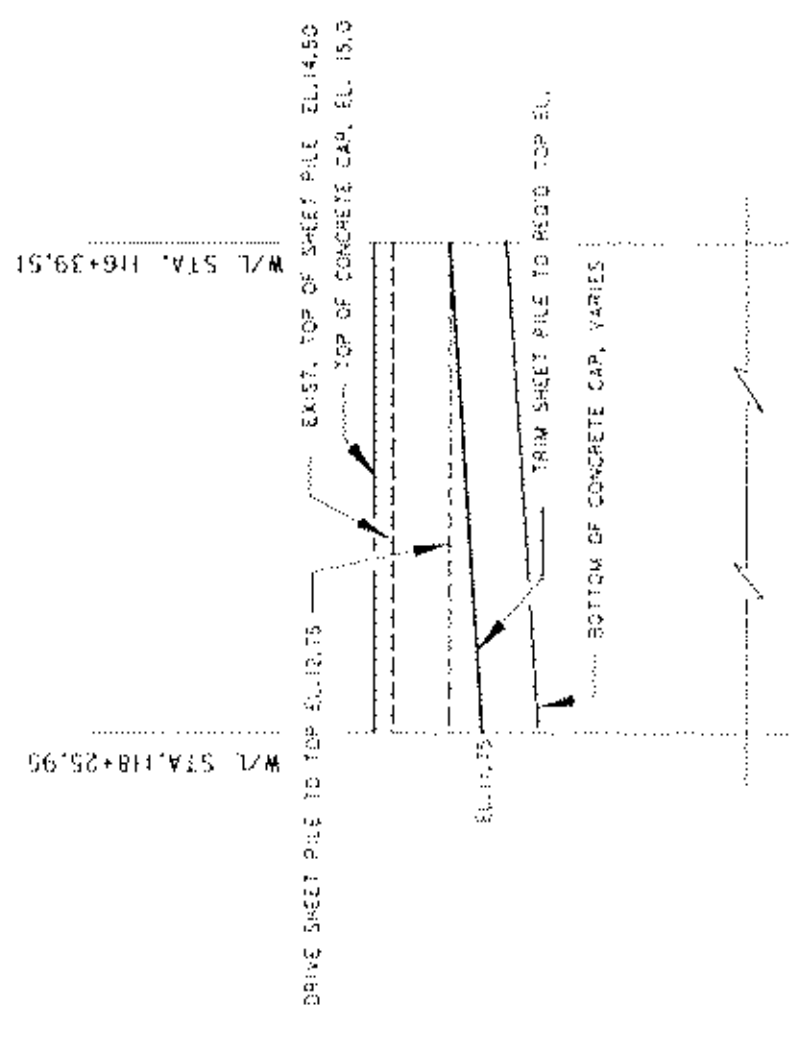
FOR ELEVATIONS AND DIMENSIONS OF THE CONCRETE CAP, SEE DWGS. 8 AND 9.



W/L STA. 116+39.51 TO W/L STA. 97+75.13



W/L STA. 94+17.86 TO W/L STA. 91+07.14



TRANSITION - PMA22 SHEET PILE

W/L STA. 118+25.95 TO W/L STA. 116+39.51

N.T.S.

FOR ELEVATIONS AND DIMENSIONS OF THE CONCRETE CAP, SEE DWGS. 8 AND 9.

NOTES:
FOR GENERAL NOTES, SEE DWG. NO. 2.
FOR PANEL LAYOUT OF FLOODWALL
IN THESE AREAS, SEE DWG. NO. 9
STATIONING BASED ON THEORETICAL
SHEET PILE WIDTHS (SEE GENERAL NOTES).
NORMAL WATER SURFACE EL. 15.5 TO 2.0 (TYP.)
THE ELEVATIONS SHOWN ARE APPROXIMATE.
THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS
AND BUILD THE LEVEE TO THE ORIGINAL SECTIONS.



U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DATE: 11/15/03
SCALE: 1\"/>

17TH STREET CANAL
EXCAVATION AND FLOODWALL PROTECTION
CAPPING OF FLOODWALLS
EAST SIDE LEVEE IMPROVEMENTS

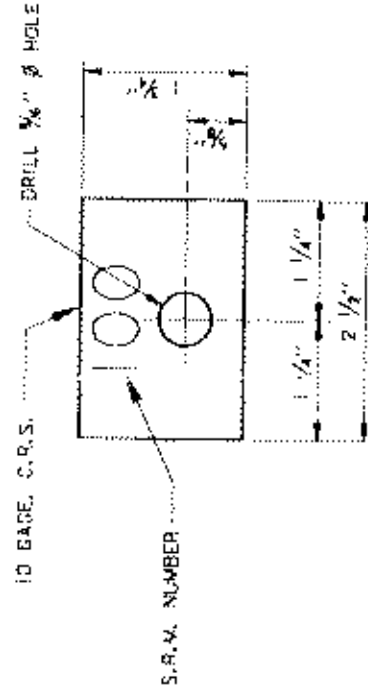
LEVEE
TYPICAL SECTIONS-1

DESIGNED BY: J.S.	DATE: NOV. 1992	PROJECT NO.: H-4-40208
DRAWN BY: P.A.R.	DATE: APR. 1993	SHEET NO.: 6 OF 16
CHECKED BY: M.S.	DATE: APR. 1993	PROJECT NO.: H-4-40208
APPROVED BY: J.S.	DATE: APR. 1993	PROJECT NO.: H-4-40208

**Safety is a Part
of Your Contract**

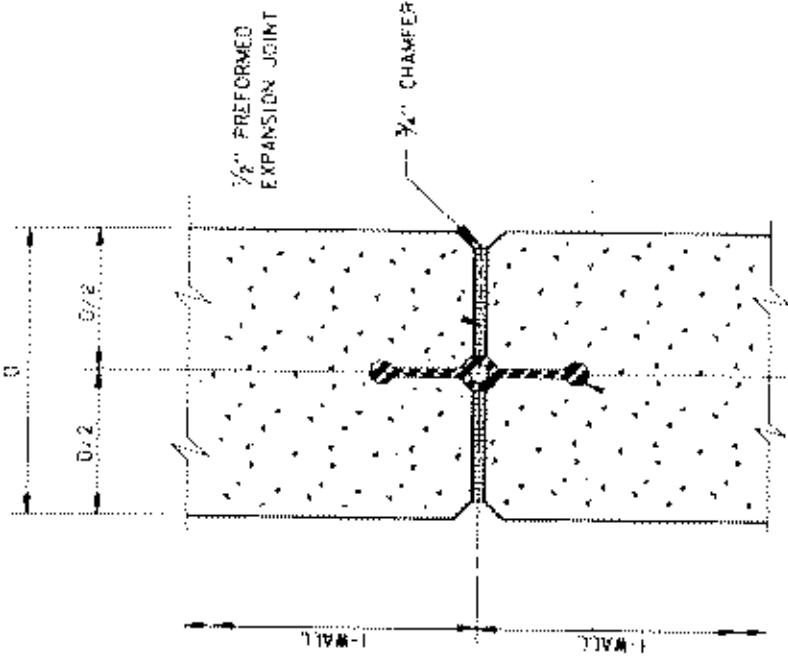
SETTLEMENT REFERENCE MARKER SCHEDULE		
S.R.M. NO.	W/L STATION (C/L MONOLITH JOINT)	ELEVATION
	126+02.51	11.33
2 TO 7	124+47.41 TO 118+25.95	11.33
	(EVERY 24.29' OR 4 MONO.)	
8 TO 17	116+19.51 TO 99+81.57	12.33
	(EVERY 86.41' OR 6 MONO.)	
18	97+75.73	12.33
19	94+17.88	9.83
20, 21	92+62.50 AND 91+07.14	9.83
22	89+20.70	8.25
22 - 26	89+20.70 TO 83+30.31	8.25
	(EVERY 186.41' OR 6 MONO.)	
27	81+74.95	8.25
28	79+81.89	7.25
29 - 33	77+70.18 TO 70+24.43	7.25
	(EVERY 186.41' OR 6 MONO.)	
34 - 65	67+82.02 TO 11+87.15	6.25
	(EVERY 181.25' OR 6 MONO.)	
66	9+25.80	6.25
67	7+00.00	6.83
68 - 71	6+19.63 TO 0+98.27	6.83
	(EVERY 181.25' OR 6 MONO.)	
72	0+17.73	6.83

* W/L STATIONS ARE APPROXIMATE. LOCATE REFERENCE BOLTS AT NEAREST W/L STATION TO THOSE SHOWN.
 ** NOTES: THE CONTRACTOR SHALL TAKE FINAL ELEVATIONS OF ALL SETTLEMENT REFERENCE MARKERS AND SHALL SUBMIT THIS DATA TO THE CONTRACTING OFFICER REPRESENTATIVE (COR). THE COR WILL FURNISH THIS DATA TO ENGINEERING DIVISION, ATTENTION OF: CELM-ED-20.
 *** ONLY ONE (1) SETTLEMENT REFERENCE MARKER REQUIRED



IDENTIFICATION TAG

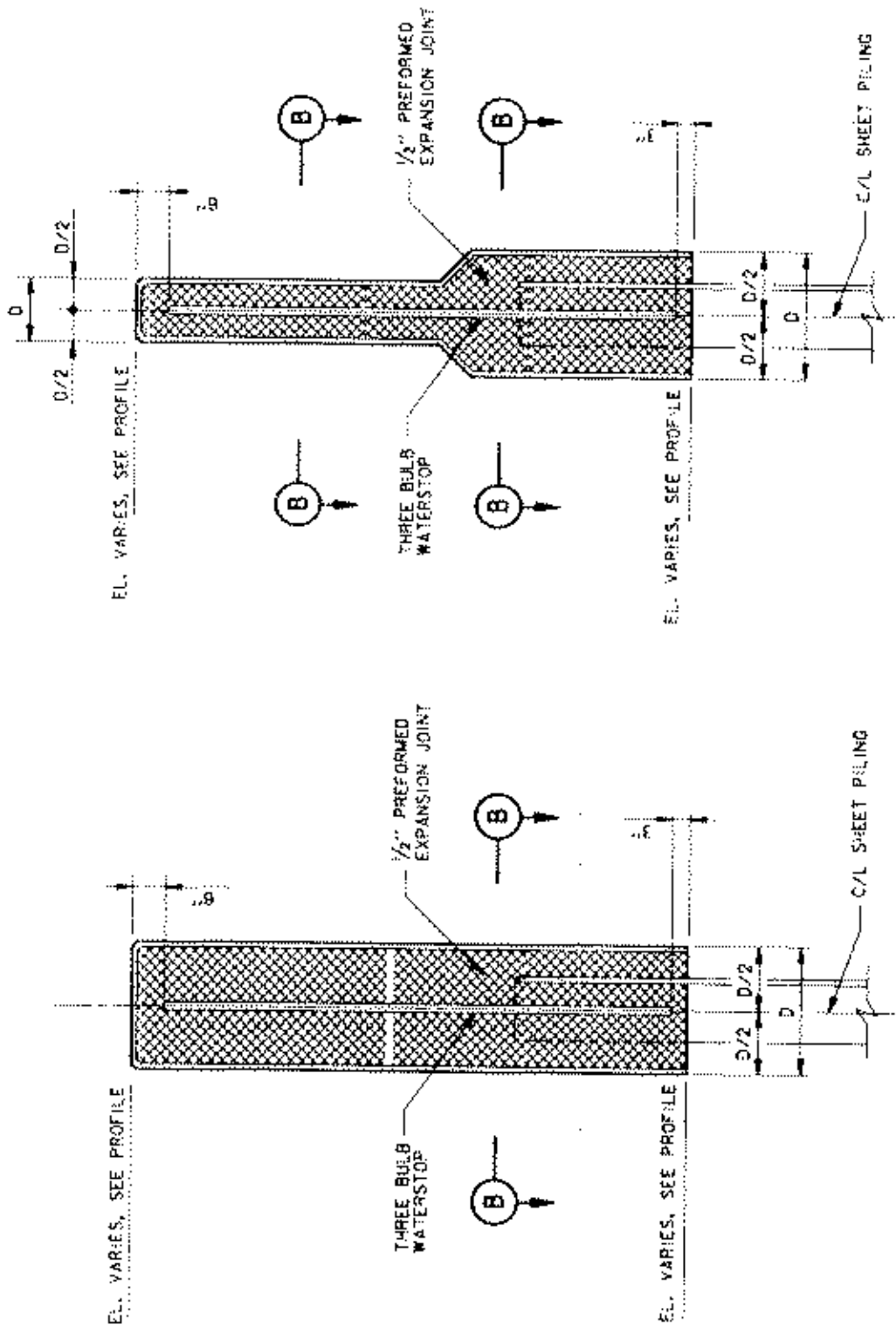
SCALE: 12" = 1' - 0"



THREE BULB WATERSTOP. SEE DETAIL.

SECTION (B)

SCALE: 3" = 1' - 0"



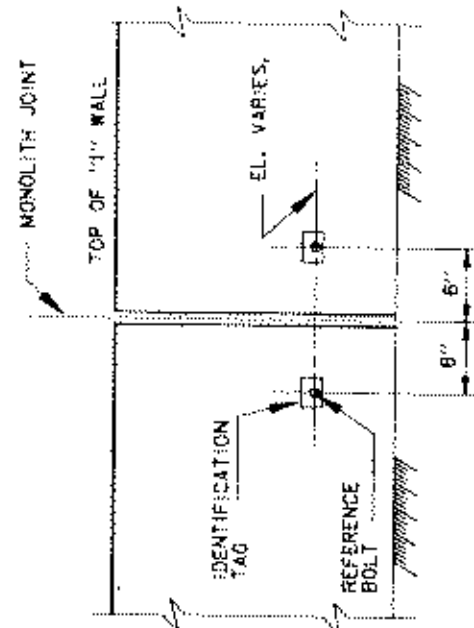
TYPICAL TYPE II AND III I-WALL JOINT

SCALE: 3/4" = 1' - 0"

TYPICAL TYPE I I-WALL JOINT

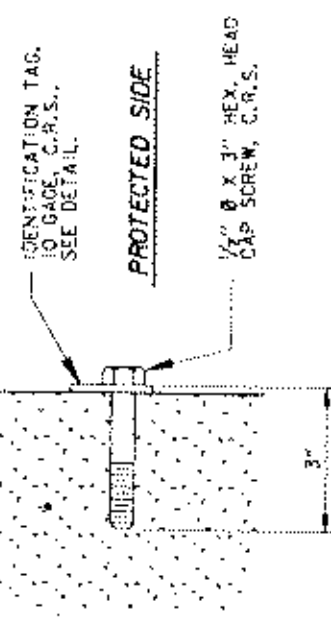
SCALE: 3/4" = 1' - 0"

NOTES:
 FOR GENERAL NOTES, SEE DWG. NO. 2.
 FOR TYPICAL CAP SECTIONS, SEE DWG. NO. 8.
 FOR LEVEL TYPICAL SECTIONS, SEE DWGS. 6 & 7.
 CONTRACTOR SHALL FORM PILING JOINTS. CONCRETE WALL AS REQUIRED BY ALIGNMENT OF SHEET PILING.
 PANEL LENGTHS SHOWN ARE BASED ON THEORETICAL DIMENSIONS. FINISH DIMENSIONS WILL VARY. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO FABRICATING FORMS.



TYPICAL ELEVATION OF SETTLEMENT REFERENCE MARKER

SCALE: 3/4" = 1' - 0"



REFERENCE BOLT

SCALE: 6" = 1' - 0"

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

17TH STREET CANAL
 EXCAVATION AND FLOODWALL PROTECTION
 CAPPING OF FLOODWALLS
 EAST SIDE LEVEE IMPROVEMENTS

MISC. JOINT DETAILS

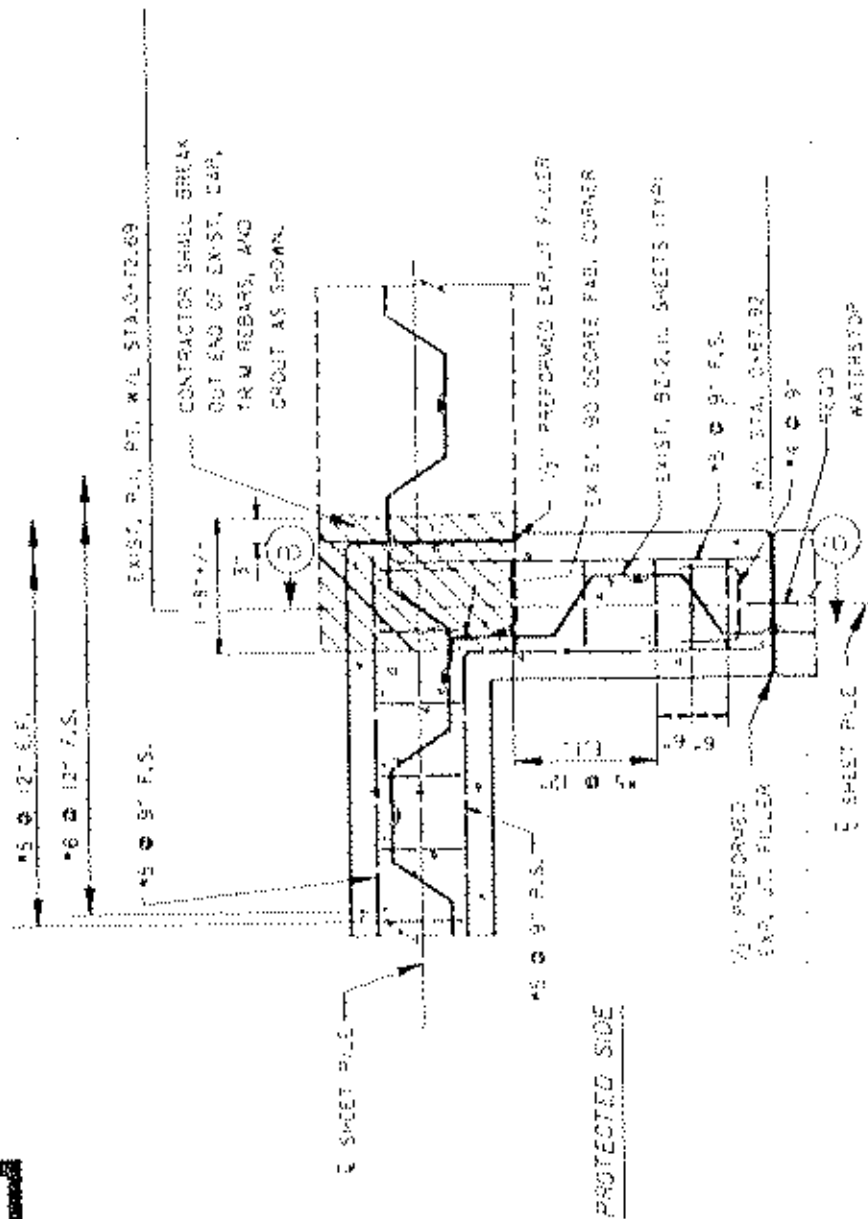
DATE: NOV. 1992
 DRAWN BY: B.J.S.
 CHECKED BY: B.J.S.
 SUBMITTED BY: B.J.S.

PROJECT NO.: DACT29-93-B-0029
 SHEET NO.: H-4-40208
 DATE: APR. 1993
 FILE NO.: H-4-40208
 DWG. NO.: 13 OF 18



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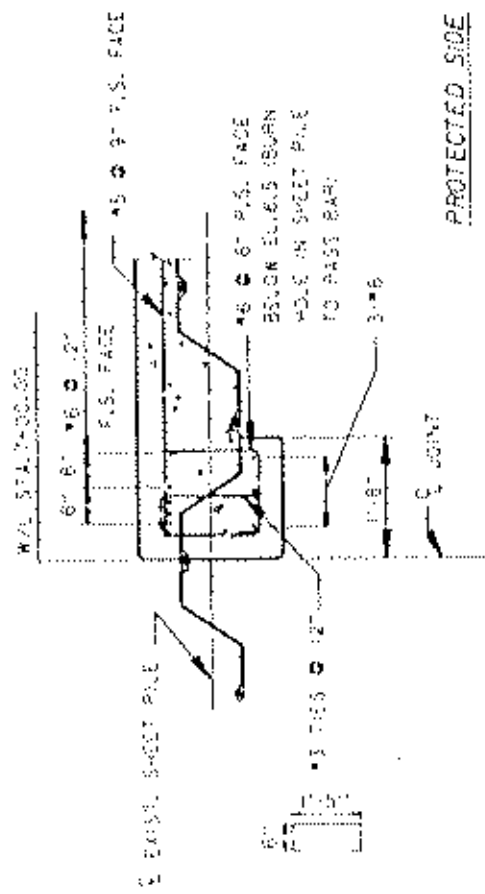
FLOOD SIDE



JOINT DETAIL, W/L STA. 0+72.69

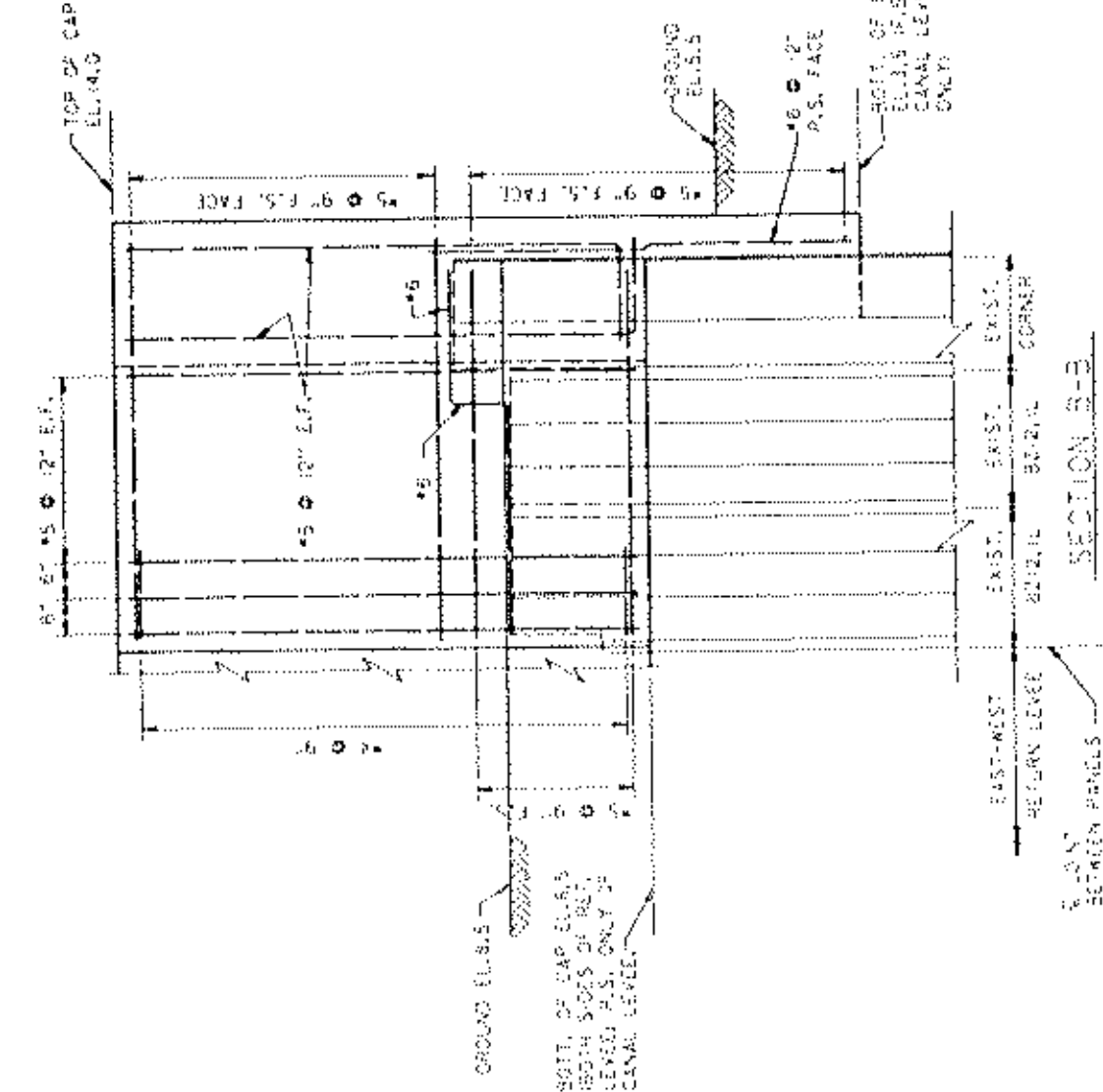
SCALE: 3/4" = 1'-0"

FLOOD SIDE



TYPICAL JOINT REINFORCING

W/L STA. 0+00.00 S-OAK
 W/L STA. 0+25.80 OPP. HAND
 W/L STA. 0+74.95 OPP. HAND AND PMA-22 SHEET PILE
 W/L STA. 79+37.69 SIMILAR EXCEPT PMA-22 SHEET PILE
 SCALE: 3/4" = 1'-0"



FOR DETAILS OF DRIVING SHEET PILE AT EXPANSION JOINTS, SEE SHEETS 13 & 14.

SCALE: 3/4" = 1'-0"

NOTES:
 1. GENERAL NOTES, SEE P.A.C. NO. 2
 2. FOR CONCRETE EXPANSION JOINTS, SEE P.A.C. NO. 3
 3. FOR REINFORCING EXPANSION JOINTS, SEE P.A.C. NO. 4
 4. FOR TYPICAL EXPANSION JOINT DETAILS, SEE P.A.C. NO. 5
 5. CONCRETE SHALL BE FORMED IN PLACE AND
 6. CONCRETE SHALL AS REQUIRED BY ALIGNMENT OF SHEET PILE.

SCALE: 3/4" = 1'-0"



U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA	
NAME: [REDACTED] TITLE: [REDACTED]	DATE: [REDACTED] APPROVED: [REDACTED]
DESIGNED BY: [REDACTED] DRAWN BY: [REDACTED] CHECKED BY: [REDACTED]	DATE: [REDACTED] PROJECT NO.: [REDACTED] SHEET NO.: [REDACTED]
PROJECT TITLE: 17TH STREET CANAL EXCAVATION AND FLOODWALL PROTECTION CAPPING OF FLOODWALLS EAST SIDE LEVEE IMPROVEMENTS	PROJECT NO.: [REDACTED] SHEET NO.: [REDACTED]
DRAWING NO.: [REDACTED] SCALE: [REDACTED]	DATE: [REDACTED]

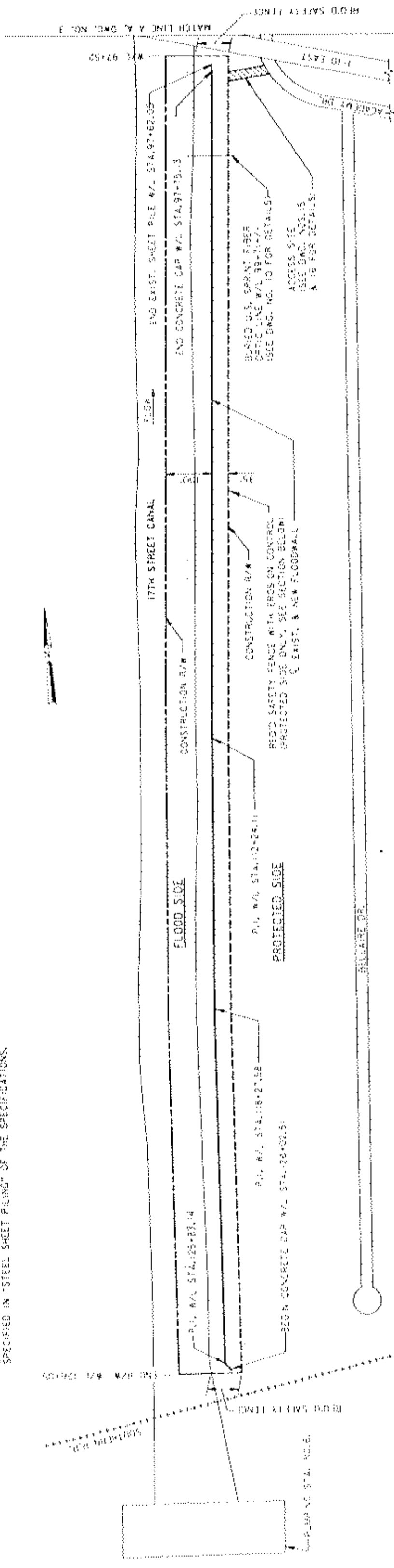


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of Your Contract**

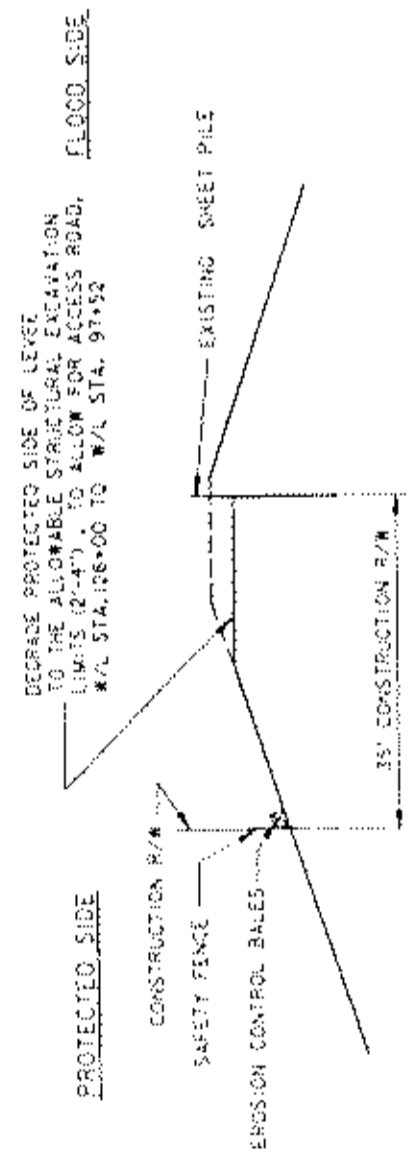
GENERAL NOTES:

1. ALL REFERENCES TO WALL LINE (W/L) REFER TO THE CENTERLINE OF THE EXISTING SHEET PILE WALL ON THE ORLEANS LEVEE OF THE 17TH STREET CANAL. STATIONINGS ALONG THE WALL IS BASED ON THE THEORETICAL WIDTH OF THE SHEETS 1812.11 AND 1825.12 ARE 22.847 (PMA#22 IS 1812.57)
2. ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D.). ELEVATION 147 U.S.C.G.L. MONUMENT 74 IS 8.77 N.G.V.D.
3. NORMAL WATER SURFACE ELEVATION RANGE IS FROM 81.15 TO 82.0 (N.G.V.D.).
4. REFERENCES TO THE PROTECTED SIDE OF THE LEVEE REFER TO THE LAND SIDE OF THE LEVEE. REFERENCES TO THE FLOOD SIDE OF THE LEVEE REFER TO THE CANAL OR LAKE SIDE OF THE LEVEE.
5. THE CONTRACTOR SHALL REMOVE THE COAL TAR EPOXY PAINT FROM THE EXISTING SHEET PILE AS SPECIFIED IN "STEEL SHEET PILING" OF THE SPECIFICATIONS.
6. THE CONTRACTOR SHALL NOTE THE CLOSE PROXIMITY OF RESIDENCES, TREES, AND UTILITIES ALONG THE ENTIRE LENGTH OF THE PROJECT SITE. HE SHALL EXERCISE EXTREME CAUTION AT ALL TIMES WHEN WORKING ON THE LEVEE AND BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE RESULTING FROM HIS OPERATIONS.
7. CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN A SAFETY FENCE AROUND THE CONSTRUCTION RIGHT-OF-WAY. SEE SPECIAL CLAUSE "SAFETY PROVISIONS".
8. SEE DRAWING 5 FOR BENCH MARK INFORMATION.

OBSTRUCTIONS TO R/W		DISPOSITION
W/L STATION (APPROXIMATE)	ITEM AND OWNER	
99+71	U.S. SPRINT FIBER OPTIC LINE	DWG. NO. 2
35+82	C.P. & L. POWER LINE	DWG. NO. 4



PLAN
SCALE 1" = 100'-0"



ACCESS AND STORAGE DETAILS
SCALE 1" = 10'-0"
ACCESS NOT SHOWN FOR CLARITY

- LEGEND**
- SHEET PILE TO BE CAPPED
 - SHEET PILE LEFT UNCAPPED
 - CONSTRUCTION R/W
 - UTILITY
 - CONSTR. R/W, SAFETY FENCE, EROSION CONTROL
 - CONSTR. R/W AND SAFETY FENCE

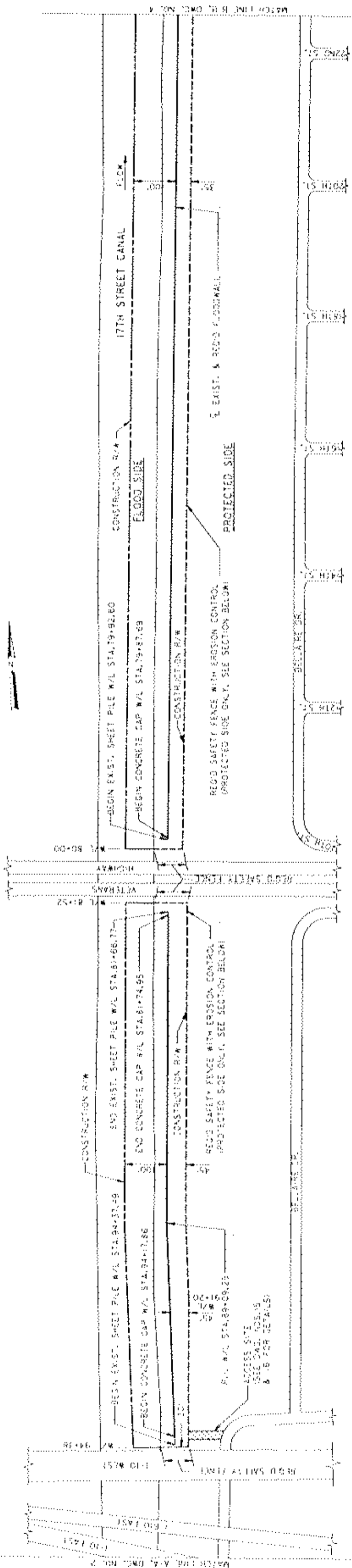
SCALE 1" = 100'

SCALE 1" = 10'

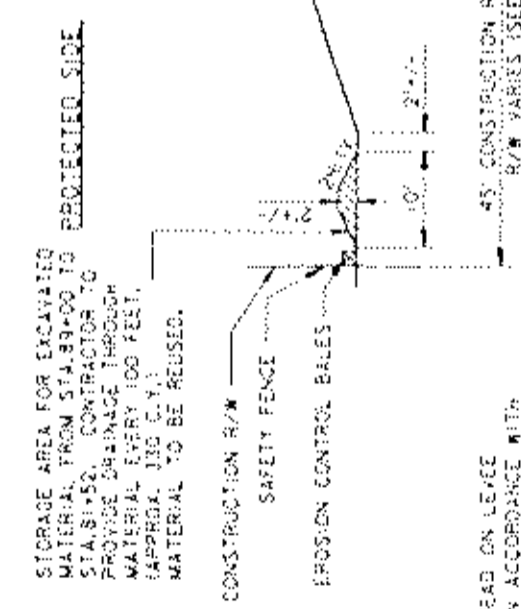
		U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA
DATE: NOV. 1992 DRAWN BY: P.M.A. CHECKED BY: M.L.S.	PROJECT NO.: 1200 SHEET NO.: 1000 DATE PLOTTED: 10/20/92	PROJECT TITLE: 17TH STREET CANAL EXCAVATION AND FLOOD WALL PROTECTION EAST SIDE LEVEE IMPROVEMENTS DRAWING NO.: H-4-40208 SHEET NO.: 2 OF 16

PLAN-1 AND GENERAL NOTES

Safety is a Part
of Your Contract

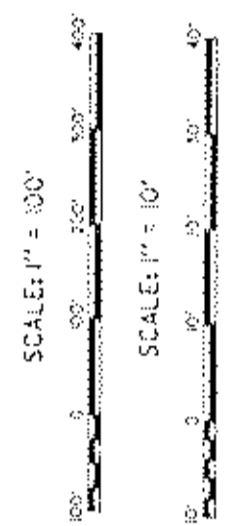


PLAN
SCALE: 1" = 100'-0"



ACCESS AND STORAGE DETAILS
SCALE: 1" = 10'-0"

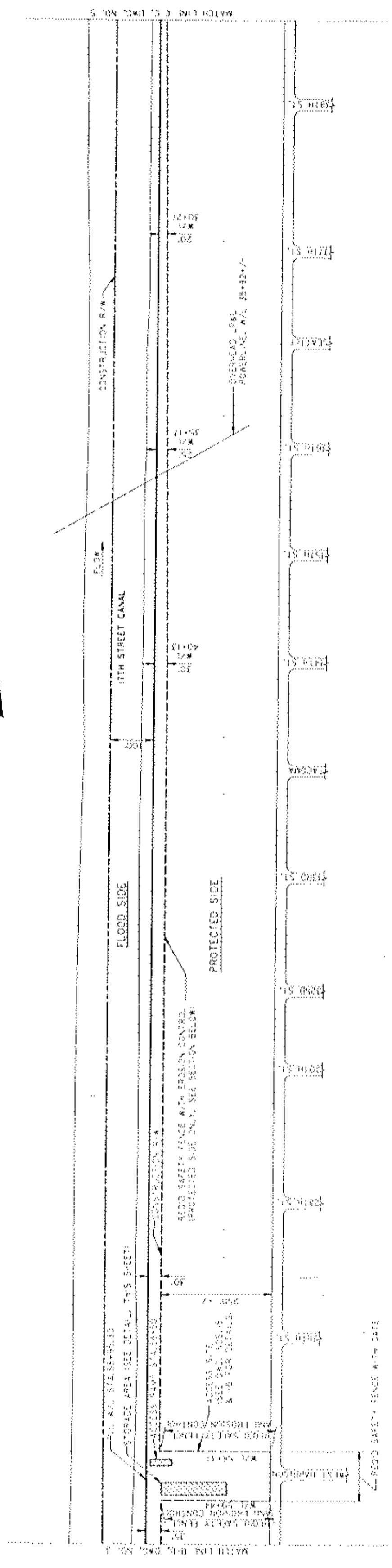
- LEGEND
- SHEET PILE TO BE CAPPED
 - SHEET PILE LEFT UNCAPPED
 - CONSTRUCTION R/W
 - UTILITY
 - CONSTR. R/W, SAFETY FENCE, EROSION CONTROL
 - CONSTR. R/W AND SAFETY FENCE



		U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA
DESIGNED BY: T.A. SPARKS DRAWN BY: P.M.A. CHECKED BY: M.L.S.	DATE: NOV. 1982 PLOT SCALE: 1/200 SHEET NO.: 1200	PROJECT: 177TH STREET CANAL HIGH LEVEL PLAN EXCAVATION AND FLOODWALL PROTECTION CAPPING OF FLOODWALLS EAST SIDE LEVEL IMPROVEMENTS PLAN-2
PROJECT NO.: DACW79-83-B-0028 SHEET NO.: 3 OF 16	DRAWING NO.: H-4-40208	DATE: NOV. 1982 PLOT SCALE: 1/200 SHEET NO.: 1200

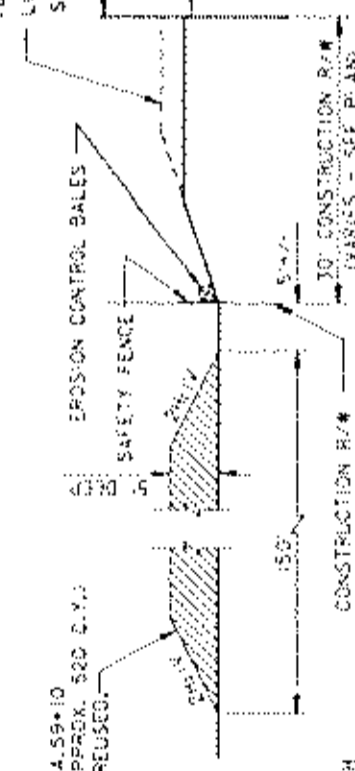


Safety is a Part
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PLAN
SCALE: 1" = 100'-0"

DECREASE PROTECTED SIDE OF LEVEE
TO THE ALLOWABLE STRUCTURAL EXCAVATION
LIMITS 12'-4" TO ALLOW FOR ACCESS ROAD.
STA. 80+00 TO STA. 40+13



STORAGE AREA STA. 59+10
TO STA. 59+40, APPROX. 500 C.Y. OF
MATERIAL TO BE REUSED.

EXCAVATED MATERIAL NOT SPREAD ON LEVEE
BACKSLOPE MUST BE HAULED IN ACCORDANCE WITH
SPEC OF THE SPECIFICATIONS AND STORED FOR
REUSE IN ACCORDANCE WITH SPECIAL CLAUSE
"OFFSITE STORAGE".
MATERIAL EXCAVATED FROM BELOW EL. 2.0 IS
TO BE HAULED IN ACCORDANCE WITH SPEC. 4.8.

ACCESS RAMP AT STA. 58+50 - SEE DWG. NO. 18 FOR DETAILS.
STA. 80+00 TO STA. 67+93 SHOWN OTHER AREAS SIMILAR.

ACCESS AND STORAGE DETAILS

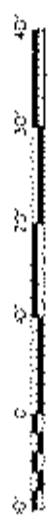
STA. 80+00 TO STA. 40+13
SCALE: 1" = 10'-0"
ACCESS NOT SHOWN FOR CLARITY

- LEGEND
- SHEET PILE TO BE CAPPED
 - SHEET PILE LEFT UNCAPPED
 - CONSTRUCTION R/W
 - UTILITY
 - CONSTR. R/W, SAFETY FENCE, EROSION CONTROL
 - CONSTR. R/W AND SAFETY FENCE

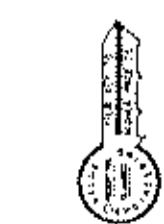
SCALE: 1" = 100'



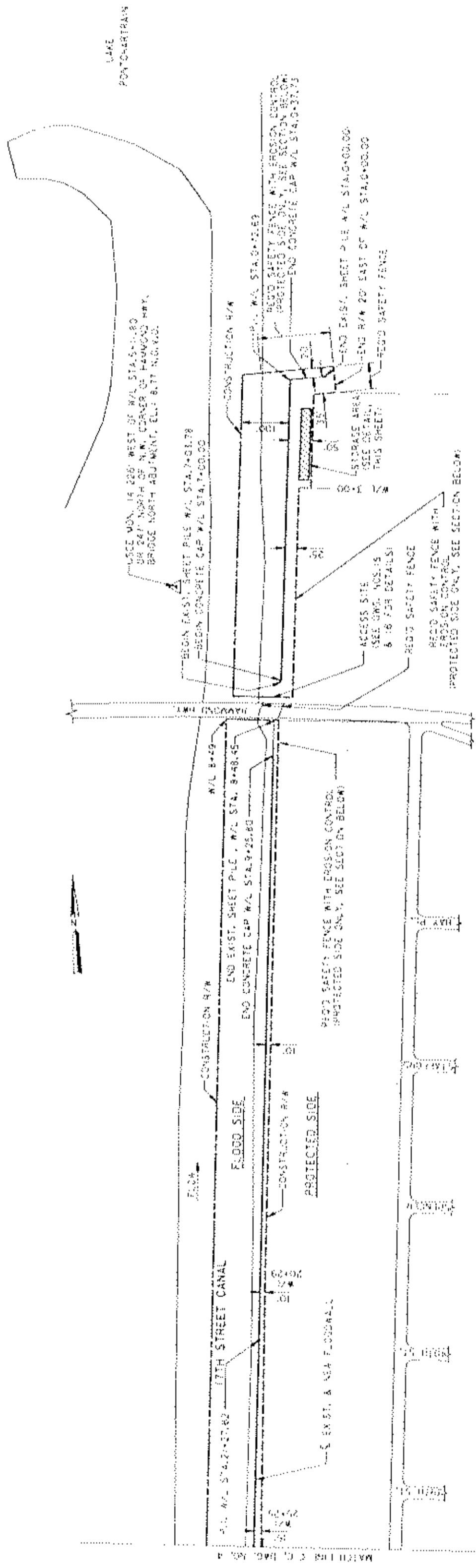
SCALE: 1" = 10'



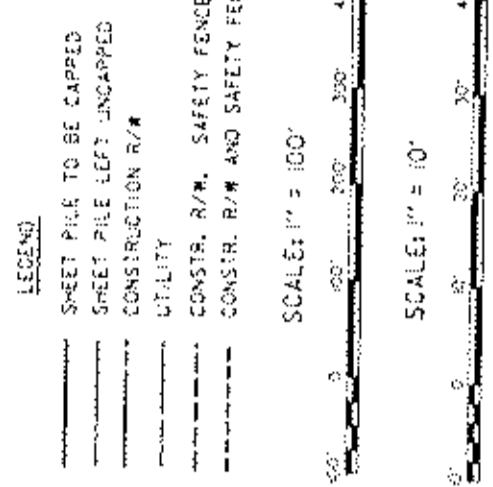
		U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA	
NAME: HIGH LEVEL PLAN DATE: NOV. 1992 DRAWN BY: P.M.R. CHECKED BY: M.L.S.	PROJECT NO.: 1200 SHEET NO.: H-4-4020B DATE: 11/92	PROJECT NO.: 1200 SHEET NO.: H-4-4020B DATE: 11/92	PROJECT NO.: 1200 SHEET NO.: H-4-4020B DATE: 11/92
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA		PROJECT NO.: 1200 SHEET NO.: H-4-4020B DATE: 11/92	
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA		PROJECT NO.: 1200 SHEET NO.: H-4-4020B DATE: 11/92	



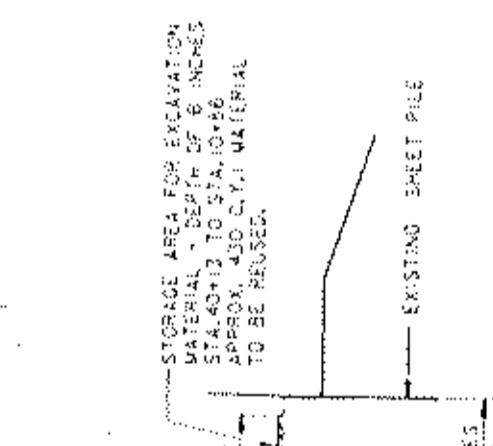
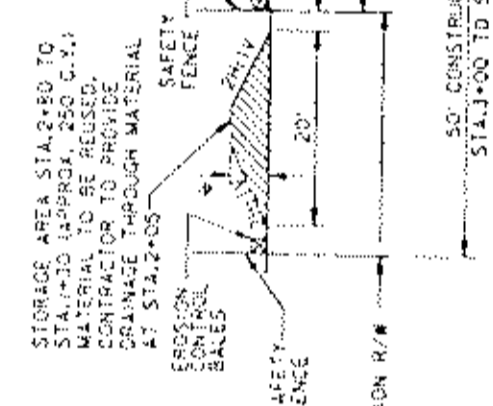
Safety is a Part
of Your Contract



PLAN
SCALE: 1" = 100'-0"



DEGRADE PROTECTED SIDE OF LEVEE TO THE ALLOWABLE STRUCTURAL EXCAVATION LIMITS (2'-0") TO ALLOW FOR ACCESS ROAD, HAMMOND HWY. TO STA. 1+00.



RETAINING WALL 27'-7" EAST OF SHEET PILE FROM STA. 7+04 TO STA. 3+35 NOT SHOWN FOR CLARITY.

EXCAVATED MATERIAL IN EXCESS OF STORAGE IN THIS REACH IS TO BE REUSED IN ACCORDANCE WITH SECTION 020 OF THE SPECIFICATIONS AND STORED FOR REUSE IN ACCORDANCE WITH THE SPECIAL CLAUSE "OFFSITE STORAGE".

MATERIAL EXCAVATED FROM BELOW ELEV. 2.0 IS TO BE HAULED IN ACCORDANCE WITH 020-4.8.

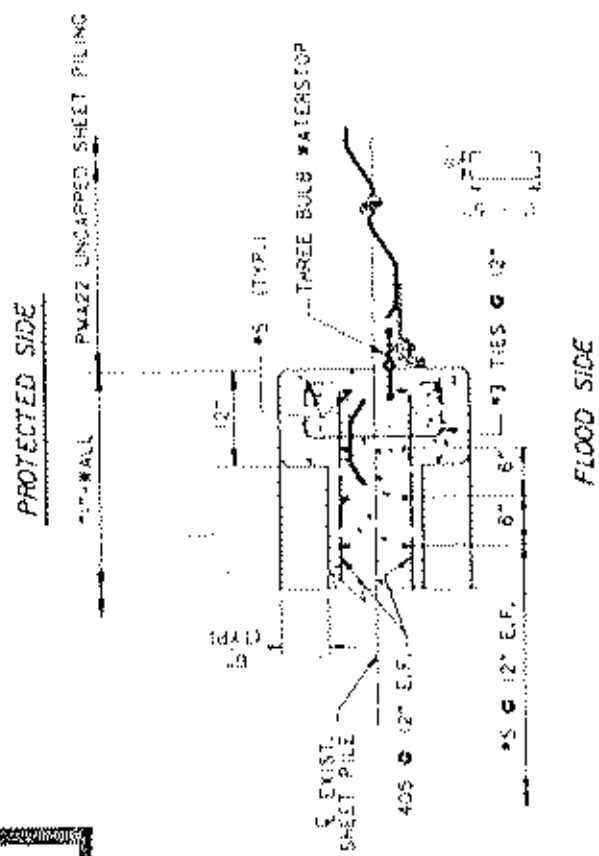
ACCESS AND STORAGE DETAILS
HAMMOND HWY. TO STA. 1+00
SCALE: 1" = 10'-0"
ACCESS NOT SHOWN ON PLAN FOR CLARITY

ACCESS AND STORAGE DETAILS
STA. 4+12 TO HAMMOND HIGHWAY
SCALE: 1" = 10'-0"
STORAGE ON LEVEE NOT SHOWN ON PLAN FOR CLARITY.

		U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA
PROJECT NO. DATE DRAWN BY CHECKED BY SCALE	DESCRIPTION DATE PROJECT NO. DATE DRAWN BY CHECKED BY SCALE	PROJECT NO. DATE DRAWN BY CHECKED BY SCALE
17TH STREET CANAL EXCAVATION AND FLOODWALL PROTECTION CAPPING OF FLOODWALLS EAST SIDE LEVEL IMPROVEMENTS PLAN-4		PROJECT NO. DATE DRAWN BY CHECKED BY SCALE
DESIGNED BY: C.E. P.M.A. CHECKED BY: M.L.S. DRAWING NO.: H-4-40208 SCALE: 1" = 10'-0" DATE: NOV. 1998		PROJECT NO.: DACR79-93-R-0005 DATE: NOV. 1998 DRAWN BY: M.L.S. CHECKED BY: M.L.S. SCALE: 1" = 10'-0" DATE: NOV. 1998

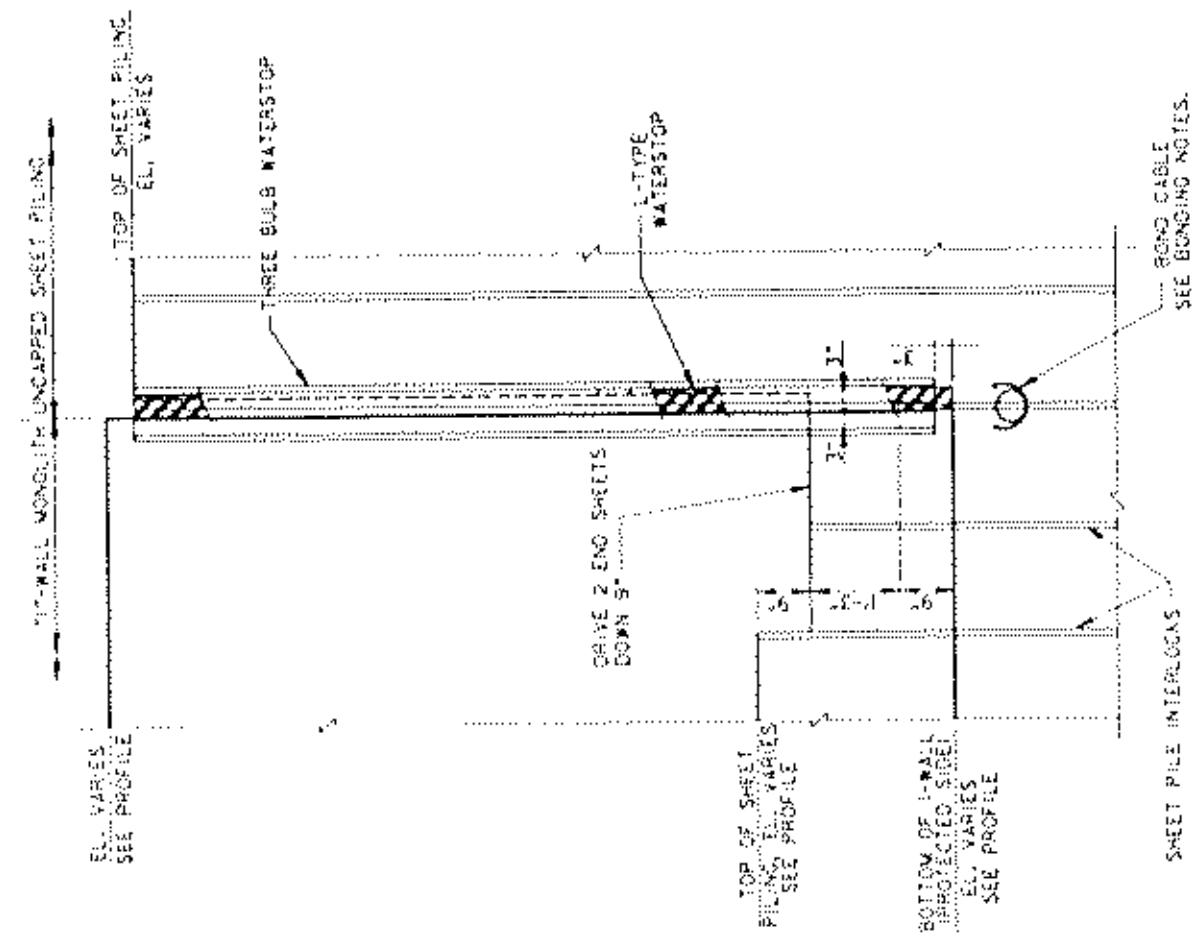


Safety is a Part of Your Contract

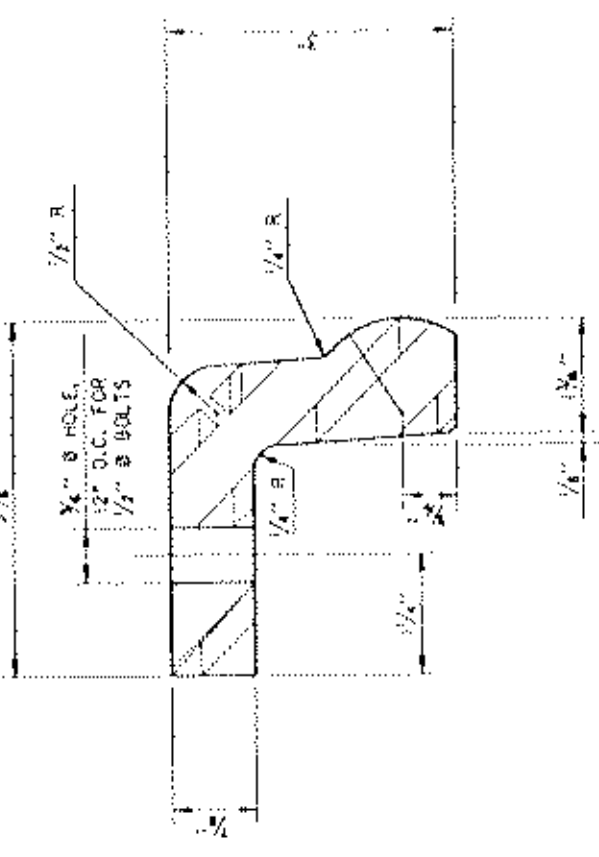


TRANSITION - 12" WALL TO UNCAPPED SHEET PILING
TYPICAL REINFORCING - TYPE I 1-WALL
SCALE: 1/2" = 1'-0"

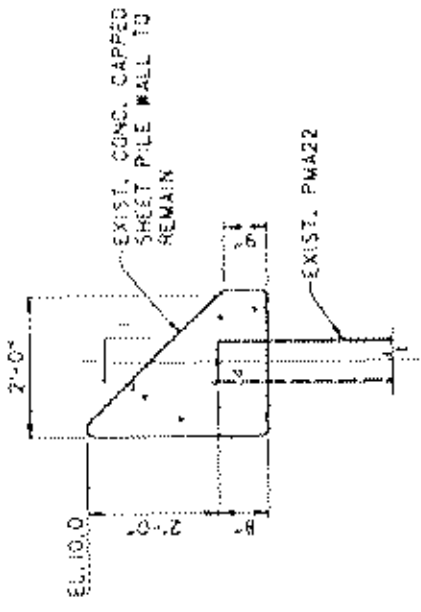
ALL STEEL REINFORCEMENT SHALL BE STAINLESS STEEL OR GALVANIZED STEEL.
ALL STEEL SHALL BE SUPPLIED BY THE CONTRACTOR.



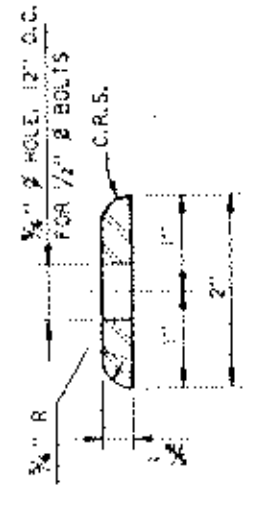
UNCAPPED SHEET PILING TO "12" WALL
SCALE: 3/4" = 1'-0"



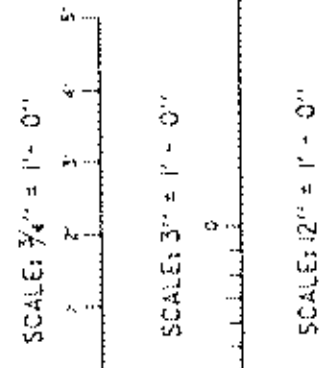
MODIFIED "L" TYPE WATERSTOP
SCALE: 12" = 1'-0"



EXISTING CONCRETE CAPPING
VICINITY VETERANS HWY.
SCALE: 3/4" = 1'-0"



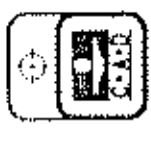
SEAL RETAINING BAR
SCALE: 12" = 1'-0"



NOTES:
1. GENERAL NOTES, SEE DRAWING NO. 2.
2. FOR TYPICAL CAP SECTIONS, SEE DRAWING NO. 3.
3. FOR TYPICAL JOINT SECTIONS, SEE DRAWING NO. 4.
4. FOR TYPICAL EXPANSION JOINT DETAILS, SEE DRAWINGS 13 AND 14.

REMARKS:
1. INSTALL BOND CABLE AT ALL EXPANSION JOINTS.
2. BOND CABLE SHALL HAVE AN 8 INCH DIAMETER LOOP TO ALLOW FOR STRESSES. BOND CABLE SHALL BE WELDED AS SPECIFIED TO ADJACENT SHEET PILES.
3. BELOW BOTTOM OF CONCRETE CAP, WELDED CONNECTIONS SHALL BE COATED WITH SPLICING EPoxy TO OBTAIN MOISTURE PROOF JOINT. SEE SPECIFICATIONS.
4. CONTRACTOR SHALL PROTECT BOND CABLE.

STATION	DESCRIPTION	DATE	APPROVED
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAW OFFICE OF THE DISTRICT ENGINEER 177H STREET CANAL EXCAVATION AND FLOODWALL PROTECTION CAPPING OF FLOODWALLS EAST SIDE LEVEE IMPROVEMENTS			
DESIGNED BY	DATE	PLANT SCALE	PLOT DATE
CHECKED BY	NO. 1997	1/8"	1/8
PROJECT NO.	16	SHEET NO.	H-4-40208
CONTRACT NO.	DAW29-91-B-0075	DATE	DEC 11 1991



P-10

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
030

PAGE OF PAGES
1 2

2. AMENDMENT/MODIFICATION NO.
P00010

3. EFFECTIVE DATE
09/16/94

4. REQUISITION/PURCHASE REG. NO.

5. PROJECT NO. (if applicable)
UC001 C1R04

SUBMITTED BY CODE
US ARMY ENGR DIST NEW ORLEANS
PO BOX 60267
NEW ORLEANS LA 70160-0267

ISSUE1

7. ADMINISTERED BY (if other than Item 4) CODE ADMIN1
US ARMY ENGR DIST, NEW ORLEANS
ATTN CELMN-CT
PO BOX 60267
NEW ORLEANS LA 70160-0267

Molly N. Block SC2(504) 862-2879

6. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00008588

PITMAN CONSTRUCTION CO INC
110 VETERANS BLVD., SUITE 325
METAIRIE LA 70005

8A. AMENDMENT OF SOLICITATION NO.

8B. DATED (SEE ITEM 11)
NOV - 2 1994

10A. MODIFICATION OF CONTRACT/ORDER NO.
DACW29-93-C-0081

10B. DATED (SEE ITEM 13)
06/28/93

CODE OPPP1 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required) Mod Obligated Amount US \$0.00
See Continuing Contract Clause H-24

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
Section 1, Contract Clauses, Clause I.86 CHANGES

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
The following change is made to the above numbered contract for Lake Pontchartrain, LA & Vicinity, Hurricane Protection Project, High Level Plan, 17th St. Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, to implement the emergency flood protection plan.

15A. NAME AND TITLE OF SIGNER (Type or print)
15B. UNITED STATES OF AMERICA
15C. DATE SIGNED
16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Chester Ashley ACO
16B. DATE SIGNED
9-16-94

CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

BY *Chester Ashley*
(Signature of Contracting Officer)

Page 2 of 2
DACM29-93-C-0081

CHANGE TO THE BIDDING SCHEDULE: There are no changes to the Bidding Schedule.

CHANGE TO THE SPECIFICATIONS: Add the following new paragraph to Section C2E - STEEL SHEET PILING:

*C2E-12.4 Work due to the implementation of the emergency flood protection plan will not be measured for payment. Payment for implementation of the flood protection plan will be made at the lump sum price for 'Flood Protection Plan'. Payment for this item shall constitute compensation for all costs associated with the flood protection plan, including mobilization, implementation and return to original status.

CHANGES TO THE DRAWINGS:
There are no changes to the drawings.

You are directed to immediately proceed with the work described by this unpriced change order. No partial payment will be made under this modification. Payment for this action will be directed under a separate modification. A formal modification will be issued containing the agreed upon price adjustment.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE 011	PAGE OF PAGES 1 1
2. AMENDMENT/MODIFICATION NO. P00009		3. EFFECTIVE DATE 09/16/94	4. REQUISITION/PURCHASE ORDER NO.	5. CONTRACT NO. (if applicable)	
6. ISSUED BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Kelly M. Perez		7. CODE ISSUE1	8. ADMINISTERED BY (if other than Item 6) CELMN-CT-CC MS. WHITTEN PHONE: (504) 862-1899		
9. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) PITTMAN CONSTRUCTION CO INC 110 VETERANS BLVD., SUITE 325 METAIRIE LA 70005		Vendor ID: 00008588		10. SA. AMENDMENT OF SOLICITATION NO.	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS	(X)	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
	X	10A. MODIFICATION OF CONTRACT/ORDER NO. DACW29-93-C-0081
		10B. DATED (SEE ITEM 11) 06/28/93
CODE OPPP1	FACILITY CODE	

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

ACCOUNTING AND APPROPRIATION DATA (if required) Mod Obligated Amount US \$564,264.00
INCREASE FUNDS BY \$564,264.00 96X3122 BEC21110008088C

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) CONTINUING CONTRACT CLAUSE H-24

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
The above numbered contract for Lake Pontchartrain, LA and Vicinity, MPP, MLP, 17th Street Outfall Canal, Flood Protection Improvement, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, is hereby modified as follows:

In accordance with Special Clause H-24, an increase of \$564,264.00 is available for payment.

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

17A. NAME AND TITLE OF SIGNER (Type or print) CONTRACTOR/OFFEROR		17B. DATE SIGNED	18A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Diane K. Pecoul 002	18B. UNITED STATES OF AMERICA BY <i>Diane K. Pecoul</i> (Signature of Contracting Officer)	18C. DATE SIGNED 16 Sep 94
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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
051
PAGE OF PAGES
1 2

2. AMENDMENT/MODIFICATION NO.
P00007
3. EFFECTIVE DATE
05/26/94
4. REQUISITION/PURCHASE REQ. NO.
5. PROJECT NO. (if applicable)
TE-003

ISSUED BY
US ARMY ENGR DIST NEW ORLEANS
PO BOX 60267
NEW ORLEANS LA 70160-0267
Cynthia Whitten
8C5(504) 862-1899
6. ADMINISTERED BY
CELIM-CT-CC NO. WHITTEN
PHONE: (504) 862-1899
JUL 29 1994

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00006588
PITTMAN CONSTRUCTION CO INC
110 VETERANS BLVD., SUITE 325
METAIRIE LA 70005
9. AMENDMENT OF SOLICITATION NO.
10. DATED (SEE ITEM 14)
10A. MODIFICATION OF CONTRACT/ORDER NO.
DAC129-93-C-0081
10B. DATED (SEE ITEM 14)
06/28/93

CODE OPPP1 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)
Mod Obligated Amount US \$0.00
No additional funds are required.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
CC 1.96 Default
 B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (d).
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
 D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return original copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
In view of delays in completion of work for the above numbered contract for Lake Pontchartrain, Louisiana, and Vicinity, Hurricane Protection Project, High Level Plan, 17th Street Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, due to causes beyond the control and without the fault or negligence of the contractor, namely, unusually severe weather during the period 1 February 1994 through 30 April 1994, this contract is modified as follows:
Except as provided herein, all terms and conditions of the document referenced in item 8A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)
A. E. Pittman, President
15B. CONTRACTOR APPROVAL
[Signature]
15C. DATE SIGNED
7/18/94
15A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Chester Ashley, ACB 007
15B. UNITED STATES OF AMERICA
BY *[Signature]*
(Signature of Contracting Officer)
15C. DATE SIGNED
7-22-94

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE 090	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. P00006		3. EFFECTIVE DATE 05/13/94	4. REQUISITION/PURCHASE REG. NO.		5. PROJECT NO. (if applicable) CAN-01
ISSUED BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Cynthia Whitten		CODE ISSUE1	7. ADMINISTERED BY (if other than item 6) CELMN-CT-CC MS. WHITTEN PHONE: (504) 862-1899		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) PITTMAN CONSTRUCTION CO INC 110 VETERANS BLVD., SUITE 325 METAIRIE LA 70005				Vendor ID: 00008588	9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 13) MAY 26 1994
CODE OPPP1		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. DACU29-93-C-0081	10B. DATED (SEE ITEM 13) 06/28/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)
No additional funds are required.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

<input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input checked="" type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The above numbered contract for Lake Pontchartrain, LA and Vicinity, HPP, HLP, 17th Street Outfall Canal, Flood Protection Improvement, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, is hereby modified as follows:

See Attached.

Except as provided herein, all terms and conditions of the document referenced in item 8A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) 15A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Diane K. Pecout 002		15B. UNITED STATES OF AMERICA BY <i>Diane K. Pecout</i> (Signature of Contracting Officer)		15C. DATE SIGNED 17 Mar 94
CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		

SF 30 CONTINUATION SHEET

14. Description of Amendment/Modification (Cont.)

1. On P00005, Block 14, page 2, the Special Clause number of ACCEPTANCE OF WORK should be changed from: H-33 to read: H-35.

2. On P00005, Block 14, page 2, the B/L Station Limits of Reach Numbers 3 and 4 should be changed from: 79+87.69 and 9+17.86 to read: 79+87.69 and 94+17.86

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE 033	PAGE OF PAGES 1 2
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2. AMENDMENT/MODIFICATION NO. P00005	3. EFFECTIVE DATE 03/31/94	4. REQUISITION/PURCHASE REG. NO.	5. PROJECT NO. (if applicable) CIN-02
ED BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Cynthia Whitten	CODE ISSUE1	7. ADMINISTERED BY (if other than issue) CELMN-CY-CC MS. WHITTEN PHONE: (504) 862-1899	

MAY - 6 1994

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00008588 PITTMAN CONSTRUCTION CO INC 110 VETERANS BLVD., SUITE 325 METAIRIE LA 70005	00	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
	X	10A. MODIFICATION OF CONTRACT/ORDER NO. DACM29-93-C-0081
		10B. DATED (SEE ITEM 13) 06/28/93
CODE OPPP1	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required) Mod Obligated Amount US \$0.00
No additional funds are required.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. CC 1.86 Changes
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return original copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The following change is made to the above numbered contract for Lake Pontchartrain LA and Vicinity, Hurricane Protection Project, High Level Plan, 17th Street Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, to provide for acceptance of the project in five reaches.

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) A.E. PITTMAN PRESIDENT	15B. DATE SIGNED 4/15/94	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Diane K. Pecoul 007	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED 29 Apr 94
(Signature of person authorized to sign)		(Signature of Contracting Officer)		

14. Description of Amendment/Modification

CHANGES TO THE BIDDING SCHEDULE: There are no changes to the bidding schedule.

CHANGES TO THE CONTRACT SPECIFICATIONS: Add the following new special clause:

"H-33 ACCEPTANCE OF WORK. Pursuant to the contract clause entitled 'INSPECTION OF CONSTRUCTION (JUL 1986)' the contract shall be accepted in reaches as follows:

REACH NUMBER	B/L STATION LIMITS
1	0+37.73 TO 7+00.00
2	9+55.99 TO 58+00.00
3	58+00.00 TO 79.87.69
4	81+74.95 TO 9+17.86
5	97+75.13 TO 126+01.51"

CHANGES TO THE CONTRACT DRAWINGS: There are no changes to the contract drawings.

CHANGES TO THE CONTRACT PRICE: The contract price remains unchanged.

CHANGES TO THE CONTRACT TIME: The contract time remains unchanged.

It is further understood and agreed that this adjustment constitutes compensation in full on behalf of the contractor, its subcontractors and suppliers for all costs and markups directly or indirectly attributable to the changes ordered for all delays, impacts, and extended overhead related thereto, and for performance of the change within the time frame stated.

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
051

PAGE OF PAGES
1 2

2. AMENDMENT/MODIFICATION NO.
P00004

3. EFFECTIVE DATE
02/14/94

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. (if applicable)
TE-002

D BY
US ARMY ENGR DIST NEW ORLEANS
PO BOX 60267
NEW ORLEANS LA 70160-0267

CODE
ISSUE1

7. ADMINISTERED BY (if other than item 6)

CODE
modcw

CELNW-CT-CC MS. WHITTEN
PHONE: (504) 862-1899

Cynthia Whitten SCS(504) 862-1899

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00008588

PITTMAN CONSTRUCTION CO INC
PO BOX 8116
NEW ORLEANS LA 70182

9A. AMENDMENT OF SOLICITATION NO.
9B. DATED (SEE ITEM 11) APR - 6 1994
10A. MODIFICATION OF CONTRACT/ORDER NO. DACW29-93-C-0081
10B. DATED (SEE ITEM 13) 06/28/93

CODE OPPP1 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)

Mod Obligated Amount US \$0.00

No additional funds are required.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
CC 1.96 Default

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return Original copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

In view of delays in completion of work for the above numbered contract for Lake Pontchartrain, Louisiana, and Vicinity, Hurricane Protection Project, High Level Plan, 17th Street Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, due to causes beyond the control and without the fault or negligence of the contractor, namely, unusually severe weather during the period 1 November 1993 through 31 January 1994, this contract is modified as follow:

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

A.E. Pittman
PRES
CONTRACTING OFFICER

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

Chester Ashley, ACO 007

15C. DATE SIGNED

3/28/94

16B. UNITED STATES OF AMERICA

BY

Chester Ashley
(Signature of Contracting Officer)

16C. DATE SIGNED

3-27-94

14. Description of Amendment/Modification (Cont.)

CHANGES TO THE BIDDING SCHEDULE: There are no changes to the bidding schedule.

CHANGES TO THE CONTRACT SPECIFICATIONS: There are no changes to the specifications.

CHANGES TO THE CONTRACT DRAWINGS: There are no changes to the contract drawings.

CHANGES TO THE CONTRACT PRICE: The contract price remains unchanged.

CHANGES TO THE CONTRACT TIME: The contract time is extended by twenty (20) calendar days due to unusually severe weather.

It is further understood and agreed that this adjustment constitutes compensation in full on behalf of the contractor, its subcontractors and suppliers for all costs and markups directly or indirectly attributable to the change, for all delays, impacts, and extended overhead related thereto, and for performance of the work within the time period of this modification related to unusually severe weather.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE 011	PAGE OF PAGES 1 1
2. AMENDMENT/MODIFICATION NO. P00003		3. EFFECTIVE DATE 02/16/94	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (if applicable) FH-002	
BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Cynthia Whitten		CODE ISSUE1	7. ADMINISTERED BY (if other than item 6) CELMN-CT-CC MS. WHITTEN PHONE: (504) 862-1899		CODE mod

MAR - 7 1994

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00008588		9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11)
PITTHAM CONSTRUCTION CO INC PO BOX 8116 NEW ORLEANS LA 70182		
CODE OPPP1 FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. DACW29-93-C-0081
		10B. DATED (SEE ITEM 13) 06/28/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required) Mod Obligated Amount US \$1,000,000.00
INCREASE FUNDS BY \$1,000,000.00 UNDER 96X3122 BEC21111RLMOSSC

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)
CONTINUING CONTRACT CLAUSE H-24

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The above numbered contract for Lake Pontchartrain, LA and Vicinity, NPP, HLP, 17th Street Outfall Canal, Flood Protection Improvement, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, is hereby modified as follows:
In accordance with Special Clause H-24, an increase of \$1,000,000.00 is available for payment.
The undersigned assumes the duties of the Contracting Officer for this action only.

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) CONTRACTOR/OFFEROR	15B. DATE SIGNED	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Diane K. Pecoul 002	16B. UNITED STATES OF AMERICA BY <i>Diane K. Pecoul</i> (Signature of Contracting Officer)	16C. DATE SIGNED 16 Feb 94
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MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Contract DACW29-93-C-0081, Lake Pontchartrain, LA, and Vicinity, HPP, HLP, 17th Street Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, Funding Mod

1. Please increase funds available by \$1,000,000.00 in accordance with Special Clause H-24. This change is assigned CIN FM-002.

DISTRIBUTION	DATE	APPROVAL	DISAPPROVAL	REMARKS
Project Manager (Program Funds)	2-11-94	<u>C. Ritter</u>		
PP-P (Certify)	2-11-94	<i>D. Kunn</i>		
(Commit F&A Funds)	2/11/94	<i>[Signature]</i>		
Contracting Div (SAACONS/Review)	2/16/94	<i>dhp</i>		
Contracting Ofcr (Approve)	2/16/94	<i>dhp</i>		
(Obligate F&A Funds)	2/16/94	<i>[Signature]</i>		
Contracting Div (Distrib)				

2. POC is Judy Ulm, X2944.

for [Signature]
RICHARD T. HILL
Chief, Construction Division

Organization Code VD
Accounting Element 284
96X3122 - BEC21 11 1R LN OSSC \$1,000,000.00 Increase

Previously avail. \$1,000,000.00
Total to date \$2,000,000.00

DISTRIBUTION:

CELMN-CD-NO CELMN-RM-FT
CELMN-PP-P CELMN-CD-CM (Patrick) (2)
CELMN-PP (Ritter) CELMN-CD-CC (Schick)
CELMN-RM-FE

Date 2/11/94
Funds Available: 1,000,000.00
Appropriation: 96X3122
 Committed Obligated
for Bureau Work, F & A Officer
[Signature]
MAR 4 1994

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE 011 PAGE OF PAGES 1 1

2. AMENDMENT/MODIFICATION NO. P00002 3. EFFECTIVE DATE 11/16/93 4. REQUISITION/PURCHASE REQ. NO. 5. PROJECT NO. (if applicable) FM-001 6. BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Cynthia Whitten SCS 7. ADMINISTERED BY (if other than item 6) CELMN-CT-CC MS. WHITTEN PHONE: (504) 862-2882

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00008588 PITTMAN CONSTRUCTION CO INC PO BOX 8116 NEW ORLEANS LA 70182 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. DACW29-93-C-0081 10B. DATED (SEE ITEM 13) 06/28/93

CODE OPPP1 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required) Mod Obligated Amount US \$650,000.00 INCREASE FUNDS AVAILABLE BY \$650,000.00 96X3122 BEC2111RLN0SSC

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: D. OTHER (Specify type of modification and authority) CONTINUING CONTRACTS H-24

E. IMPORTANT: Contractor is not, is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The above numbered contract for Lake Pontchartrain, LA and Vicinity, HPP, HLP, 17th Street Outfall Canal, Flood Protection Improvement, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, is hereby modified as follows:

In accordance with Special Clause H-24, an increase of \$650,000.00 is available for payment.

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) 15B. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Diane K. Pecoul 002 15C. DATE SIGNED 15D. UNITED STATES OF AMERICA BY Diane K. Pecoul (Signature of Contracting Officer) 15E. DATE SIGNED 17 Nov 93

MEMORANDUM FOR SEE DISTRIBUTION

OBJECT: Contract DACW29-93-C-0081, Lake Pontchartrain, LA, and Vicinity, HPP, HLP, 17th Street Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, Funding Mod

1. Please increase funds available by \$650,000.00 in accordance with Special Clause H-24. This change is assigned CIN FM-001.

DISTRIBUTION	DATE	APPROVAL	DISAPPROVAL	REMARKS
Project Manager (Program Funds)	16 Nov 93	<u>C. Ritter</u>		
PP-P (Certify)	16 Nov 93	<i>A. Hume</i>		
(Commit F&A Funds)	16 Nov 93	<i>Jr</i>		
Contracting Div (SAACONS/Review)	17 Nov 93	<i>dy</i>		
Contracting Ofcr (Approve)	17 Nov 93	<i>dy</i>		
(Obligate F&A Funds)	17 Nov 93	<i>Jr</i>		
Contracting Div (Distrib)				

2. POC is Judy Ulm, X2944.

for *Richard T. Hill*
 RICHARD T. HILL
 Chief, Construction Division

Organization Code VB
 Accounting Element 284
 96X3122 - BEC21 11 1R LN OSSC \$650,000.00 Increase

Previously avail. \$ 350,000.00
 Total to date \$1,000,000.00

DISTRIBUTION:
 CELMN-CD-NO CELMN-RM-FT
 CELMN-PP-P CELMN-CD-CH (Patrick)(2)
 CELMN-PP (Ritter) CELMN-CD-CC (Schick)
 CELMN-RM-FE

Date 11/16/93
 Funds Available: 650,000.00
 Appropriation: 96X3122
 Comm Mod... Obligated
 for the water, F & A Officer
J. Muller
 Installation Accounts Clerk

J. Muller
 11/17

2. AMENDMENT/MODIFICATION NO. P00001
 3. EFFECTIVE DATE 11/16/93
 4. REQUISITION/PURCHASE REQ. NO.
 5. PROJECT NO. (If applicable) TE-001
 6. ORDER BY CODE ISSUE1
 7. ADMINISTERED BY (If other than Item 6) CODE modcw
 US ARMY ENGR DIST NEW ORLEANS
 PO BOX 60267
 NEW ORLEANS LA 70160-0267
 Cynthia Whitten SCS
 CELMN-CT-CC MS. WHITTEN
 PHONE: (504) 862-2882
DEC 13 1993

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00008588
 PITTMAN CONSTRUCTION CO INC
 PO BOX 8116
 NEW ORLEANS LA 70182
 9A. AMENDMENT OF SOLICITATION NO.
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. DACW29-93-C-0081
 10B. DATED (SEE ITEM 13) 06/28/93
 CODE OPPP1 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS
 The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.
 Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.
 12. ACCOUNTING AND APPROPRIATION DATA (If required) Mod Obligated Amount US \$0.00
 No additional funds are required.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.
 A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
 CC I.96 Default
 B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
 D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return Original copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
 In view of delays in completion of work for the above numbered contract for Lake Pontchartrain, Louisiana, and Vicinity, Hurricane Protection Project, High Level Plan, 17th Street Outfall Canal, Flood Protection Improvement Project, Capping of Floodwalls, East Side Improvements, Orleans Parish, LA, due to causes beyond the control and without the fault or negligence of the contractor, namely, unusually severe weather during the period 10 August 1993 through 31 October 1993, this contract is modified as follow:
 Except as provided herein, all terms and conditions of the document referenced in Item 8A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) A. E. Pittman, President
 15B. DATE SIGNED 11/24/93
 15C. UNITED STATES OF AMERICA
 15D. BY Chester Ashley (Signature of Contracting Officer)
 15E. DATE SIGNED 12-6-93
 15A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Chester Ashley, ACD 007

14. Description of Amendment/Modification (Cont.)

CHANGES TO THE BIDDING SCHEDULE: There are no changes to the bidding schedule.

CHANGES TO THE CONTRACT SPECIFICATIONS: There are no changes to the specifications.

CHANGES TO THE CONTRACT DRAWINGS: There are no changes to the contract drawings.

CHANGES TO THE CONTRACT PRICE: The contract price remains unchanged.

CHANGES TO THE CONTRACT TIME: The contract time is extended by two (2) calendar days due to unusually severe weather.

It is further understood and agreed that this adjustment constitutes compensation in full on behalf of the contractor, its subcontractors and suppliers for all costs and markups directly or indirectly attributable to the change, for all delays, impacts, and extended overhead related thereto, and for performance of the work within the time period of this modification related to unusually severe weather.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
PAGE OF PAGES
1 8

2. AMENDMENT/MODIFICATION NO. 0002		3. EFFECTIVE DATE 05/28/93		4. REQUISITION/PURCHASE REQ. NO. ED0000-3336-0063		5. PROJECT NO. (if applicable) dkn	
6. ISSUED BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Molly M. Block		CODE ISSUE1		7. ADMINISTERED BY (if other than Item 6) US ARMY ENGR DIST, NEW ORLEANS ATTN CELMN-CT PO BOX 60267 NEW ORLEANS LA 70160-0267		CODE ADMIN1	
		SC2 (504)862-2879					

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		<input checked="" type="checkbox"/> 9A. AMENDMENT OF SOLICITATION NO. DACW29-93-B-0025 <input type="checkbox"/> 9B. DATED (SEE ITEM 11) 04/21/93 <input type="checkbox"/> 10A. MODIFICATION OF CONTRACT/ORDER NO. <input type="checkbox"/> 10B. DATED (SEE ITEM 13)
CODE OMR68	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

<input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

PLANS AND SPECIFICATIONS FOR LAKE PONTCHARTRAIN LA & VICINITY, HURRICANE PROTECTION PROJECT, HIGH LEVEL PLAN, 17TH ST. OUTFALL CANAL, FLOOD PROTECTION IMPROVEMENT PROJECT, CAPPING OF FLOODWALLS, EAST SIDE IMPROVEMENTS, ORLEANS PARISH, LA, ARE HEREBY AMENDED AS FOLLOWS:

BID OPENING DATE

BID OPENING DATE AND TIME OF 2 JUNE 1993, HAS BEEN CHANGED AND WILL NOW OPEN ON 9 JUNE 1993, 2:00 P.M., LOCAL TIME AT PLACE OF BID OPENING.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) CONTRACTOR/OFFEROR		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) UNITED STATES OF AMERICA	
15C. DATE SIGNED		18C. DATE SIGNED	
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

BID SCHEDULE

Delete page B-1 in its entirety and substitute the attached revised page B-1 therefor.

SECTION C

(1) Page C2A-3, paragraph C2A-7(5). Delete the first four lines in their entirety and substitute "The Contracting Officer will require frequent use of" therefor.

(2) Page C2C-4, paragraph C2C-4.9. Delete the last line in its entirety and substitute the following therefor.

"Government and to the Louisiana Department of Environmental Quality (LADEQ). Proof of acceptance and conditions and said acceptance shall be submitted to the Contracting Officer prior to the removal of any muck from the job site. Any required permits for the disposal shall be obtained by the Contractor at his expense. The LADEQ point of contact is Mr. Gerald Mathes, (504)-765-0249."

(3) Page C2E-1, paragraph C2E-1. In the 4th line add "and" between "grade," and "constructing". Starting in the 7th line and ending in the 8th line, delete "and removing coal tar epoxy paint from the sheet pile".

(4) Page C2E-2, paragraphs C2E-2.6 and C2E-3.3. Delete these paragraphs in their entirety and substitute "C2E-2.6 Reserved." and "C2E-3.3 Reserved." therefor respectively.

(5) Page C2E-3, paragraph C2E-3.6(1). In the first line, after the word "installation" add ", removal" .

(6) Page C2E-4.

a. Subparagraph C2E-4.1(6). Delete this paragraph in its entirety and substitute "(6) Removal of existing coal tar epoxy paint where stud anchors are placed."

b. Paragraph C2E-5.1. Delete the 3rd and 4th lines in their entirety and substitute "to be capped only where welded steel studs will be placed."

c. Paragraph C2E-5.3.2.3. In the 2nd line, change "surface o t the" to "surface of the".

(7) Page C2E-17.

a. Paragraph C2E-10.1. Add "The Contractor shall remove the cofferdam after the floodwall construction is complete within the above stations." to the end of the paragraph.

b. Paragraph C2E-11. In the 2nd line, add "and removal" between the words "construction" and "of".

(8) Page C2E-18, paragraph C2E-12.3. In the first line after the word "constructing", add "and removing". In the second line after the word "construction", add "and removal".

(9) Page C3D-22, paragraph C3D-12.2.2. In the 4th line from the end of the paragraph, change "the protected side" to "both sides".

(10) Add the attached new Section C5B, pages C5B-a, C5B-1, C5B-2, and C5B-3.

SECTION H

(1) Page H-28, sub-paragraph H-28.a.1. Change "Hammond Highway" to "Lake Marina Drive" and "vice-versa" to "Hammond Highway".

(2) Page H-28, sub-paragraph H-28.a.2. Delete this paragraph in its entirety and substitute the following therefor:

"2. South of Hammond Highway. Trucks leaving this access site shall exit onto Hammond Highway and travel designated truck routes to their destination and enter at the intersection of West Harrison and Bellaire Drive."

(3) Page H-29, sub-paragraph H-28.a.5.b. In the 2nd sentence, change "H-9(f)" to "H-9(g)". In the 3rd sentence, delete "15 feet", and add "as shown on the drawings" after the words "sheet pile".

(4) Page H-31, paragraph H-30. In the 7th typed line from the end of the paragraph, change "siste" to "site".

(5) Add the following new clause to the end of the Special Clauses.

"H-34 ORDER OF WORK. The Contractor shall not proceed with work between Hammond Highway and West Harrison Blvd. until all other construction activities have been completed (East Jefferson Levee District, Contract 92-1) between these streets."

DRAWINGS

Delete Dwgs. 2, 5, 8, 9, and 15 of 17, File No. H-4-40208, in their entirety and substitute the attached revised Dwgs. 2, 5, 8, 9, and 15 of 17, File No. H-4-40208 therefor.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
PAGE OF PAGES
1 3

2. AMENDMENT/MODIFICATION NO. 0001		3. EFFECTIVE DATE 05/18/93	4. REQUISITION/PURCHASE REQ. NO. ED0000-3336-0063	5. PROJECT NO. (if applicable) dn
6. ISSUED BY US ARMY ENGR DIST NEW ORLEANS PO BOX 60267 NEW ORLEANS LA 70160-0267 Molly M. Block		CODE ISSUE1	7. ADMINISTERED BY (if other than item 6) US ARMY ENGR DIST, NEW ORLEANS ATTN CELMN-CT PO BOX 60267 NEW ORLEANS LA 70160-0267	
		SC2 (504)862-2879	CODE ADMIN1	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	<input checked="" type="checkbox"/>	9A. AMENDMENT OF SOLICITATION NO. DACW29-93-B-0025
	<input type="checkbox"/>	9B. DATED (SEE ITEM 11) 04/21/93
	<input type="checkbox"/>	10A. MODIFICATION OF CONTRACT/ORDER NO.
	<input type="checkbox"/>	10B. DATED (SEE ITEM 13)
CODE OMR68	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

ACCOUNTING AND APPROPRIATION DATA (if required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

<input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SPECIFICATIONS FOR LAKE PONTCHARTRAIN, LA & VICINITY, HURRICANE PROTECTION PROJECT, HIGH LEVEL PLAN, 17TH ST. OUTFALL CANAL, FLOOD PROTECTION IMPROVEMENT PROJECT, CAPPING OF FLOODWALLS, EAST SIDE IMPROVEMENTS, ORLEANS PARISH, LA, ARE HEREBY AMENDED AS FOLLOWS:

BID OPENING DATE

BID OPENING DATE AND TIME OF 25 MAY 1993, HAS BEEN CHANGED AND WILL NOW OPEN ON 2 JUNE 1993, 2:00 P.M., LOCAL TIME AT PLACE OF BID OPENING.

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

14A. NAME AND TITLE OF SIGNER (Type or print)		14B. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
CONTRACTOR/OFFEROR	15C. DATE SIGNED	14B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

SECTION C

(1) Page C2B-2, paragraph C2B-4.3. Delete this paragraph in its entirety and substitute the following therefor:

"C2B-4.3 Areas To Be Cleared. Prior to construction, the Contractor shall clear an area east and west of the centerline of the sheet piling necessary for construction of the concrete cap, but not less than 5 feet on either side of the centerline of the sheet piling."

(2) Page C2C-3, paragraph C2C-4.6.1. Delete this paragraph in its entirety.

(3) Page C2C-4, paragraphs C2C-4.6.2 and C2C-4.6.3. Delete these paragraphs in their entirety. Renumber paragraph "C2C-4.6.4" to "C2C-4.6.1".

(4) Page C2C-4, paragraph C2C-4.8. Delete the last line in its entirety and substitute "the levee." therefor.

(5) Page C3A-4, paragraph C3A-9.1. Delete this paragraph in its entirety and substitute the following therefor.

"C3A-9.1 Unsupported Concrete. Formwork for walls shall not be removed in less than 18 hours of cumulative time after concrete placement, not necessarily consecutive time, during which the temperature of the air surrounding the concrete is above 50 degrees F".

SECTION H

(1) Page H-29, sub-paragraph H-28b. In the 2nd line, delete "1 foot".

(2) Add the attached clause, H-33 entitled "TRAFFIC CONTROL", page H-33 to the end of the Special Clauses.

SECTION I
CONTRACT CLAUSES

- I.1 BASIS FOR SETTLEMENT OF PROPOSALS (EFARS 49.113(100))
- I.2 DEFINITIONS (SEPT 1991)--ALTERNATE I (APR 1984)
- I.3 EFARS 52.202-10001 DEFINITIONS.
- I.4 OFFICIALS NOT TO BENEFIT (APR 1984)
- I.5 GRATUITIES (APR 1984)
- I.6 COVENANT AGAINST CONTINGENT FEES (APR 1984)
- I.7 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1985)
- I.8 ANTI-KICKBACK PROCEDURES (OCT 1988)
- I.9 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (NOV 1990)
- I.10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (SEP 1990)
- I.11 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JAN 1990)
- I.12 STATUTORY PROHIBITION ON COMPENSATION TO FORMER DEPARTMENT OF DEFENSE EMPLOYEES (DEC 1991)
- I.13 SPECIAL PROHIBITION ON EMPLOYMENT (DEC 1991)

- I.14 PROHIBITION AGAINST RETALIATORY PERSONNEL ACTIONS (APR 1992)
- I.15 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)
- I.16 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (NOV 1992)
- I.17 VARIATION IN ESTIMATED QUANTITY (APR 1984)
- I.18 SUSPENSION OF WORK (APR 1984)
- I.19 AUDIT--SEALED BIDDING (APR 1985)
- I.20 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS-- SEALED BIDDING (DEC 1991)
- I.21 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS--SEALED BIDDING (DEC 1991)
- I.22 UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL DISADVANTAGED BUSINESS CONCERNS (FEB 1990)
- I.23 SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS SUBCONTRACTING PLAN (JAN 1991)--ALTERNATE I (AUG 1989)
- I.24 UTILIZATION OF WOMEN-OWNED SMALL BUSINESSES (AUG 1986)
- I.25 LIQUIDATED DAMAGES--SMALL BUSINESS SUBCONTRACTING PLAN (AUG 1989)
- I.26 UTILIZATION OF LABOR SURPLUS AREA CONCERNS (APR 1984)
- I.27 LABOR SURPLUS AREA SUBCONTRACTING PROGRAM (APR 1984)
- I.28 CONVICT LABOR (APR 1984)

I.29 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT--OVERTIME
COMPENSATION (MAR 1986)

I.30 OPEN BIDDING ON FEDERAL CONSTRUCTION CONTRACTS (NOV 1992)

I.31 DAVIS-BACON ACT (NOV 1992)

I.32 WITHHOLDING OF FUNDS (FEB 1988)

I.33 PAYROLLS AND BASIC RECORDS (FEB 1988)

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