IFB No. **DACW09-02-B-0005**

U.S. ARMY CORPS
OF ENGINEERS
LOS ANGELES DISTRICT

PORT OF LOS ANGELES CHANNEL DEEPENING, LOS ANGELES AND LONG BEACH HARBORS, SAN PEDRO BAY, CA

Construction Solicitation and Specifications

UNRESTRICTED

JUNE 2002

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IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO. W81EYN-2079-9004	6. PROJECT NO. PORT OF LOS ANGELES DEEPENING

7. ISSUED BY CODE	8. ADDRESS OFFER TO
USAED-LOS ANGELES CONTRACTING DIVISION P. O. BOX 532711 LOS ANGELES, CA 90053-2325	USAED-LOS ANGELES CONTRACTING DIVISION C/O LUCIA A. CARVAJAL P. O. BOX 537211 LOS ANGELES, CA 90053-2325

9. FOR INFORMATION CALL:	A. NAME LUCIA A. CARVAJAL	B. TELEPHONE NO. *(Include area code) (NO COLLECT CALLS)* 213.452.3240

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):*
PORT OF LOS ANGELES CHANNEL DEEPENING, LOS ANGELES AND LONG BEACH HARBORS, SAN PERDRO BAY, CALIFORNIA

The project consists of approximately 8 million cubic yards of dredging with disposal at four in-harbor disposal areas. Disposal areas require rock dikes. Approximately 2 million cubic yards of excavation from Pier 400 will be included in the disposal area. Project work includes pipeline removal, demolition of remnant piers, installation of wick drains and geodetical instruments.

The estimated range of this acquisition is $25,000,000 and $100,000,000.

BIDDERS PLEASE NOTE: This procurement may be delayed, cancelled or revised at any time during the solicitation, evaluation and/or final award process.

Any contract awarded as a result of this solicitation will be made pursuant to the Small Business Competitiveness Demonstration Program.

11. The Contractor shall begin performance within * calendar days and complete it within * calendar days after receiving

[ ] award, [X] notice to proceed. This performance period is [X] mandatory, [ ] negotiable. *(See* * Section 00800 *.)*

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? *(If "YES," indicate within how may calendar days after award in Item 12B.)*	12B. CALENDAR DAYS
[X] YES [ ] NO	10

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 1:00 PM *(hour)* local time 16 July 2002 *(date)*. If this is a sealed bid solicitation, offers will 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 [X] 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 60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER *(Must be fully completed by offeror)*

14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*

15. TELEPHONE NO. *(Include area code)*

16. REMITTANCE ADDRESS *(Include only if different than Item 14)*

CODE FACILITY CODE

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 ▶ See Price Schedule

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.										
DATE										

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*

20B. SIGNATURE

20C. OFFER DATE

AWARD *(To be completed by Government)*

21. ITEMS ACCEPTED:

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN ▶ *(4 Copies unless otherwise specified)*

ITEM

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO ☐ 10 U.S.C 2304(c) ( ) ☐ 41 U.S.C 253(c) ( )

26. ADMINISTERED BY CODE

27. PAYMENT WILL BE MADE BY

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

☐ 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 requirements 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.

☐ 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 con- summates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or print)*

31A. NAME OF CONTRACTING OFFICER *(Type or print)*

30B. SIGNATURE

30C. DATE

31B. UNITED STATES OF AMERICA

BY

31C. AWARD DATE

PRICING SCHEDULE

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT ($)
001	MOBILIZATION AND DEMOBILIZATION	1	LS	$_____	$_____
002	DEMOLITION – SOUTHWEST SLIP	1	LS	$_____	$_____
003	DRAINAGE STRUCTURES – EXTENSION OF 108" SUMMERLAND AVENUE STORM DRAIN (LINE D)	1	LS	$_____	$_____
004	DRAINAGE STRUCTURES – EXTENSION OF 18" STORM DRAIN (LINE E-1)	1	LS	$_____	$_____
005	DRAINAGE STRUCTURES - EXTENSION OF 18" STORM DRAIN (LINE E-2)	1	LS	$_____	$_____
006	DRAINAGE STRUCTURES - EXTENSION OF 24" STORM DRAIN (LINE E-3)	1	LS	$_____	$_____
007	DRAINAGE STRUCTURES – TEMPORARY 42" EXTENSION OF 54" STORM DRAIN (LINE C)	1	LS	$_____	$_____
008	FILL QUALITY CONTROL AND INSTRUMENTATION INSTALLATION-PIER 300 EXPANSION	1	LS	$_____	$_____
009	FILL QUALITY CONTROL AND INSTRUMENTATION INSTALLATION - SOUTHWEST SLIP	1	LS	$_____	$_____
0010	REMOVE AND DISPOSE OF ABANDONED 36" OIL PIPELINE (No.3)	1	LS	$_____	$_____
0011	REMOVE AND DISPOSE OF ABANDONED 20" WATER PIPELINE (No.7)	1	LS	$_____	$_____
0012	REMOVE AND DISPOSE OF TWO ABANDONED 20" SEWER PIPELINES (No.8)	1	LS	$_____	$_____
0013	REMOVE AND DISPOSE OF TWO ABANDONED TELEPHONE CABLES (No.5)	1	LS	$_____	$_____
0014	REMOVE AND DISPOSE OF ABANDONED 30" SEWER PIPELINE (No.9)	1	LS	$_____	$_____
0015	REMOVE AND DISPOSE OF ABANDONED 30" SEWER PIPELINE (No.10)	1	LS	$_____	$_____
0016	REMOVE AND DISPOSE OF TWO ABANDONED POWER CABLES (No.11)	1	LS	$_____	$_____
0017	REMOVE AND DISPOSE OF ABANDONED 10" AND 24" OIL PIPELINES (No.1)	1	LS	$_____	$_____

PRICING SCHEDULE

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT ($)
0018	REMOVE AND DISPOSE OF ABANDONED 24" WATER PIPELINE (No.6)	1	LS	$_____	$_____
0019	MARKER BUOYS	1	LS	$_____	$_____
0020	DREDGE AND DISPOSE OF D201 OVERLAYING D202	200,000	CY	$_____	$_____
0021	DREDGE AND DISPOSE OF D202	2,000,000	CY	$_____	$_____
0022	DREDGE AND DISPOSE OF D205	200,000	CY	$_____	$_____
0023	DREDGE AND DISPOSE OF D211 & D212	250,000	CY	$_____	$_____
0024	DREDGE AND DISPOSE OF D213	40,000	CY	$_____	$_____
0025	DREDGE AND DISPOSE OF D214	400,000	CY	$_____	$_____
0026	DREDGE AND DISPOSE OF D203, 204, 206, 207, 208, 209 & 210	5,700,000	CY	$_____	$_____
0027	WICKS – UNDER DIKES SOUTHWEST SLIP				
0027A	FIRST 1,300,000	1,300,000	LF	$_____	$_____
0027B	OVER 1,300,000 TO 2,600,000	1,300,000	LF	$_____	$_____
0028	WICKS – UNDER SURCHARGE SOUTHWEST SLIP				
0028A	FIRST 7,000,000	7,000,000	LF	$_____	$_____
0028B	OVER 7,000,000 TO 13,500,000	6,500,000	LF	$_____	$_____

PRICING SCHEDULE

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT ($)
0029	GRAVEL DIKE DRAINAGE BLANKET – SOUTHWEST SLIP	100,000	TON	$_____	$_____
0030	GRAVEL SURCHARGE DRAINAGE BLANKET – SOUTHWEST SLIP	200,000	TON	$_____	$_____
0031	QUARRY RUN	3,000,000	TON	$_____	$_____
0032	ROCK REVETMENT – A-250	100,000	TON	$_____	$_____
0033	ROCK REVETMENT – A-500	90,000	TON	$_____	$_____
0034	GEOTEXTILE FILTER	32,000	SY	$_____	$_____
0035	REMOVE SURCHARGE FROM SOUTHWEST SLIP- AREA 2 AND PLACE ON SOUTHWEST SLIP-AREA 1	350,000	CY	$_____	$_____
0036	REMOVE SURCHARGE FROM SOUTHWEST SLIP-AREA 1 AND PLACE ON PIER 300 EXPANSION	740,000	CY	$_____	$_____
0037	REMOVE AND DISPOSE OF PIER 400 SURCHARGE				
0037A	FIRST 1,500,000	1,500,000	CY	$_____	$_____
0037B	OVER 1,500,000 TO 2,300,000	800,000	CY	$_____	$_____
0038	REMOVE OF PIER 400 UNSUITABLE MATERIAL BELOW ROUGH GRADE AND DISPOSE, PLACE PIER 400 SURCHARGE MATERIAL IN EXCAVATION BELOW				
0038A	FIRST 300,000	300,000	CY	$_____	$_____
0038B	OVER 300,000 TO 500,000	200,000	CY	$_____	$_____
	TOTAL ESTIMATED AMOUNT				$_____

SECTION 00010 Bidders Notes/Bid Schedule

1. All extensions of the unit prices shown will be subject to verification by the Government. In case of variation between the unit price and the extension, the unit price will be considered to be the bid.

2. If a modification to a bid based on unit prices is submitted which provides for a lump sum adjustment to the total estimated amount, the application of the lump sum adjustment to each unit price in the Price Schedule must be stated. If it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit price in the Price Schedule.

3. Prices must be submitted on all individual items of the Price Schedule, otherwise the bid will be considered non-responsive and will be rejected.

4. For the purpose of initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of the Price Schedule as submitted by the bidder:

a. Obviously misplaced decimal points will be corrected;
b. In case of discrepancy between the unit price and the extended price, the unit price will govern;
c. Apparent errors in extensions of unit prices will be corrected;
d. Apparent errors in addition of lump sum and extended prices will be corrected.

5. For the purpose of bid evaluation, the Government will proceed on the assumption that the bidder intends the bid to be evaluated on the basis of unit prices the totals arrived at by the resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

6. The lump sum “LS” line items in the Price Schedule are not “Estimated Quantity” line items and are not subject to the “Variation in Estimated Quantity” contract clause.

7. The Contract Clause 52.232-27, “Prompt Payment for Construction Contracts” requires that the name and address of the contractor official, to whom payment is to be sent, be the same as that in the contract or in a proper Notice of Assignment.

8. Principal Contracting Officer. The Contracting Officer who signs this contract will be the Principal Contracting Officer for this contract. However, any Contracting Officer assigned to the Los Angeles District, contracting within his authority, may take formal action on this contract when the Principal Contracting Officer is unavailable and the action needs to be taken.

9. Amounts and prices shall be indicated in either words or figures, NOT BOTH.

10. Payment of Electronic Funds Transfer (EFT) is the mandatory method of payment. The Contractors attention is directed to Contract Clause No. 52.232-33 “Mandatory Information for Electronic Funds Transfer” located in Section 00700.

11. The bidder shall distribute his indirect costs (overhead, profit, bond, etc.,) over all items in the Price Schedule. The Government will review all submitted Price Schedules for any unbalancing of the items. Any submitted Price Schedule determined to be unbalanced may be considered non-responsive and cause the bidder to be ineligible for contract award.

12. The bidder shall furnish all plant, labor, material, equipment, etc., necessary to perform all work in strict accordance with the terms and conditions set forth in the contract to include all attachments thereto.

13. Some quantities are ESTIMATED, the bidders prices MUST BE FIRM.

14. Bidder is cautioned to check his Price Schedule carefully prior to submission. If the Price Schedule contains unit prices, they should be round off to the second decimal point only NOT EXTENDED FURTHER.

15. Bidders attention is directed to Section 00100 “Instructions to Bidders” Clause No. 52.0214-4001, entitled “Directions for Submitting Bids”. Please note that there are Special Instructions Pertaining to Hand-Carried Bids.

16. Contractor is required to fill in Cage code (Reference Section 00600, entitled "Required Central Contractor Registration" Mar 1998) and DUNS Number (Reference Section 00600, entitled, "Data Universal Numbering System (DUNS) Number" Jun1999) in Block No. 15 on Standard Form 1442, Name and Address Block (Cage Code under Code and DUNS No. under Facility Code respectively).

16. The Government contemplates award one contract to the responsive, responsible bidder who submits the low bid for the total of all the items in the Price Schedule.

CERTIFICATE OF CORPORATE PRINCIPAL

1) IF THE OFFEROR IS A JOINT VENTURE, COMPLETE THE FOLLOWING:

_____	_____	_____
(Company Name)	(Signature)	(Title)
_____	_____	_____
(Company Name)	(Signature)	(Title)
_____	_____	_____
(Company Name)	(Signature)	(Title)

2) IF THE OFFEROR IS PARTNERSHIP, LIST FULL NAME OF ALL PARTNERS:

_____	_____	_____
(Company Name)	(Signature)	(Title)
_____	_____	_____
(Company Name)	(Signature)	(Title)
_____	_____	_____
(Company Name)	(Signature)	(Title)

3) IF THE OFFEROR IS A CORPORATION, THE FOLLOWING CERTIFICATION SHOULD BE COMPLETED:

CERTIFICATION AS TO CORPORATE PRINCIPAL

I, _____ , certify that I am the Secretary of the corporation named as principal in the

within contract; that _____ , who signed the said contract on behalf of the principal, was the

_____ of the corporation; that I know his signature and that his signature is genuine; and that said contract was duly signed, sealed and attested for in behalf of said corporation by authority of its governing body.

_____
CORPORATE PRINCIPAL

CORPORATE SEAL

_____
SECRETARY

Section 00100 Instructions to Bidders

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52.0000-4010 INQUIRIES

Perspective bidders/offerors should submit inquiries related to this solicitation by writing or calling the following (collect calls will not be accepted:

(1) For inquiries of a contractual nature (solicitation requirements, interpretation of contractual language) call:
Lucia A. Carvajal
213.452.3250

For bid results only, call (213) 452-3235.

(2) All technical questions on the specification or drawings will be submitted in writing to:
Address:
USAED – Los Angeles District, ATTN: Lucia A. Carvajal
P. O. Box 532711
Los Angeles, CA 90053-2325

Facsimile Number: 213.452-4187.

(3) Please include the solicitation number, project title and location of project with your questions. Written inquiries must be received by this office not later than 14 calendar days prior to bid opening date/date set for receipt of offers.

(4) Oral explanations or instructions are not binding. Any information given to a bidder/offeror which impacts the bid/offer will be given in the form of a written amendment to the solicitation.

52.0000-4023 SAFETY REQUIREMENTS

The bidder's attention is directed to the latest version of U.S Army Corps of Engineers Safety and Health Manual, EM 385-1-1, which will be strictly enforced. This publication may be obtained from the US Army Engineer District, Los Angeles, ATTN: Safety Office, P.O. Box 532711, Los Angeles, California 90053-2325.

52.0001-4004 BID RESULTS

The telephone number for bid results after the opening is Area Code (213) 452-3245.

52.211-2 AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) AND DESCRIPTIONS LISTED IN THE ACQUISITION MANAGEMENT SYSTEMS AND DATA REQUIREMENTS CONTROL LIST, DOD 5010.12-L (DEC 1999)

Copies of specifications, standards, and data item descriptions cited in this solicitation may be obtained--
(a) From the ASSIST database via the Internet at http://assist.daps.mil; or

(b) By submitting a request to the--Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(End of provision)

52.214-1 SOLICITATION DEFINITIONS--SEALED BIDDING (JUL 1987)

"Government" means United States Government.

"Offer" means "bid" in sealed bidding.

"Solicitation" means an invitation for bids in sealed bidding.

(End of provision)

52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting a bid, (3) by letter or telegram, or (4) by facsimile, if facsimile bids are authorized in the solicitation. The Government must receive the acknowledgment by the time and at the place specified for receipt of bids.

(End of provision)

52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)

Bidders must provide full, accurate, and complete information as required by this solicitation and its attachments. The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

(End of provision)

52.214-5 SUBMISSION OF BIDS (MAR 1997)

(a) Bids and bid modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) (1) addressed to the office specified in the solicitation, and (2) showing the time and date specified for receipt, the solicitation number, and the name and address of the bidder.

(b) Bidders using commercial carrier services shall ensure that the bid is addressed and marked on the outermost envelope or wrapper as prescribed in subparagraphs (a)(1) and (2) of this provision when delivered to the office specified in the solicitation.

(c) Telegraphic bids will not be considered unless authorized by the solicitation; however, bids may be modified or withdrawn by written or telegraphic notice.

(d) Facsimile bids, modifications, or withdrawals, will not be considered unless authorized by the solicitation.

(e) Bids submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)

Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective bidders before the submission of their bids. Oral explanations or instructions given before the award of a contract will not be binding. Any information given a prospective bidder concerning a solicitation will be furnished promptly to all other prospective bidders as an amendment to the solicitation, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.

(End of provision)

52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS (NOV 1999)

(a) Bidders are responsible for submitting bids, and any modifications or withdrawals, so as to reach the Government office designated in the invitation for bids (IFB) by the time specified in the IFB. If no time is specified in the IFB, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that bids are due.

(b)(1) Any bid, modification, or withdrawal received at the Government office designated in the IFB after the exact time specified for receipt of bids is “late” and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late bid would not unduly delay the acquisition; and--

(i) If it was transmitted through an electronic commerce method authorized by the IFB, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of bids; or

(ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of bids and was under the Government's control prior to the time set for receipt of bids.

(2) However, a late modification of an otherwise successful bid that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(c) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the bid wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(d) If an emergency or unanticipated event interrupts normal Government processes so that bids cannot be received at the Government office designated for receipt of bids by the exact time specified in the IFB and urgent Government requirements preclude amendment of the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(e) Bids may be withdrawn by written notice received at any time before the exact time set for receipt of bids. If the IFB authorizes facsimile bids, bids may be withdrawn via facsimile received at any time before the exact time set for receipt of bids, subject to the conditions specified in the provision at 52.214-31, Facsimile Bids. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for receipt of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

(End of provision)

52.214-9 Failure to Submit Bid. (JUL 1995)

Recipients of this solicitation not responding with a bid should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements.

52.214-18 PREPARATION OF BIDS--CONSTRUCTION (APR 1984)

(a) Bids must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a bid must initial each erasure or change appearing on any bid form.

(b) The bid form may require bidders to submit bid prices for one or more items on various bases, including--

(1) Lump sum bidding;

(2) Alternate prices;

(3) Units of construction; or

(4) Any combination of subparagraphs (1) through (3) above.

(c) If the solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.

(d) Alternate bids will not be considered unless this solicitation authorizes their submission.

52.214-19 CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION (AUG 1996)

(a) The Government will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the Government, considering only price and the price-related factors specified elsewhere in the solicitation.

(b) The Government may reject any or all bids, and waive informalities or minor irregularities in bids received.

(c) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the bid.

(d) The Government may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Government even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

Offers submitted in response to this solicitation shall be in the English language. Offers received in other than English shall be rejected.

(End of provision)

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)

Offers submitted in response to this solicitation shall be in terms of U.S. dollars. Offers received in other than U.S. dollars shall be rejected.

(End of provision)

52.0214-4001 DIRECTIONS FOR SUBMITING BIDS (MAR 2002)

Envelopes containing bids must be sealed, marked and addressed as follows:

MARK ENVELOPES:

Bid under IFB No. DACW09-02-B-0005
Bid Opening Date: JULY 16, 2002 AT 1:00 pm

ADDRESS ENVELOPES TO:

Department of the Army
U. S. Army Engineer District, Los Angeles
ATTN: Contracting Division
C/O: LUCIA A. CARVAJAL
P. O. Box 532711
Los Angeles, CA 90053-2325

SPECIAL INSTRUCTIONS PERTAINING TO HAND-CARRIED BIDS:

Due to security precautions, all Corps of Engineers visitors/couriers are now required to check in at the Public Affairs Office (PAO), Suite 980, Wilshire Blvd, Los Angeles, CA. Bidders are no longer permitted to hand-carry their bids directly to Contacting Division without an authorized escort. **Bids may NOT be left unattended at the Public Affairs Office (PAO), Suite 980.**

Bidders who desire to hand-deliver their bids prior to the scheduled bid opening time/date must notify the Contracting Division to arrange for receipt of their bid by Contracting Division personnel. Normally the contact will be the Contract Specialist designated above. In the event the Contract Specialist cannot be reached, please call the main Contracting Division telephone number, 213-452-3231 or the following alternative telephone numbers -3233, -3245, -3234, or -3235, in order to request assistance.

30 minutes prior to the scheduled bid opening time/date, the Bid Opening Officer will be in the Public Affairs Office (PAO) Suite 980, to accept bids. After visitor in-processing, all bidders will subsequently be escorted to Bid Opening Room, where the bids will be publicly opened and read.

In order to expedite visitor processing, bidders are encouraged to complete the information requested on the Notice of Visitor(s) Form (attached). The completed form can be faxed to the Contract Specialist at (213)452-4184 or 4187, prior to the date for receipt of bids. In addition, no more than 2 visitors per firm will be permitted within the building. No exceptions will be made. The offeror is responsible for compliance with the security requirements and shall ensure that any company representative, courier or delivery personnel are aware of these special procedures pertaining to hand carried bids.

NOTICE OF VISITOR(S)

1. Date(s) of Visit *(Inclusive)*	**2. Arrival Time**	
3. Name of Visitor(s) *(Last, First)*	**4. Agency/Company of Visitor**	
5. Name of Person Being Visited *(Include Div, Br, Sec)*	**6. Suite Number**	**7. Telephone Number**
8. Contact Person *(if other than Person Being Visited)*		**9. Telephone Number**
10. Other Comments or Instructions		

- All visitors must report to the Public Affairs Office, Suite 980
- Visitors must use the Visitor Tag provided.
- Visitors must be escorted to Corps of Engineers floors
- Parking validation is only available for Engineering Division, Construction-Operations, and Information Management field personnel.
- Delivery personnel will be validated for 30 minutes only.

52.214-5000 ARITHMETIC DISCREPANCIES EFARS 52.214-5000

(a) For the purpose of initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of the bidding schedule as submitted by bidders:

(1) Obviously misplaced decimal points will be corrected;

(2) Discrepancy between unit price and extended price, the unit price will govern;

(3) Apparent errors in extension of unit prices will be corrected;

(4) Apparent errors in addition of lump sum and extended prices will be corrected.

(b) For the purpose of bid evaluation, the Government will proceed on the assumption that the bidder intends his bid to be evaluated on the basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

(c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

(End of statement)

52.0214-4583 TELEGRAPHIC BIDS/OFFERS ARE NOT ACCEPTABLE

Any telegram to modify or withdraw a bid/offer sent to this office must be physically delivered to the office designated for receipt of bid/offer by the date and time set for bid opening/receipt of proposals. No one from this office will be dispatched to the local telegraph office to pick up any telegram for any reason.

52.0214-4584 FACSIMILE BIDS/OFFERS

Facsimile bids/offers, modifications thereto, or cancellations of bids/offers will not be accepted.

52.0214-4599 EVALUATION FOR AWARD

The Government contemplates award of one contract to the responsive, responsible bidder who submits the low bid for the total of all the items in the Bidding Schedule.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm Fixed Price contract resulting from this solicitation.

(End of clause)

52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENT-- CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (FEB 2000)

(a) Definitions. Construction material, designated country construction material, domestic construction material, foreign construction material, and NAFTA country construction material, as used in this provision, are defined in the clause of this solicitation entitled “Buy American Act--Balance of Payments Program--Construction Materials under Trade Agreements” (Federal Acquisition Regulation (FAR) clause 52.225-11).

(b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act or Balance of Payments Program should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act or Balance of Payments Program before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act or Balance of Payments Program, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers. (1) When an offer includes foreign construction material, other than designated country or NAFTA country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic, designated country, or NAFTA country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic, designated country, or NAFTA country construction material, and the offeror shall be required to furnish such domestic, designated country, or NAFTA country construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be 20% percent of the bid price or $3,000,000.00, whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

52.228-4506 INDIVIDUAL SURETIES IN SUPPORT OF BID BONDS

Bidder/offerors utilizing individual sureties in support of a bid bond shall include a Standard Form (SF) 28 (Affidavit of Individual Surety), accompanied by a pledge of acceptable assets from each person acting as an individual surety, and include these with the SF 24 (Bid Bond), and the bid itself (see clause titled "Pledges of Assets," FAR 52.228-11). Pledges of acceptable assets shall be in the form of (1) evidence of an escrow account and/or (2) a recorded lien on real estate. If this is an RFP, failure to provide required documentation described herein may cause the offeror to be deemed "unacceptable".

52.228-4507 BID GUARANTEE FORM AND AMOUNT

When bids/proposals exceed $100,000, the offeror shall furnish a separated bid guarantee in accordance with the solicitation provision titled "Bid Guarantee", FAR 52.228-1. In accordance with FAR 28.101-2 the bid guarantee amount shall be a least 20 percent of the "bid price" but shall not exceed $3 million. When the penal sum is expressed as a percentage, a maximum dollar limitation may be stated. If there are

option line items on the Pricing Schedule (Schedule B), the term "bid price" is hereby defined as the total bid not to include any amount for line items designated as "options". In bids/proposals that contain "additives", the "bid price" is defined as the total of all bid items including additive line items. FAR 28.106-1 states that a Standard Form (SF) 24 shall be used for the bid bond. In accordance with FAR 28.202(a)(1), corporate sureties utilized must appear on the list contained in the Department of Treasury Circular 570 titled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies."

52.232-38 SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER (MAY 1999)

The offeror shall provide, with its offer, the following information that is required to make payment by electronic funds transfer (EFT) under any contract that results from this solicitation. This submission satisfies the requirement to provide EFT information under paragraphs (b)(1) and (j) of the clause at 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration.

(1) The solicitation number (or other procurement identification number).

(2) The offeror's name and remittance address, as stated in the offer.

(3) The signature (manual or electronic, as appropriate), title, and telephone number of the offeror's official authorized to provide this information.

(4) The name, address, and 9-digit Routing Transit Number of the offeror's financial agent.

(5) The offeror's account number and the type of account (checking, savings, or lockbox).

(6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the offeror's financial agent.

(7) If applicable, the offeror shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the offeror's financial agent is not directly on-line to the Fedwire and, therefore, not the receiver of the wire transfer payment.

(End of provision)

52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Patricia Brown Trainer, C/O Lucia A. Carvajal, P. O. Box 532711, Los Angeles, CA 90053-2325

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting Stan Fujimoto at 562. 861.1094. An organized site visit will be held on June 25, 2002 at 10:00 AM. Please meet at the following location:

Port of Los Angeles Board Room
425 South Palos Verdes Street
San Pedro, CA 90733

52.211-5000 EVALUATION OF SUBDIVIDED ITEMS (MAR 1995)—EFARS

Item Nos. ,0027, 0028, 0037 and 0038 are subdivided into two or more estimated quantities and are to be separately priced. The Government will evaluate each of these items on the basis of total price of its sub-items.

(End of clause)

Section 00600 Representations & Certifications

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Section 00600

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contradictory to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as an agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above _____ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the offeror deletes or modifies subparagraph (a)(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds 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 on his or her behalf in connection with 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, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) 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 on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of $100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than $10,000, and not more than $100,000, for each such failure.

(End of provision)

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

___ TIN:.----------

___ TIN has been applied for.

___ TIN is not required because:

___ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

___ Offeror is an agency or instrumentality of a foreign government;

___ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

___ Sole proprietorship;

___ Partnership;

___ Corporate entity (not tax-exempt);

___ Corporate entity (tax-exempt);

___ Government entity (Federal, State, or local);

___ Foreign government;

___ International organization per 26 CFR 1.6049-4;

___ Other----------

(f) Common parent.

___ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

___ Name and TIN of common parent:

Name----------

TIN----------

(End of provision)

52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

(a) Definition. Women-owned business concern, as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it ( ) is a women-owned business concern.

(End of provision)

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

(a) Contractor identification is essential for complying with statutory contract reporting requirements. Therefore, the offeror is requested to enter, in the block with its name and address on the Standard Form 33 or similar document, the annotation "DUNS" followed by the DUNS number which identifies the offeror's name and address exactly as stated in the offer.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

(1) Company name.

(2) Company address.

(3) Company telephone number.

(4) Line of business.

(5) Chief executive officer/key manager.

(6) Date the company was started.

(7) Number of people employed by the company.

(8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at http://www.customerservice@dnb.com/. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@dnb.com.
(End of provision)

52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (APR 2001)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals --

(A) Are ( ) are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have ( ) have not ( ), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of

embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(D) of this provision.

(ii) The Offeror has ( ) has not ( ), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(D) Have ( ) have not ( ), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(E) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

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 SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 2001) ALTERNATE I (OCT 2000) & ALTERNATE II (OCT 2000)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 23499

(2) The small business size standard is $17 Million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it ( ) is, ( ) is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.

(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a veteran-owned small business concern.

(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a service-disabled veteran-owned small business concern.

(6) (Complete only if offeror represented itself as small business concern in paragraph (b)(1) of this provision). The offeror represents, as part of its offer, that--

(i) It ( ) is, ( ) is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and

(ii) It ( ) is, ( ) is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) (Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.) The offeror shall check the category in which its ownership falls:

( ) Black American.

( ) Hispanic American.

( ) Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

( ) Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

( ) Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

(c) Definitions. As used in this provision--

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

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 in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women; in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice.

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-2 EQUAL LOW BIDS. (OCT 1995)

(a) This provision applies to small business concerns only.

(b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

_____

_____

(c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 1999)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

___ Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (OCT 2000)

(a) Definition.

"Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the North American Industry Classification System (NAICS) code assigned to a contracting opportunity.

(b) [Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.] The Offeror [ ] is, [ ] is not an emerging small business.

(c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees	Avg. Annual Gross Revenues
____ 50 or fewer	____ $1 million or less
____ 51 - 100	____ $1,000,001 - $2 million
____ 101 - 250	____ $2,000,001 - $3.5 million
____ 251 - 500	____ $3,500,001 - $5 million
____ 501 - 750	____ $5,000,001 - $10 million
____ 751 - 1,000	____ $10,000,001 - $17 million
____ Over 1,000	____ Over $17 million

(End of provision)

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a) [ ] It has, [ ] has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;

(b) [ ] It has, [ ] has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

[ ] (i) The facility does not manufacture, process or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

[ ] (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);

[ ] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[ ] (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

[ ] (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

252.204-7001 COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING (AUG 1999)

(a) The offeror is requested to enter its CAGE code on its offer in the block with its name and address. The CAGE code entered must be for that name and address. Enter “CAGE” before the number.

(b) If the offeror does not have a CAGE code, it may ask the Contracting Officer to request one from the Defense Logistics Information Service (DLIS). The Contracting Officer will--

(1) Ask the Contractor to complete section B of a DD Form 2051, Request for Assignment of a Commercial and Government Entity (CAGE) Code;

(2) Complete section A and forward the form to DLIS; and

(3) Notify the Contractor of its assigned CAGE code.

(c) Do not delay submission of the offer pending receipt of a CAGE code.

(End of provision)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION.(MAR 2000)

(a) Definitions.

As used in this clause--

(1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at http://www.ccr2000.com.

(End of clause)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

(a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.

(2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

(3) "Significant interest" means --

(i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;

(ii) Holding a management position in the firm, such as a director or officer;

(iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;

(iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or

(v) Holding 50 percent or more of the indebtness of a firm.

(b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

(1) Identification of each government holding a significant interest; and

(2) A description of the significant interest held by each government.

(End of provision)

252.209-7002 DISCLOSURE OF OWNERSHIP OR CONTROL BY A FOREIGN GOVERNMENT (SEP 1994)

(a) Definitions. As used in this provision--

(1) "Entity controlled by a foreign government" means--

(i) Any domestic or foreign organization or corporation that is effectively owned or controlled by a foreign government; or

(ii) Any individual acting on behalf of a foreign government.

(2) "Effectively owned or controlled" means that a foreign government or any entity controlled by a foreign government has the power, either directly or indirectly, whether exercised or exercisable, to control or influence the election or appointment of the Offeror's officers, directors, partners, regents, trustees, or a majority of the Offeror's board of directors by means, e.g., ownership, contract, or operation of law.

(3) "Foreign government" means any governing body organized and existing under the laws of any country other than the United States and its possessions and trust territories and any agent or instrumentality of that government.

(4) "Proscribed information" means--

(i) Top Secret information;

(ii) Communications Security (COMSEC) information, except classified keys used to operate secure telephone unites (STU IIIs);

(iii) Restricted Data as defined in the U.S. Atomic Energy Act of 1954, as amended;

(iv) Special Access Program (SAP) information; or

(v) Sensitive Compartmental Information (SCI).

(b) Prohibition on award. No contract under a national security program may be awarded to a company owned by an entity controlled by a foreign government if that company requires access to proscribed information to perform the contract, unless the Secretary of Defense or designee has waived application of 10 U.S.C.2536(a).

(c) Disclosure.
The Offeror shall disclose any interest a foreign government has in the Offeror when that interest constitutes control by a foreign government as defined in this provision. If the Offeror is a subsidiary, it shall also disclose any reportable interest a foreign government has in any entity that owns or controls the subsidiary, including reportable interest concerning the Offeror's immediate parent, intermediate parents, and the ultimate parent. Use separate paper as needed, and provide the information in the following format:

Offeror's Point of Contact for Questions about Disclosure
(Name and Phone Number with Country Code, City Code and Area Code, as applicable)
Name and Address of Offeror
Name and Address of Entity Description of Interest, Controlled by a Foreign Ownership Percentage, and
Government Identification of Foreign Government

(End of provision)

252.209-7003 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (MAR 1998)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 37 U.S.C. 4212(d) (i.e., the VETS-100 report required by Federal Acquisition Regulation clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era), it has submitted the most recent report required by 38 U.S.C. 4212(d).

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

(a) Definitions. As used in this clause--

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).

(2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.

(b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec 2407(a) prohibits a United States person from taking.

(End of clause)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

(a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) Representation. The Offeror represents that it:

____ (1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.
(End of provision)

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SECTION 00700

52.202-1 DEFINITIONS. (MAY 2001)

(a) Agency head or head of the agency means the Secretary (Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, unless otherwise indicated, including any deputy or assistant chief official of the executive agency.

(b) Commercial component means any component that is a commercial item.

(c) Commercial item means--

(1) Any item, other than real property, that is of a type customarily used for nongovernmental purposes and that--

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (c)(1) or (c)(2) of this clause, but for--

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. “Minor” modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if such services are procured for support of an item referred to in paragraphs (c)(1), (2), (3), or (4) of this clause, and if the source of such services--

(i) Offers such services to the general public and the Federal Government contemporaneously and under similar terms and conditions; and

(ii) Offers to use the same work force for providing the Federal Government with such services as the source uses for providing such services to the general public;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed;

(7) Any item, combination of items, or service referred to in subparagraphs (c)(1) through (c)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or

(8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local Governments.

(d) Component means any item supplied to the Government as part of an end item or of another component, except that for use in 52.225-9, and 52.225-11 see the definitions in 52.225-9(a) and 52.225-11(a).

(e) 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.

(f) Nondevelopmental item means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (f)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (f)(1) or (f)(2) solely because the item is not yet in use.

(g) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.
(End of clause)

52.203-3 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) of this clause, 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)

52.203-5 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)

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

(a) Except as provided in (b) of this clause, 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) of this clause 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 which exceed $100,000.

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(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 any kickback. The Contracting Officer may order the 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 this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed $100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) 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, regulation, or under this contract.

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract 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 designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(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, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(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)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(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:

(1) The awarding of any Federal contract.

(2) The making of any Federal grant.

(3) The making of any Federal loan.

(4) The entering into of any cooperative agreement.

(5) 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:

(1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.

(3) A special Government employee, as defined in section 202, title 18, United States Code.

(4) 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 theperson'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)

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause--

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is

a part of the broader category of “recovered material.” For paper and paper products, postconsumer material means “postconsumer fiber” defined by the U.S. Environmental Protection Agency (EPA) as--

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

Printed or copied double-sided means printing or reproducing a document so that information is on both sides of a sheet of paper.

Recovered material, for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as “recovered fiber” and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as--

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

52.209-6 Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment (JUL 1995)

(a) The Government suspends or debars Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the $25,000 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 $25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the

subcontractor, or its principles, 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 Federal Procurement and Nonprocurement 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 Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement 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)

52.214-26 Audit and Records--Sealed Bidding. (OCT 1997)

(a) As used in this clause, records includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with the pricing of any modification to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

(1) The proposal for the modification;

(2) The discussions conducted on the proposal(s), including those related to negotiating;

(3) Pricing of the modification; or

(4) Performance of the modification.

(c) Comptroller General. In the case of pricing any modification, the Comptroller General of the United States, or an authorized representative, shall have the same rights as specified in paragraph (b) of this clause.

(d) Availability. The Contractor shall make available at its office at all reasonable times the materials described in 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 data 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.

(e) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (e), in all subcontracts expected to exceed the threshold in FAR 15.403-4(a)(1) for submission of cost or pricing data.

52.214-27 Price Reduction for Defective Cost or Pricing Data - Modifications - Sealed Bidding. (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for the submission of cost or pricing data at FAR 15.403-4(a)(1), except that this clause does not apply to a modification if an exception under FAR 15.403-1(b) applies.

(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) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made:

(1) 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; or

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2) Except as prohibited by subdivision (d)(2)(ii) of this clause:

(i) 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) 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.

52.214-28 Subcontractor Cost or Pricing Data - Modifications - Sealed Bidding. (OCT 1997)

(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 the threshold for submission of cost or pricing data at (FAR) 48 CFR 15.403-4(a)(1); and

(2) be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modifications involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1(b) applies.

(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 15.406-2 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, when entered into, exceeds the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1).

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns 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, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(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.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (OCT 2000)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause--

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract 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 offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small 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 negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for 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, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. Service-disabled veteran-owned small business concerns meet the definition of veteran-owned small business concerns, and offerors may include them within the subcontracting plan goal for veteran-owned small business concerns. A separate goal for service-disabled veteran-owned small business concerns is not required. 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 for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to HUBZone small business concerns;

(v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and

(vi) Total dollars planned to be subcontracted to women-owned small 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;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, 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, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror in 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;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small 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, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled ``Utilization of Small Business Concerns'' in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of $500,000 ($1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will--

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can 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 paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-

owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small 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 (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small 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 veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether HUBZone small business concerns were solicited and, if not, why not;

(D) Whether small disadvantaged business concerns were solicited and, if not, why not;

(E) Whether women-owned small business concerns were solicited and, if not, why not; and

(F) 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;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(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 program'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 commercial 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, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small 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, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business 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, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all ``make-or-buy'' decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small 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 plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, 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 ensures that the master plan is updated as necessary and provides copies of the approved master plan, including 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) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(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," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the

close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-16 Liquidated Damages-Subcontracting Plan (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, 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 Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial 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 Business Subcontracting Plan,” 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.

(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 and to discuss the matter. 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 plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial 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 the Government may have.

(End of clause)

52.222-3 Convict Labor (Aug 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District

of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(a)(1) The worker is paid or is in an approved work training program on a voluntary basis;

(2) Representatives of local union central bodies or similar labor union organizations have been consulted;

(3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and

(4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 Contract Work Hours and Safety Standards Act - Overtime Compensation. (SEP 2000)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of $10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding $100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(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 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) 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.

(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.

52.219-25 SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM—DISADVANTAGED STATUS AND REPORTING (OCT 1999)

(a) Disadvantaged status for joint venture partners, team members, and subcontractors. This clause addresses disadvantaged status for joint venture partners, teaming arrangement members, and subcontractors and is applicable if this contract contains small disadvantaged business (SDB) participation targets. The Contractor shall obtain representations of small disadvantaged status from joint venture partners, teaming arrangement members, and subcontractors through use of a provision substantially the same as paragraph (b)(1)(i) of the provision at FAR 52.219-22, Small Disadvantaged Business Status. The Contractor shall confirm that a joint venture partner, team member, or subcontractor representing itself as a small disadvantaged business concern, is identified as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net) or by contacting the SBA's Office of Small Disadvantaged Business Certification and Eligibility.

(b) Reporting requirement. If this contract contains SDB participation targets, the Contractor shall report on the participation of SDB concerns at contract completion, or as otherwise provided in this contract. Reporting may be on Optional Form 312, Small Disadvantaged Business Participation Report, or in the Contractor's own format providing the same information. This report is required for each contract containing SDB participation targets. If this contract contains an individual Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, reports may be submitted with the final Subcontracting Report for Individual Contracts (Standard Form 294) at the completion of the contract.

(End of clause)

52.222-3 Convict Labor (Aug 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District

of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(a)(1) The worker is paid or is in an approved work training program on a voluntary basis;

(2) Representatives of local union central bodies or similar labor union organizations have been consulted;

(3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and

(4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 Contract Work Hours and Safety Standards Act - Overtime Compensation. (SEP 2000)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of $10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding $100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(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 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) 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.

(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.

52.222-7 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.

52.222-8 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 the 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.

52.222-9 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.

52.222-10 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.

52.222-11 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.

52.222-12 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.

52.222-13 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.

52.222-14 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 or their representatives.

52.222-15 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.

52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(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) of this clause. 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. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(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. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under

investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(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; in 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 subparagraphs (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 officer 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.

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"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 Deputy Assistant Secretary 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) of this clause.

(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 on-site 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 rest rooms and necessary dressing or sleeping areas 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) of this clause. 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) of this clause, 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) of this clause, 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 Deputy Assistant Secretary 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.

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).

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

(a)) Definitions. As used in this clause--

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

Appropriate office of the State employment service system means the local office of the Federal-State national system of public employment offices with assigned responsibility to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established “recall” lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who—

(1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or

(2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.

(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 disabled veteran or a veteran of the Vietnam era. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era 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 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 employment openings with the appropriate office of the State employment service.

(3) The listing of 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.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columb ia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(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 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 Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary), 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 disabled veterans and veterans of the Vietnam Era.

(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 Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(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 disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(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 individuals with disabilities; 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. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be 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 individuals with physical or mental disabilities.

(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 $10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.
(End of clause)

52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999)

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--

(1) The number of 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 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 September 30 of each year beginning September 30, 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. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 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. 4212.

(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)

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)

(a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, insert "None")	Identification No.

_____ _____

_____ _____

_____ _____

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

(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 deter- mine 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 where 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 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 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 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 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 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; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) though (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 while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (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)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-5 TRADE AGREEMENTS (APR 2000)

(a) Definitions. As used in this clause.

Caribbean Basin country means any of the following countries: Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, El Salvador, Grenada, Guatemala, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago.

Caribbean Basin country end product means an article that--

(1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or

(2) In the case of an article that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product includes services (except transportation services) incidental to the article, provided that the value of those incidental services does not exceed that of the article itself. The term excludes products that

are excluded from duty-free treatment for Caribbean countries under 19 U.S.C. 2703(b), which presently are--

(i) Textiles and apparel articles that are subject to textile agreements;

(ii) Footwear

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

(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 deter- mine 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 where 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 emp loyees 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 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 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 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 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 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; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) though (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 while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (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)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention

Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-11 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (FEB 2000)

(a) Definitions. As used in this clause--

Component means any article, material, or supply incorporated directly into construction materials.

Construction material means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark.

Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

Domestic construction material 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 for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

North American Free Trade Agreement country means Canada or Mexico.

North American Free Trade Agreement country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA) apply to this acquisition. Therefore, the Buy American Act and Balance of Payments Program restrictions are waived for designated country and NAFTA country construction materials.

(2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: none

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent. For determination of unreasonable cost under the Balance of Payments Program, the Contracting Officer will use a factor of 50 percent;

(ii) The application of the restriction of the Buy American Act or Balance of Payments Program to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act or Balance of Payments Program. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act or Balance of Payments Program applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act or Balance of Payments Program applies, use of foreign construction material is noncompliant with the Buy American Act or Balance of Payments Program.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1:			
Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....
Item 2:			
Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUL 2000)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea,

Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(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 the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(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 simplified acquisition threshold at (FAR) 2.101.to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 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.

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

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, or issuing financial institution for other security, 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;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(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)

52.229-3 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)

52.229-5 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)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. 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.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) 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 also may be taken into consideration if--

(i) Consideration is specifically authorized by this contract; and

(ii) 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) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

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;

(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; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

_____

(Name)

_____

(Title)

_____

(Date)

(d) Refund of unearned amounts. 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 paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after 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) Retainage. 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) Title, liability, and reservation of rights. 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) Reimbursement for bond premiums. 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) Final payment. 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) Limitation because of undefinitized work. 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.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts 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. reproduce, prepare derivative works, distribute copies to the public, and (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.

52.232-23 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.

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (MAY 2001)

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 the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101 and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that 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. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date shall be the 14th day after the date of the Contractor's payment request, 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. If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice, 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) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. 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, it shall be returned within 7 days after the date the designated billing office received the invoice, with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing 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. (The Contractor is encouraged to date invoices as close as possible to the date of mailing or transmission.)

(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 the 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.

(x) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(3) Interest penalty. 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. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(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) Computing penalty amount. 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 (e.g., tariffs). 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 principal payment amount approved by the Government until the payment date of such approved principal amount; and will 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 principal payment amount and will 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, the due date on the corrected invoice will be adjusted by subtracting from such date 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.

(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.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(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 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the 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) Prompt payment discounts. An interest penalty also shall 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) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(6)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of $1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed $5,000;

(2) The additional penalty shall never be less than $25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than $1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(4)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(6)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty

due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. 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 [insert day as prescribed by Agency head; if not prescribed, insert 30th day] 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.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Subcontract clause requirements. 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) Prompt payment for subcontractors. A payment clause that 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) Interest for subcontractors. An interest penalty clause that 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) Subcontractor clause flowdown. 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) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. 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) Withholding permitted. 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) Withholding requirements. 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 previously has been 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) Subcontractor withholding procedures. 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) Subcontractor notice. 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) Contracting Officer notice. 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) Subcontractor progress payment reduction. 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) Subsequent subcontractor payment. 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) Notice to Contracting Officer. 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) Interest to Government. 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) Third-party deficiency reports. (1) Withholding from subcontractor. 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, 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) Subsequent payment or interest charge. 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--

(i) Pay the amount withheld under subdivision (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) 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) Written notice of subcontractor withholding. 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) Subcontractor payment entitlement. 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) Prime-subcontractor disputes. 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) Preservation of prime-subcontractor rights. 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) Non-recourse for prime contractor interest penalty. 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.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term “EFT” refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.
(End of Clause)

52.233-1 Disputes. (DEC 1998)

(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 $100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. 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, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim 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)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding $100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "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; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 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 $100,000, 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) If the 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 disput resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. 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)

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), 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.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(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.

52.236-3 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.

52.236-5 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.

52.236-6 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 worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

52.236-7 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.

52.236-8 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.

52.236-9 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.

52.236-10 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.

52.236-11 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.

52.236-12 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.

52.236-13 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.

52.236-15 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.

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all 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 that may be established or indicated by the Contracting Officer. 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.

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(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.

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details

regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 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.

52.243-4 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.

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(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) of this section.

(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, at no increase in contract price, 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.

52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000)

(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 will 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 will 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.

If the VECP is not accepted, the Contracting Officer will 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.

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 decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(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) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or $100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) 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.

(i) 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)

52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996)

(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 (b)(6) of this clause; 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 in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) 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.

(e) 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.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining 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 (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, 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 modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the

Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under subparagraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of--

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under subparagraph (f)(1) of this clause;

(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 (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, 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.

(3) 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.

(h) 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 (g) of this clause, 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.

(i) 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.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) 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.

(l) 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.

(m)(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.

(n) 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.

52.249-10 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 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.

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.

52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows:

(End of clause)

52.252-6 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.

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

(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) 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 serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 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 prohibition 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 the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)

(a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DoD) contracts, DoD Hotline Posters prepared by the DoD Office of the Inspector General.

(b) DoD Hotline Posters may be obtained from the DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.

(c) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--

(1) The Contracting Officer has given prior written approval; or

(2) The information is otherwise in the public domain before the date of release.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.205-7000 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)

252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEA R FORCES (INF) TREATY (NOV 1995)

(a) The Contractor shall not deny consideration for a subcontract award under this contract to a potential subcontractor subject to on-site inspection under the INF Treaty, or a similar treaty, solely or in part because of the actual or potential presence of Soviet inspectors at the subcontractor's facility, unless the decision is approved by the Contracting Officer.

(b) The Contractor shall incorporate this clause, including this paragraph (b), in all solicitations and contracts exceeding the simplified acquisition threshold in part 13 of the Federal Acquisition Regulation, except those for commercial items.

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of $25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) 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 identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

252.223-7004 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, and 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 employees 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 times 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 program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

252.225-7012 Preference for Certain Domestic Commodities (AUG 2000)

(a) The Contractor agrees to deliver under this contract only such of the following articles that have been grown, reprocessed, reused, or produced in the United States, its possessions, or Puerto Rico --

(1) Food;

(2) Clothing;

(3) Tents, tarpaulins, or covers;

(4) Cotton and other natural fiber products;

(5) Woven silk or woven silk blends;

(6) Spun silk yarn for cartridge cloth;

(7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics;

(8) Canvas products;

(9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles); or

(10) Any item of individual equipment (Federal supply Classification 8465) manufactured from or containing such fibers, yarns, fabrics, or materials.

(b) This clause does not apply --

(1) To supplies listed in FAR section 25.104(a), or other supplies for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;

(2) To foods which have been manufactured or processed in the United States, its possessions, or Puerto Rico;

(3) To chemical warfare protective clothing produced in the countries listed in subsection 225.872-1 of the Defense FAR Supplement; or

(4) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if--

(i) The fabric is to be used as a component of an end item that is not a textile product. Examples of textile products, made in whole or in part of fabric, include--

(a) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);

(B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs/apparel/ findings/tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;

(C) Upholstered seats (whether for household, office, or other use); and

(D) Parachutes (Federal Supply Class 1670); or

(ii) The fibers and yarns are para-aramid fibers and yarns manufactured in the Netherlands.

(End of clause)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

(a) Definitions. As used in this clause--

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).

(2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.

(b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec 2407(a) prohibits a United States person from taking.

(End of clause)

252.227-7000 Non-estoppel. (OCT 1966)

The Government reserves the right at any time to contest the enforceability, validity, scope of, or the title to any patent or patent application herein licensed without waiving or forfeiting any right under this contract.

252.227-7022 GOVERNMENT RIGHTS (UNLIMITED) (MAR 1979)

The Government shall have unlimited rights, in all drawings, designs, specifications, notes and other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Contractor. The Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works on the request of the Contracting Officer.

252.227-7023 DRAWINGS AND OTHER DATA TO BECOME PROPERTY OF GOVERNMENT. (MAR 1979)

All designs, drawings, specifications, notes and other works developed in the performance of this contract shall become the sole property of the Government and may be used on any other design or construction without additional compensation to the Contractor. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work under 17 U.S.C. 201(b). With respect thereto, the Contractor agrees not to assert or authorize others to assert any rights nor establish any claim under the design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish all retained works on the request of the Contracting Officer. Unless otherwise provided in this contract, the Contractor shall have the right to retain copies of all works beyond such period.

252.227-7033 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.

252.231-7000 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.

252.236-7000 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.

252.236-7008 CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991)

(a) The Government's payment for the items listed in the Bidding Schedule shall constitute full compensation to the Contractor for --

(1) Furnishing all plant, labor, equipment, appliances, and materials; and

(2) Performing all operations required to complete the work in conformity with the drawings and specifications.

(b) The Contractor shall include in the prices for the items listed in the Bidding Schedule all costs for work in the specifications, whether or not specifically listed in the Bidding Schedule.

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.243-7001 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.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

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SECTION 00800

52.0001- 4001 CONTRACT ADMINISTRATION DATA

The Contract Administration Office for this contract subsequent to award is:

Department of the Army
Los Angeles District, Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

ATTN: Lucia A. Carvajal
Telephone No: Area Code (213) 452- 3240

Payment will be made by:

USACE Finance Center
ATTN: CEFC-AO-P
5270 Integrity Drive
Millington, TN 38054-5005

Submit Invoices to:

Refer to Block No. 26 of the Standard Form 1442, "Solicitation, Offer and Award" which will be completed at time of contract award.

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 1 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 730 calendar days after the Contractor receives the Notice to Proceed.

The Contractor shall provide the following portions of the project by the dates indicated below:

1) Contractor shall complete the dredging adjacent to the Los Angeles County Flood Control Department Summerland Avenue 108-inch Storm Drain Line "D" by 1 October 2002.
2) Contractor shall complete the portion of Southwest Slip Area 2 that is 300 feet landside of dike control line and shall complete dredging over a 300 feet wide waterside area in front of Southwest Slip Area 2 by 1 November 2003.
3) Contractor shall complete the whole of Southwest Slip Area 2 by 1 March 2004.
4) Contractor shall complete the whole of Southwest Slip Area 1 by 1 March 2004.
5) Contractor shall complete the portion of Pier 400 Excess Surcharge Material that is 300 feet landside of existing rock dike Face A, Face B and Face C by 1 November 2002. Material may be stockpiled on site as directed by Contracting Officer.
6) Contractor shall complete Areas 1, 2, 3 and 4 of Pier 400 Excess Surcharge Material by 1 January 2003. Removal of material from Areas 3 and 4 shall not commence until 1 November 2002.
7) Contractor shall complete Areas 5 and 6 of Pier 400 Excess Surcharge Material by 1 March 2003. Removal of material from Areas 5 and 6 shall not commence until 1 January 2003.

The completion date is based on the assumption that the successful Contractor will receive the Notice to Proceed by 1 September 2002. The completion date will be extended by the number of calendar days after the above date that the Contactor receives the Notice to Proceed, except to the extent that the delay in issuance of the Notice to Proceed results from the failure of the Contractor to give the required

Performance and Payment Bonds within the time specified in the bid.

The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of $6,612.00 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-18 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 judgment of the Contracting Officer, is justified.

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(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 participation for each trade
21% to 25.1%	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 Programs 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 the 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 goals 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 Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) 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 Los Angeles County, California.

52.228-12 Prospective Subcontractor Requests for Bonds. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, 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 requester.

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) “Irrevocable letter of credit” (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than $25 million in the past year, ILCs over $5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than $25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

_____

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____(for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States $_____. This Letter of Credit is payable at [issuing financial institution's

and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

_____

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

_____
[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars

_____/U.S. $_____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

_____

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGNED DRAFT

_____

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States $_____. This draft is drawn under Irrevocable Letter of Credit No. _____.

_____

[Beneficiary Agency]

By: _____

52.228-15 Performance and Payment Bonds--Construction (JUL 2000)-

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is $100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.0028-4001 REQUIRED INSURANCE

Insurance is required as follows:

a. Either Workman's Compensation or Employer's Liability Insurance with a minimum limit of $100,000.00.

b. General Liability. The Contracting Officer shall require bodily injury liability insurance coverage written on the comprehensive form or policy of at least $500,000.00 per occurrence.

c. Automobile Liability Insurance for Bodily Injury and Property Damage with minimum limits of $200,000.00 for injury or death of any one person; $500,000.00 for each accident or occurrence of bodily injury liability; and $20,000.00 for each accident or occurrence for property liability.

d. In every case the insurance coverage shall amount to at least the limits stated above. However, where the Financial Responsibility Compulsory Insurance Law of the State in which the installation is located requires higher limits, the Automobile Liability Insurance Policy should provide coverage of at least those limits.

Prior to the commencement of work hereunder, the Contractor shall furnish to the Contracting Office a certificate or written statement of the above required insurance. The policies evidencing required insurance shall contain an endorsement to the effect that cancellation or any material change in the policies adversely affecting the interests of the Government in such insurance shall not be effective until 10 days after written notice thereof to the Contracting Officer.

The Contractor agrees to insert the substance of this clause, including this paragraph, in all subcontracts

52.0231-4001 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995)
EFARS 52-231-5000

(a) Allowable costs 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 for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region VII. Working conditions shall be considered to be average for determining equipment rates 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)(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 lessees 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 of pricing data submitted are accurate, complete and current.

(End of clause)

52.232-4001 CONTINUING CONTRACTS (ALTERNATE) (MAR 1995) EFARS 52-232-5002

(a) Funds are not available at the inception of this contract to cover the entire contract price. The sum of $1,000,000.00 has been reserved for this contract and is available for payment to the contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds, together with funds provided by one or more non-federal project sponsors will be reserved for this contract. The liability of the United States for payment beyond the funds reserved for this contract is contingent on the reservation of additional funds.

(b) Failure to make payment in excess of the amount currently reserved, or that may be reserved from time to time, shall not be considered a breach of this contract, and shall not entitle the contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (e) and (h) below.

(c) 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 of any additional funds reserved for the contract by issuing and administrative modification to the contract.

(d) 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 of additional funds which will be needed to meet payments due or to become due under this 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.

(e) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. If and when sufficient additional funds are reserved, the contractor shall be entitled to simple interest on any payment that the contracting officer determines was actually earned under the terms of this 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, as in effect on the first day of the delay in such payment.

(f) 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 a "Suspension of Work" or similar clause or in any other manner under this contract.

(g) 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.

(h) If, upon the expiration of sixty (60) 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 at no cost to the Government, except that, to the extent that additional funds to make payment therefore are allocated to this contract, it may be treated as a termination for the convenience of the Government.

(i) 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 this 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.

(j) The term "Reservation" means monies that have been set aside and made available for payments under this contract.

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least 35% percent of the total amount of 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.

52.236-4 PHYSICAL DATA (APR 1984)

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.

(b) Weather conditions . The contractor shall satisfy himself as to the hazards likely to arise from weather conditions.

(c) Transportation facilities . The contractor shall make his own investigation of the conditions of existing public and private roads and clearances, restrictions, bridge load limits and other limitations affecting transportation and ingress and egress at the job site. The unavailability of transportation facilities or limitations thereof shall not become a basis for claims against the Government or extensions of time for completion of the work.

(d) N/A.

52.236-16 QUANTITY SURVEYS (APR 1984)

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(b) The Government shall conduct the original and final surveys and make the computations based on them. The Contractor shall conduct the surveys for any periods for which progress payments are requested and shall make the computations based on these surveys. All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.

(c) Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(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 therefore. 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.

52.0236-4001 PLANT AND MATERIAL REMOVAL AFTER CONTRACT TERMINATION (MAR 1996) EFARS 52.236-5000

Should this contract be terminated as provided in clause 52.232-4001 because of the failure of Congress to provide additional funds for its completion, the contractor may be permitted to remove plant and material on which payments for preparatory work have been made, subject to an equitable deduction from the amounts due the contractor to reimburse the United States for the unabsorbed value of such plant and material.

(End of clause)

52.249-4001 BASIS FOR SETTLEMENT OF PROPOSALS EFARS 52.249-5000

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total costs basis, the following principals 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 costs 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 unallowable expenses will be used to determine equipment operating expenses. [3]

(4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).

(5) License, taxes, storage and insurance costs age normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recover through the indirect expense rate.

(End of Statement)

252.236-7001 CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(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;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details 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:

Title	File	Drawing No.
INDEX OF DRAWINGS (PAGE 1),	B-1632,	SHEET 2
INDEX OF DRAWINGS (PAGE 2),	B-1633,	SHEET 3
Refer to Index of Drawings		

(End of clause)

252.236-7002 OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC 1991)

(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.).

252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) Definitions. As used in this clause --

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information --

(1) Prime contract number;

(2) Name of vessel;

(3) Vessel flag of registry;

(4) Date of loading;

(5) Port of loading;

(6) Port of final discharge;

(7) Description of commodity;

(8) Gross weight in pounds and cubic feet if available;

(9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor agrees to provide with its final invoice under this contract a representation that to the best of its knowledge and belief --

(1) No ocean transportation was used in the performance of this contract;

(2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY

TOTAL_____

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) The Contractor shall include this clause, including this paragraph (h), in all subcontractors under this contract that--

(1) Exceed the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation; and

(2) Are for a type of supplies described in paragraph (b)(3) of this clause.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(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--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

52.211-5001 VARIATIONS IN ESTIMATED QUANTITIES, SUBDIVIDED ITEMS
(MAR 1995)—EFARS

This variation in estimated quantities clause is applicable only to Items Nos. **0027, 0028, 0037 and 0038**

(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 Items Nos**. 0027, 0028, 0037 and 0038** is less than 85% of the quantity of the first sub-item listed under such item, 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 shall be made in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.

(c) If the actual quantity of work performed under Items Nos. **0027, 0028, 0037 and 0038** exceeds 115% or is less than 85% of the total estimated quantity of the sub-item under that item and/or if the quantity of the work performed under the second sub-item or any subsequent sub-item under Items Nos. **0027, 0028, 0037 and 0038** 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 52.211-18, Variation in Estimated Quantities.

(End of clause)

252.236-7004 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION. (DEC 1991)

(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) 60 percent of the lump sum price upon completion of the contractor's mobilization at the work site.

(2) The remaining 40 percent 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 in payment, as determined by the Contracting Officer, of –

(i) Actual mobilization costs at completion of mobilization;

(ii) Actual demobilization costs at completion of demobilization; and

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

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

BRS Document Viewer
General Decision Number CA020033

General Decision Number CA020033
Superseded General Decision No. CA010033
State: California Construction Type:
BUILDING
DREDGING
HEAVY HIGHWAY
County(ies):
LOS ANGELES BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	03/01/2002
1	03/08/2002
2	03/22/2002
3	03/29/2002
4	05/10/2002

COUNTY(ies):
LOS ANGELES ASBE0005B 09/24/2001

	Rates	Fringes
Includes the application of all insulating materials, protective coverings, coatings, and finishings to all types of mechanical systems		
INSULATOR/ASBESTOS WORKER	30.23	7.66

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* ASBE0005D 10/04/1999

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER		
Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechnical systems, wheather they contain asbestos or not	19.70	4.87

BOIL0092F 10/01/2001

	Rates	Fringes
BOILERMAKER	31.01	11.95

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* BRCA0004L 05/01/2002

	Rates	Fringes
BRICKLAYER; MARBLE MASON	30.35	6.35

BRCA0018H 06/01/2001

	Rates	Fringes
TILE LAYER	26.00	6.86
TILE FINISHER	16.45	2.11
MARBLE FINISHER	19.55	2.76

BRCA0018K 12/01/2000

	Rates	Fringes
TERRAZZO WORKER	26.78	5.34

TERRAZZO FINISHER	20.53	5.34

CARP0002A 07/01/2001

	Rates	Fringes
CARPENTERS:		
Carpenter, cabinet installer, insulation installer, floor worker and acoustical installer	27.75	5.61
Shingler	27.88	5.61
Roof loader of shingles	19.52	5.61
Saw filer	27.83	5.61
Table power saw operator	27.85	5.61
Pneumatic nailer or power stapler	28.00	5.61
Millwright	28.25	5.61
Pile driver; Derrick barge; Bridge or dock carpenter; Cable splicer; Heavy framer; Rockslinger	27.88	5.61
Head rockslinger	27.98	5.61
Rock barge or scow	27.98	5.61
Scaffold builder	22.00	5.61

FOOTNOTE:

Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre-drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): $0.13 per hour additional.

CARP0002B 07/01/2001

	Rates	Fringes
DIVERS:		
Diver, wet	486.08 per day	5.61
Diver, stand-by	243.04 per day	5.61
Diver tender	235.04 per day	5.61

CARP0002Q 07/01/2001

	Rates	Fringes
Work on wood framed construction of single family residences, apartments or condominiums under 4 stories		
DRYWALL INSTALLERS	19.00	5.18
DRYWALL STOCKER/SCRAPPER	10.00	4.42
All other work		
DRYWALL INSTALLERS	27.75	6.43
DRYWALL STOCKER/SCRAPPER	10.00	4.42

CARP0003H 07/01/2001

	Rates	Fringes
MODULAR FURNITURE INSTALLER	14.99	5.805
LOW WALL MODULAR TECHNICIAN	18.22	5.805
FULL WALL TECHNICIAN	21.47	5.805

ELEC0011A 02/15/2002

	Rates	Fringes
ELECTRICIANS:		

Tunnel Work:		
Electrician	32.67	3%+10.79
Cable splicer; instrumentation person; and fiber optic cable splicer	33.27	3%+10.79
All other electrical work including work on the building and the grounding/bonding system for intelligent transportation systems and intelligent vehicle highway systems, including distribution panels, racks, switching systems, general lighting, convenience outlets for transformers of voltage, and device supply voltage:		
Electrician	29.70	3%+10.79
Cable splicer; instrumentation person; and fiber optic cable splicer	30.30	3%+10.79
All other electrical work on intelligent transportation systems and CCTV highway systems:		
Transportation Systems		
Electrician	29.70	3%+10.79
Cable splicer; and fiber optic cable splicer	30.30	3%+10.79
Technician	21.83	3%+10.39

SCOPE OF WORK:
TRANSPORTATION SYSTEMS:
ELECTRICIAN:
Installation of street lights and traffic signals, including electrical circuitry, programmable controllers, pedestal-mounted electrical meter enclosures and laying of pre-assembled multi-conductor cable in ducts, layout of electrical systems and communication installation, including proper position of trench depths and radius at duct banks, location for man holes, pull boxes, street lights and traffic signals. Installation of underground ducts for electrical,telephone, cable television and communication systems. Pulling,termination and splicing of traffic signal and street lightingconductors and electrical systems including interconnect,detector loop, fiber optic cable and video/cable.
TECHNICIAN:
Distribution of material at job site, manual excavation and backfill, installation of system conduits and raceways for electrical, telephone, cable television and communication systems. Pulling, terminating and splicing of traffic signal and street lighting conductors and electrical systems including interconnect, detector loop, fiber optic cable and video/data.

ELEC0011H 12/01/2001

	Rates	Fringes
COMMUNICATIONS & SYSTEMS WORK (excludes any work on intelligent transportation systems		

or CCTV highway systems):

COMMUNICATIONS & SYSTEMS INSTALLER	21.53	3%+5.00
COMMUNICATIONS & SYSTEMS TECHNICIAN	23.33	3%+5.00

SCOPE OF WORK

The work covered shall include the installation, testing, service and maintenance, of the following systems that utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for TV monitoring and surveillance, background foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms and low voltage master clock systems.

A. Communication systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems

SCADA (Supervisory control/data acquisition
PCM (Pulse code modulation)
Inventory control systems
Digital data systems
Broadband & baseband and carriers
Point of sale systems
VSAT data systems
Data communication systems
RF and remote control systems
Fiber optic data systems

B. Sound and Voice Transmission/Transference Systems

Background-Foreground Music
Intercom and Telephone Interconnect Systems
Sound and Musical Entertainment Systems
Nurse Call Systems
Radio Page Systems
School Intercom and Sound Systems
Burglar Alarm Systems
Low-Voltage Master Clock Systems
Multi-Media/Multiplex Systems
Telephone Systems
RF Systems and Antennas and Wave Guide

C. *Fire Alarm Systems-installation, wire pulling and testing.

D. Television and Video Systems

Television Monitoring and Surveillance Systems
Video Security Systems
Video Entertainment Systems
Video Educational Systems
CATV and CCTV

E. Security Systems

Perimeter Security Systems
Vibration Sensor Systems
Sonar/Infrared Monitoring Equipment
Access Control Systems
Card Access Systems

*Fire Alarm Systems

1. Fire Alarms-In Raceways

a. Wire and cable pulling, in raceways, performed at the current electrician wage rate and fringe benefits.

b. Installation and termination of devices, panels, startup, testing and programmming performed by the technician.
2. Fire Alarms-Open Wire Systems
a. Open wire systems installed by the tchnician.

ELEC0011J 09/01/1998

	Rates	Fringes
ALARM TECHNICIAN	17.60	3%

PAID HOLIDAYS:
New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving, the last regularly scheduled working day before Christmas, Christmas Day, and two floating holidays by mutual agreement between the employer and the worker.

SCOPE OF WORK:
Fire alarm, hold-up alarm, burglar alarm and surveillance systems. Does not cover the installation of conduit systems and/or the installation of line voltage to these aforesaid systems. Installation of an incidental run or runs of conduit for mechanical protection shall not be considered a conduit system.

ELEC1245C 06/01/2001

	Rates	Fringes
LINE CONSTRUCTION:		
Lineman; Cable splicer	32.20	4.5%+6.98
Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), and overhead and underground distribution line equipment)	27.37	4.5%+6.70
Groundman	20.93	4.5%+6.70
Powderman	30.59	4.5%+6.74

ELEV0018A 09/15/2001

	Rates	Fringes
ELEVATOR MECHANIC	33.695	7.455

FOOTNOTE:
Vacation Pay: 8% with 5 or more years of service, 6% for 6 months to 5 years service. Paid Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Friday after, and Christmas Day.

ENGI0012C 07/01/2001

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	27.05	11.30
GROUP 2	27.83	11.30
GROUP 3	28.12	11.30
GROUP 4	29.21	11.30
GROUP 5	29.43	11.30
GROUP 6	29.54	11.30
GROUP 7	29.66	11.30
GROUP 8	29.83	11.30

GROUP 9	29.93	11.30
GROUP 10	29.96	11.30
GROUP 11	30.04	11.30
GROUP 12	30.16	11.30
GROUP 13	30.33	11.30
GROUP 14	30.43	11.30
GROUP 15	30.54	11.30
GROUP 16	30.66	11.30
GROUP 17	30.83	11.30
GROUP 18	30.93	11.30
GROUP 19	31.04	11.30
GROUP 20	31.16	11.30
GROUP 21	31.66	11.30
CRANES, PILEDRIVING & HOISTING EQUIPMENT:		
GROUP 1	28.00	11.30
GROUP 2	28.78	11.30
GROUP 3	29.07	11.30
GROUP 4	29.21	11.30
GROUP 5	29.43	11.30
GROUP 6	29.54	11.30
GROUP 7	29.66	11.30
GROUP 8	29.83	11.30
GROUP 9	30.00	11.30
GROUP 10	31.00	11.30
GROUP 11	32.00	11.30
GROUP 12	33.00	11.30
GROUP 13	34.00	11.30
TUNNEL WORK:		
GROUP 1	29.28	11.30
GROUP 2	29.57	11.30
GROUP 3	29.71	11.30
GROUP 4	29.93	11.30
GROUP 5	30.04	11.30
GROUP 6	30.46	11.30

FOOTNOTES: Workers required to suit up and work in a hazardous material environment: $1.00 per hour additional.

Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU side dum jack; Screening and conveyor machine oeprator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (side steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Horizontal Directional Drilling Machine; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator (including water wells); Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter(concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 6: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar

types); Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bendng machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 7: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 8: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth-moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self-loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 9: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 10: Canal liner operator; Canal trimmer operator; Remote-control earth-moving equipment operator (operating a second piece of equipment: $1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 11: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 12: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 13: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in tandem - Quad 9 and similar type)

GROUP 14: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 15: Rotex concrete belt operator (or similar types); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds.and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 18: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 19: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment

operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)
GROUP 21: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)
CRANES, PILEDRIVING AND HOISTING EQUIPMENT CLASSIFICATIONS
GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)
GROUP 2: Truck crane oiler
GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)
GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator
GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)
GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator
GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)
GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds. mrc)
GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons
GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry
GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)
GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and

including 300 tons mrc)
GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)
GROUP 2: Power-driven jumbo form setter operator
GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)
GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)
GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)
GROUP 6: Tunnel mole boring machine operator

ENGI0012D 08/01/2001

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
DREDGING:		
Leverman	33.65	11.30
Dredge dozer	30.18	11.30
Deckmate	30.07	11.30
Winch operator (stern winch on dredge)	29.52	11.30
Fireman; deckhand and bargeman	28.98	11.30
Barge mate	29.59	11.30

IRON0002D 07/01/2001

	Rates	Fringes
IRONWORKERS:		
Fence erector	25.19	14.575
Ornamental, reinforcing and structural	26.08	14.575

FOOTNOTE:
Work at Edwards Air Force Base: $3.00 per hour additional.

LABO0001B 07/01/2001

	Rates	Fringes
BRICK TENDER	20.41	9.26

LABO0002H 09/01/2001

	Rates	Fringes
LABORERS:		
GROUP 1	19.46	9.82
GROUP 2	19.96	9.82
GROUP 3	20.46	9.82

GROUP 4	21.91	9.82
GROUP 5	22.16	9.82
TUNNEL LABORERS:		
GROUP 1	22.37	9.82
GROUP 2	22.64	9.82
GROUP 3	23.05	9.82
GROUP 4	23.64	9.82
GUNITE LABORERS:		
GROUP 1	22.34	12.24
GROUP 2	21.39	12.24
GROUP 3	17.85	12.24
HOUSEMOVERS (ONLY WHERE HOUSEMOVING IS INCIDENTAL TO A CONSTRUCTION CONTRACT):		
Housemover	15.50	8.38
Yard maintenance person	15.25	8.38

FOOTNOTE: GUNITE PREMIUM PAY:

Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates.

Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis.

Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Slurry seal crew (mixer operator, applicator operator, squeegee person, shuttle person, top person), filling of cracks by any method on any surface; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner; Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or

water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellower

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials ("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt-rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller: All power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Bull gang mucker, track person; Changehouse person; Concrete crew, including rodder and spreader; Dump person; Dump person (outside); Swamper (brake person and

switch person on tunnel work); Tunnel materials handling person
GROUP 2: Chucktender, cabletender; Loading and unloading agitator cars; Nipper; Pot tender, using mastic or other materials (for example, but not by way of limitation, shotcrete, etc.); Vibrator person, jack hammer, pneumatic tools (except driller)
GROUP 3: Blaster, driller, powder person; Chemical grout jet person; Cherry picker person; Grout gun person; Grout mixer person; Grout pump person; Jackleg miner; Jumbo person; Kemper and other pneumatic concrete placer operator; Miner, tunnel (hand or machine); Nozzle person; Operating of troweling and/or grouting machines; Powder person (primer house); Primer person; Sandblaster; Shotcrete person; Steel form raiser and setter; Timber person, retimber person, wood or steel; Tunnel Concrete finisher
GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Nozzle person and rod person
GROUP 2: Gun person
GROUP 3: Rebound person

LABO0300A 08/01/2001

	Rates	Fringes
PLASTERER TENDER	22.30	9.62
PLASTER CLEANUUP LABORER	19.75	9.62

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* LABO0882B 01/01/2002

	Rates	Fringes
ASBESTOS REMOVAL LABORER	20.97	7.65

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos-containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO1184A 07/01/2001

	Rates	Fringes
LABORERS - STRIPING:		
GROUP 1	20.24	7.97
GROUP 2	20.94	7.97
GROUP 3	23.01	7.97
GROUP 4	24.66	7.97

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician
GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment
GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating

devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper
GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

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PAIN0036A 07/01/2001

	Rates	Fringes
PAINTER (includes lead abatement):		
Work on service stations and and car washes; Small new commercial work (defined as construction up to and including 3 stories in height, such as small shopping centers, small stores, small office buildings and small food establishments); Small new industrial work (defined as light metal buildings, small warehouses, small storage facilities and tilt-up buildings); Repaint work (defined as repaint of any structure with the exception of work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities); Tenant improvement work (defined as tenant improvement work not included in conjunction with the construction of the building, and all repainting of tenant improvement projects	21.25	5.63
All other work	24.52	5.63

PAIN0036F 10/01/2001

	Rates	Fringes

EXCLUDING ANTELOPE VALLEY NORTH OF THE FOLLOWING BOUNDARY: KERN COUNTY LINE TO HWY. #5, SOUTH OF HWY. #5 TO HWY. N2, EAST ON N2 TO PALMDALE BLVD., TO HWY. #14, SOUTH TO HWY. #18, EAST TO HWY. #395:

DRYWALL FINISHER	25.33	7.93
REMAINDER OF COUNTY:		
DRYWALL FINISHER	22.14	7.93

PAIN1247B 03/01/2002

	Rates	Fringes
SOFT FLOOR LAYER	25.95	6.22

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* PLAS0200I 08/01/2001

	Rates	Fringes
PLASTERERS	28.66	3.80

PLAS0500B 07/01/2001

	Rates	Fringes
CEMENT MASONS:		
Work on projects where the total permit value of the general and all subcontracts is $12 million or less:		
Cement Mason; curb and gutter machine; Clary and similar type of screed operator (cement only); grinding machine (all types); Jackson vibratory, Texas screed and similar type screed operator; scoring machine operator	20.47	9.45
Cement mason (magnesite, magnesite - terrazzo and mastic composition, epoxy, urethanes and exotic coatings, Dex-O-Tex)	20.60	9.45
Cement mason, floating and troweling machine operator	22.31	11.45
All other work:		
Cement mason; curb and gutter machine operator; Clary and similar type of screed operator (cement only); grinding machine (all types); Jackson vibratory, Texas screed and similar type screed operator; scoring machine operator	22.31	11.45
Cement mason (magnesite, magnesite - terrazzo and mastic composition, epoxy, urethanes and exotic coatings, Dex-O-Tex)	22.43	11.45
Cement Mason - floating and troweling machine operator	22.56	11.45

FOOTNOTE:

Work on a swinging stage, bosun chair, or suspended scaffold, whether swinging or rigid, above or below ground: $0.25 per hour additional.

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* PLUM0016A 07/01/2001

	Rates	Fringes
PLUMBER & PIPEFITTER:		
SEWER AND STORM DRAIN WORK	17.83	10.88
REPAIR	25.46	11.32
ALL OTHER WORK	26.33	11.88

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* PLUM0250B 09/01/2001

	Rates	Fringes
REFRIGERATION & AIR CONDITIONING		
FITTER	32.60	9.90

PLUM0345A 07/01/2001

	Rates	Fringes
LANDSCAPE & IRRIGATION FITTER	20.38	11.10

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* ROOF0036B 09/01/2001

	Rates	Fringes
ROOFER	24.77	5.40
Duties limited to the following: Roof removal of any type of roofing or roofing material; or spudding, or sweeping; and/or clean-up; and/or preload in, or in preparing the roof for application of roofing, damp and/or waterproofing materials		
PREPARER	16.24	1.00

FOOTNOTE: Pitch premium: Work on which employees are exposed to pitch fumes or required to handle pitch, pitch base or pitch impregnated products, or any material containing coal tar pitch, the entire roofing crew shall receive $1.75 per hour "pitch premium" pay.

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* SFCA0669M 04/01/2002

	Rates	Fringes
DOES NOT INCLUDE THE CITY OF POMONA, CATALINA ISLAND, AND THAT PART OF LOS ANGELES COUNTY WITHIN 25 MILES OF THE CITY LIMITS OF LOS ANGELES:		
SPRINKLER FITTER	29.35	6.05

SFCA0709E 09/01/2001

	Rates	Fringes
THE CITY OF POMOMA, CATALINA ISLAND, AND THAT PART OF LOS ANGELES COUNTY WITHIN 25 MILES OF THE CITY LIMITS OF LOS ANGELES:		
SPRINKLER FITTER (FIRE)	31.58	10.95

SHEE0102G 02/01/2001

	Rates	Fringes
INDUSTRIAL		
Work on all air pollution control systems, noise abatement panels, blow pipe, air-veyor systems, dust collecting, baghouses, heating, air conditioning, and ventilating (other than creature comfort) and all other industrial		

work, including metal insulated
ceilings
SHEETMETAL WORKER 24.91 13.62

SHEE0102I 02/01/2001

	Rates	Fringes
SOUTH OF IMPERIAL HWY. TO THE CITY OF LONG BEACH AND THE CITIES OF PONOMA AND CLAREMONT:		
COMMERCIAL SHEET METAL WORKER:		
Work on all commercial HVAC for creature comfort and computers clean rooms, architectural metals, metal roofing and lagging over insulation	28.60	10.39

SHEE0108B 08/01/2001

	Rates	Fringes
SOUTH OF A STRAIGHT LINE DRAWN BETWEEN GORMAN AND BIG PINES, CALIFORNIA; EXCLUDING THE AREA SOUTH OF IMPERIAL HIGHWAY EAST OF THE LOS ANGELES RIVER, EXCLUDING THE CITIES OF LONG BEACH, CLAREMONT AND POMONA, AND EXCLUDING THE ISLAND OF CATALINA:		
Work on all new construction and remodel work except residential buildings and commercial buildings less than ten thousand (10,000) square feet:		
SHEET METAL WORKERS	30.17	10.39
Modernization excluding new construction:		
Work to add or change existing heating or air conditioning systems in building or new building one year after occupncy limited to single dewllings, duplex dwellings, triplex dewllings, apartment dwellings not to exceed 4 (units) per building over two (2) stories and commercial buildings not exceeding five thousand (5,000) square feet. Work does not include modification, upgrades, energy management, or conservation improvements of central heating and air conditioning equipment or new construction:		
SHEETMETAL WORKER	17.66	3.99
Light commercial:		
Work on general sheet metal and heating and air conditioning on single family dwellings, tract homes and apartment buildings up to and including two (2) stories in height and building four thousand (4,000) square feet of total project:		
Sheet Metal Worker	17.66	2.50

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* TEAM0011G 07/01/2001

	Rates	Fringes
TRUCK DRIVERS:		
Edwards Air Force Base:		
GROUP 1	24.44	12.39
GROUP 2	24.59	12.39
GROUP 3	24.72	12.39

GROUP 4	24.91	12.39
GROUP 5	24.85	12.39
GROUP 6	24.97	12.39
GROUP 7	25.22	12.39
GROUP 8	25.47	12.39
GROUP 9	25.67	12.39
GROUP 10	25.97	12.39
GROUP 11	26.47	12.39
Remainder of County:		
GROUP 1	21.44	12.39
GROUP 2	21.59	12.39
GROUP 3	21.72	12.39
GROUP 4	21.91	12.39
GROUP 5	21.85	12.39
GROUP 6	21.97	12.39
GROUP 7	22.22	12.39
GROUP 8	22.47	12.39
GROUP 9	22.67	12.39
GROUP 10	22.97	12.39
GROUP 11	23.47	12.39

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver

GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck-mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person ($0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of vehicles - 4 or more axle; Oil spreader truck; Dump truck, 16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver; Ross carrier driver

GROUP 8: Dump truck, 25 yds. or more water level; Truck repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles or over

GROUP 10: Dump truck - 50 yds. or more water level; Water pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine with attachments; Winch truck driver - $1.25 additional when operating winch or similar special attachments

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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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)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01200

GENERAL REQUIREMENTS

03/02

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-- End of Section Table of Contents --

SECTION 01200

GENERAL REQUIREMENTS
03/02

PART 1 GENERAL

1.1 APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CORPS OF ENGINEERS (COE)

COE EM 385-1-1	(1996) Safety and Health Requirements Manual
ER 415-1-5-89	Construction Time Extension for Weather

DEPARTMENT OF COMMERCE (DOC)

DOC PS 1	(1983) Construction and Industrial Plywood
DOC PS 20-70	American Softwood Lumber Standard

CODE OF FEDERAL REGULATIONS

29 CFR 1926	Safety and Health Regulations for Construction
33 CFR 80	Colregs Demarcation Lines
33 CFR 156	Oil and Hazardous Material Transfer Operations
33 CFR 80-84	COLREGS
33 CFR 96	Rules for Safe Operation of Vessels and Safety Management Systems

Federal Specifications (FS)

FS FF-B-575	(Rev C) Bolts, Hexagon and Square
FS FF-N-105	(Rev B; Int Am 4) Nails, Brads, Staples and Spikes: Wire, Cut and Wrought

FS FF-N-836	(Rev D; Am 2) Nut: Square, Hexagon,Cap, Slotted, Castle, Knurled, Welding and Single Ball Seat
FS TT-E-529	(Rev D) Enamel, Alkyd, Semi-Gloss
FS TT-P-25	(Rev E; Am 2) Primer Coating, Exterior (Undercoat for Wood, Ready-Mixed, White and Tints)
FS MM-L-751	(Rev D) (Rev H) Lumber; Softwood

US Coast Guard

INST M16672.28	Navigation Rules, International-Inland, latest edition.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Site Specific Safety and Health Plan; G

Activity Hazards Safety Analysis; G

Work and Storage Area Plan; G

SD-05 Design Data

Aerial Photographs

SD-11 Closeout Submittals

As-Built plans; G

1.3 PROJECT SIGNS AND BULLETIN BOARDS

1.3.1 General

The Contractor shall construct and erect project and hard hat signs and a bulletin board at the respective locations designated by the Contracting Officer. The signs shall conform to the requirements depicted in the plans included at the end of this section. Signs shall be erected as soon as possible and within 10 days after commencement of work for this contract.

1.3.2 Construction Signs

1.3.2.1 Materials

Lumber shall conform to DOC PS 20-70, and shall be seasoned Douglas Fir, SRS, Grade D or better except that posts, braces and spacers shall be construction Grade (WCLB)

Plywood shall conform to DOC PS 1, Grade AC, Group 1, Exterior.

Bolts, Nuts and Nails. Bolts and nuts shall be galvanized conform to FS FF-B-575 and to FS FF-N-836. Nails shall conform to FS FF-N-105.

Paints and Oils. Paints shall conforms to FS TT-P-25 for primer and FS TT-E-529 for finish paint and lettering.

1.3.2.2 Execution

Signs shall be erected as soon as possible and within 10 days after commencement of work under this contract shall include:

Project Sign at location designated by the Contracting Officer.

Warning Signs facing approaching traffic on all haul roads crossing under overhead power transmission lines.

Five (5) hard hat signs at locations directed.

Four (4) disposal signs at locations directed

Project and hard hat signs shall be constructed per the details shown in attached figures. Decals for hard hat signs shall be furnished by the Contracting Officer.

The Contractor shall place a sign in an area that will easily identify the storage area. The sign will notify the public of the Storage Area for the Contractor, equipment, and construction crew. Public parking is not allowed in this area.

1.3.3 Bulletin Board at the Contractor's office

A weatherproof bulletin board, approximately 36 inches wide and 30 inches high, with hinged glass door shall be provided adjacent to or mounted on the Contractor's project office. If adjacent to the office, the bulletin board shall be securely mounted on no less than 2 posts. Bulletin board and posts shall be painted or have other approved factory finish. The bulletin board shall be easily accessible at all times and shall contain wage rates, equal opportunity notice, and such other items required to be posted.

1.3.4 Maintenance and Disposal

The Contractor shall maintain signs in good condition throughout the life of the project. Signs shall remain the property of the Contractor and upon completion of the project they shall be removed from the site.

1.4 PUBLIC UTILITIES

1.4.1 General

The approximate location of all railroads, pipelines, power and communication lines, cables and other utilities known to exist within the limits of the work are indicated on the plans. The sizes, locations, and names of owners of such pipelines, cables and utilities are given from available information, but their accuracy is not guaranteed, reference Section 02225 PIPELINE AND CABLE REMOVAL. Except as otherwise indicated on the plans, all existing utilities will be left in place and the Contractor shall conduct his operations in such a manner that the pipelines, cables and utilities will be protected from damage at all times, or arrangements shall be made by the Contractor for their relocation at the Contractor's own expense. The Contractor shall be responsible for any damage to pipelines, cables, and utilities known to exist and shall reimburse the owners for such damage caused by his operations.

1.4.2 Pipelines, Cables and Utilities To be Removed, Relocated or Protected

The Contractor shall notify the Contracting Officer, in writing, 14 calendar days prior to starting work on any pipeline, cable or utility to be removed, relocated or protected. On each removal, relocation, notification shall include dates on which the Contractor plans excavation, by-pass work, removal work and/or installation work, as applicable.

Pipelines, Cables or Utilities to be relocated or removed not as part of this contract are designated "To be Relocated by others" or "To be removed by others", respectively. Pipelines, Cables or Utilities shown on the plans and not so designated will be left in place and be subject to the provisions of the CONTRACT CLAUSE: PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS. The Contractor may make arrangements with the owner for temporary relocation and restoration of pipelines, cables and utilities not designated to be relocated, or for additional work in excess of the work needed to relocate pipelines, cables or utilities designated for relocation at no additional cost to the Government.

1.4.3 Pipelines, Cables, and Utilities Not Shown

If the Contractor encounters, within the construction limits of the entire project, pipelines, cables or utilities not shown on the plans and not visible as of the date of this contract and if such pipelines, cables or utilities will interfere with construction operations, he shall immediately notify the Contracting Officer in writing to enable a determination by the Contracting Officer as to the necessity for removal or relocation. If such pipelines, cables, or utilities are left in place, removed or relocated, as directed by the Contracting Officer, the Contractor shall be entitled to an equitable adjustment for any additional work or delay.

1.4.4 Electrical Current

All electric current required by the Contractor shall be furnished at his expense. All temporary lines shall be furnished, installed, connected, and

maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer and shall be removed by the Contractor in a like manner at his expense prior to final acceptance of the construction.

1.4.5 Coordination

The Contractor shall consult and cooperate with the owner of pipelines, cables and utilities that are to be relocated or removed by others to establish a mutual performance schedule and to enable coordination of such work with the construction work. These consultations shall be held as soon as possible after award of the contract or sufficiently in advance of anticipated interference with construction operations to provide required time for the removal or relocation of affected pipelines, cables or utilities.

It shall be the responsibility of the Contractor to fully coordinate all work with all other contractors, Los Angeles Harbor Department forces,and personnel working concurrently in the project vicinity.

The Contractor shall coordinate and cooperate with all occupants of each berth affected by the project to insure uninterrupted continued operation of all port facilities. Contractor's operations shall not interfere or disrupt ongoing terminal operations at the West Basin Terminals, Pier 300 Terminal, and Pier 400 Terminal.

If there is a coordination problem in the dredging project, the Contracting Officer shall be notified immediately and a meeting between all parties involved shall be held to resolve the problem.

Coordination with Port Police- the Contractor shall:

a. Provide, per U.S. Coast Guard requirements, VHF Channel 13 (156.65 MHZ) Bridge to Bridge radio communication which is exclusively for use in communicating with Port Pilots.

b. Also, provide a working channel for all other communications in addition to emergency channel 13 and 16.

c. Provide and use an appropriate whistle for signaling replies to Port Pilot warnings of ship approaches.

d. Check in each morning with Pilot Station.

Prior to start of construction activities the Contractor shall attend a meeting with the Contracting Officer and the Project Engineer, U.S. Coast Guard Captain of the Port, Los Angeles Port Pilots, and the Los Angeles Port Police to outline the organization for prevention/elimination of traffic conflicts.

Prior to start of work, the Contractor shall provide the Contracting Officer with names, addresses and 24-hour phone numbers of the Contractor's project engineers, superintendent, and foreman.

1.5 SITE ACCESS

The plans and specifications indicate the general means of site access for Contractor's work force and equipment. Prior to submission of bid, Contractor shall have satisfied himself on the means and methods of site access and of the operational restrictions concerning site access and allow for these in his bid price.

1.6 NOTICES

Copies of letters or notifications made to pipeline, cable, or utility companies, U.S. Navy, U.S. Coast Guard, Port of Los Angeles, County, and others shall be provided to the Contracting Officer.

1.6.1 Traffic Routing

The Contractor shall notify the Contracting Officer 14 days in advance of the time work will be started in areas requiring the rerouting of traffic, traffic lane striping, and removal of street signs. The foregoing shall apply to progressive modifications of traffic routing within an area in which work is in progress.

Police, Port Police, Coast Guard, and Fire Departments shall be notified by the Contractor whenever a street is to be closed to traffic, and obtain required permits, see paragraph POINTS OF CONTACT. If the closing is to be of long duration, a single notification to each department three (3) days before closing will be sufficient. A single notification shall then be made at the time the street is again opened to traffic. If the closing is to be of short duration or if different sections of the street are to be closed at different times, notifications shall be made on a day-to-day basis.

1.6.2 Underground Service Alert

The Contractor shall contact Underground Service Alert. Notify Underground Service Alert at (800) 422-4133 at least 2 working days, but not more that 14 calendar days prior to performing any excavation or other work close to any underground pipeline prior to commencement of demolition and work.

1.6.3 Existing Bench Marks and R/W Markers

The Contractor shall notify the Contracting Officer, in writing, 7 days in advance of the time he proposes to remove any bench mark or right-of-way marker. Along with the notification, the Contractor shall provide an alternate plan for maintaining the survey point.

1.6.4 United States Coast Guard

The Contractor shall notify, in writing, the Commander Eleventh Coast Guard District, and the Coast Guard Marine Safety Office/Group LA-LB not less than 14 calendar days prior to commencing work. The notifications, via letter, e-mail, or facsimile (with copy provided to the Contracting Officer), shall include as a minimum the following information:

a. Project description and location including latitude/longitude (NAD 83).

b. Size and type of any floating construction equipment to be used and displacement of such.
c. Name and radio call signs for working vessels.
d. Telephone number for 24-hour on-site contact and phone number of Project Engineer.
e. Construction schedule with start and completion dates.
f. Potential hazards to navigation.
g. Recommend the following language to be used in the Local Notice to Mariners: "Mariners are urged to transit at their slowest safest speed to minimize wake, and proceed with caution after passing arrangements have been made."

Mail address:

Commander (oan)
Eleventh Coast Guard District
Building 50-6
Coast Guard Island
Alameda, CA 94501-5100
ATTN: Local Notice to Mariners
TEL (510) 437-2970 FAX (510) 437-5836
email: srushing@d11.uscg.mil
cc: mcarlson@d11.uscg.mil

U.S. Coast Guard
Marine Safety Office / Group LA-LB
1001 South Seaside Ave., Bldg 20
San Pedro, CA 90731
Attn: Waterways Management
Phone # (310) 732-2020
Fax # (310) 732-2029
e-mail:rgriffiths@d11.uscg.mil

1.7 AIDS TO NAVIGATION

Navigation aids located within or near the areas required to be dredged will be removed by U.S. Coast Guard in advance of dredging operations. The Contractor shall not remove, relocate, obstruct, willfully damage, make fast to, or interfere with any aids to navigation unless specifically noted as part of this work. The U.S. Coast Guard has authority for moving or relocating aids to navigation. The Contractor shall notify the Eleventh Coast Guard District in writing with a copy to the Marine Safety Office / Group LA-LB, and the Contracting Officer, not less than 14 days in advance of the time he plans to operate any equipment adjacent to any aids to navigation which requires relocation or removal.

Navigation: The Contractor's operations shall conform to the U.S. Coast Guard publication "Navigation Rules, International-INST M16672.2", latest edition.

1.8 DREDGING AIDS

The Contractor shall submit a plan to the Contracting Officer on use and location of Temporary navigational aids and obtain the approval of the U.S. Coast Guard and the Chief Port Pilot 30 days prior to placing any buoy or other dredging aid markers in the water. Buoys and other dredging aids markers shall be equipped with necessary lights and the Contractor shall insure that all lights are in proper working order prior to installation. Buoys and dredging aid markers shall be maintained throughout the length of the dredging operation and shall not be colored, marked, or placed in a manner that will obstruct or be confused with other navigational aids. The Contractor's buoys and aid markers shall conform to U.S. Coast Guard regulations.

All underwater and above surface hazards to navigation shall be marked with a quick-flash white light at least 40 candela.

1.9 RESTRICTIONS

1.9.1 Obstruction of Channel

The Government will not undertake to keep the harbor entrance or navigation channels free from vessels or other obstructions. The Contractor shall be required to conduct the work in such a manner as to obstruct navigation as little as possible, and in case the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon the completion of the work, the Contractor shall promptly remove his plant, including ranges, temporary buoys, and piles and other marks placed by him under the contract in navigable waters or on shore. The Contractor's dredge shall be equipped for bridge to bridge communication with other vessels and the Contractor shall monitor prescribed channel in compliance with Coast Guard regulations.

Representatives of other Agencies. Personnel representing owners and agencies may be present for various portions of the work. However, the Contractor will be responsible only to the Contracting Officer.

The Contractor shall keep all areas neat, clean, and in a safe condition at all times.

1.9.2 Electric Current

All electric current required by the Contractor shall be furnished at his expense. All temporary connections for electricity shall be subject to the approval of the Contracting Officer. All temporary lines shall be furnished, installed, connected, and maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer and shall be removed by the Contractor in a like manner at his expense prior to final acceptance of the construction.

1.9.3 Pipeline Crossings.

The Contractor shall provide anchors or similar provisions to prevent rupture along the pipelines as required and where pipeline change in direction 22 degrees or more. Spills resulting from rupture shall be removed by and at the expense of the Contractor. Should submerged pipeline cause shoaling in the channel, the Contractor shall remove such shoals and restore to the depths as existed prior to the laying of the submerged pipe. Materials so removed shall be disposed of in a manner approved by the Contracting Officer. No separate payment will be made for the removal of such shoals and all cost thereof shall be included in the contract price with no additional cost to the Government.

1.9.4 Channel Crossings:

Where the Contractor's delivery pipe and any required power lines cross

navigation channels, the top of the pipe and power lines shall be submerged and maintained to a minimum depth of -72 feet MLLW in the Entrance Channel to Pier 300 Turning Basin, -45 feet MLLW in the Main, East Basin and West Basin Channels, -52 feet MLLW in the Pier 300 Channel, -67 feet MLLW in the Pier 400 Channel, and -51 feet MLLW in the Super Tanker Channel to provide an unrestricted navigation over the pipe and power lines for a distance of not less than the width of the channels. The Contractor shall prevent floating of the submerged pipeline and powerline (i.e. anchors, weights, air valves, etc.). The Contractor shall remove the anchors or weights after completion of the dredging operations.

1.10 MARINE PLANT AND EQUIPMENT

a. All marine plant and equipment which are required by federal regulations to be inspected by the United States Coast Guard, shall have valid certifications. No marine plant or equipment requiring Coast Guard inspection shall be put into use on the job without the required certification issued by the U.S. Coast Guard Officer in Charge of Marine Inspections.

b. All marine construction equipment shall monitor appropriate VHF marine safety radio channels.

c. Fuel transfer operations shall conform to U.S. Coast Guard design regulations, 33 CFR 156.

d. Marine Equipment and Construction Equipment Inspection. The Contracting Officer will make a detailed inspection of the Contractor's marine equipment and all construction equipment. A Marine Inspection Checklist and construction Equipment Inspection Checklist will be completed by the Contracting Officer prior to start of dredging. The Contractor may be required to modify or repair portions of its marine equipment and construction equipment that does not meet minimum standards as identified in the checklist before the marine equipment and construction equipment will be allowed to operate at the site. Any delays caused by required modifications or repairs will not be cause for any added coast to this contract and / or an extension in the time specified for completion of the contract.

1.11 POINTS OF CONTACT

Representatives shall be notified ten (10) working days before work commences in areas affecting them, unless otherwise indicated.

FEDERAL AGENCIES:

U.S. Army Corps of Engineers		
Resident Engineer	Dan Moore	(909) 981-5571
Safety Office	Susan Tianen	(213) 452-3898
U.S. Coast Guard		
Marine Safety Office/Group LA-LB	LT Rob Griffiths	(310) 732-2020
	BMC Robert Mikulskis	(310) 732-2020
Notice to Mariners	QM2 Shannon Rushing	(510) 437-2970
Aids to Navigation	LT Matt Salas	(510) 437-2969

Signal Management	LT Matthew Braden	(510) 437-2978
Federal Correction Institute Terminal Island	Tammy Wooden	(310) 831-8961

LOS ANGELES HARBOR DEPARTMENT, CITY OF LOS ANGELES:

Chief Harbor Engineer	Stacey Jones	(310) 732-3646
Chief Port Pilot	Pilot Dispatch Captains Bent Christiansen and Michael Rubino	(310) 732-3805
Port Police	Watch Commander Emergencies	(310) 732-3491 (310) 732-3500
Wharfinger	Cathy Lozano	(310) 732-3833
Construction & Maintenance Yard	Joannie Mukai	(310) 732-3555
Substation information	Ben Chavdarian	(310) 732-3622
City Lifeguard	Manya Traub	(310) 514-0261
Fire Department Battalion Headquarters	Chief Callaway	(310) 548-7516
Dept. of Water & Power Power System Operations	Johnson Tsui	(213) 367-0329
Least Tern Biologist	Dennis Hagner	(310) 732-3682

LOS ANGELES COUNTY:

Baywatch, Cabrillo Beach	John Lorentzen	(310) 372-2166
Dept. Recreation & Parks	Ron Berkowitz	(310) 548-7519

STATE OF CALIFORNIA:

Calif. Regional Water Quality Control Board-LA Region	Michael Lyons	(213) 576-6718
Dept. of Fish and Game	Marilyn Fluharty	(858) 467-4231

SOUTH COAST AIR QUALITY MGMT DISTRICT

	William Thompson	(909)396-2398

OTHERS:

Marine Exchange	Dick Mckenna	(310) 832-6411
Terminal Island Processing	Mike Chevalier	(310) 832-2691
Container Care, Ltd.	John Hunter	(310) 547-0867

Southern California Gas Co.	John Dewitt	(310) 732-4237
Terminal Island Treatment Plant Manager	Clarence Mansell	(310) 548-7543
Kaiser International Corp.	Roy Cootes	(310) 514-2084

1.12 TRANSPORTATION

The Contractor shall obtain and comply with all transportation permits and requirements.

The Contractor shall submit a plan for use of the Contractor's work and storage area for approval not less than 10 days prior to mobilization in the area.Only construction equipment, crew, and their support vehicles shall use the storage site in the harbor area.

1.13 PUBLIC SAFETY.

Attention is invited to the CONTRACT CLAUSE: PERMITS AND RESPONSIBILITIES. The Contractor shall provide temporary fencing, barricades, and/or guards, as required, to provide protection in the interest of public safety. Whenever the Contractor's operations create a condition hazardous to the public, he shall furnish at his own expense and without cost to the Government such flagmen and guards as are necessary to give adequate warning to the public of any dangerous conditions to be encountered and he shall furnish, erect, or maintain such fences, barricades, lights, signs and other devices as are necessary to prevent accidents and avoid damage or injury to the public. Flagmen and guards, while on duty and assigned to give warning and safety devices shall conform to applicable city, county, and state requirements. Should the Contractor appear to be neglectful or negligent in furnishing adequate warning and protection measures, the Contracting Officer may direct attention to the existence of a hazard and the necessary warning and protective measures shall be furnished and installed by the Contractor without additional cost to the Government. Should the Contracting Officer point out the inadequacy of warning and protective measures, such action of the Contracting Officer shall not relieve the Contractor from any responsibility for public safety or abrogate his obligation to furnish and pay for those devices. The installation of any general illumination shall not relieve the Contractor of his responsibility for furnishing and maintaining any protective facility.

1.14 GENERAL SAFETY REQUIREMENTS

1.14.1 General

The Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, (see CONTRACT CLAUSES: SECTION 00700, ACCIDENT PREVENTION) and the Occupational Safety and Health Act (OSHA) Standards for Construction (Title 29, Code of Federal Regulations Parts 1910 and 1926 as revised from time to time) and Cal/OSHA Title 8 Regulations are applicable to this contract. In

case of conflict, the most stringent requirement of the standards is applicable. Pursuant to EM 385-1-1, the Contractor shall submit a Site-specific Safety and Health Plan.

1.14.2 The Prime Contractor's Superintendent

The Prime Contractor's superintendent shall take an active role in enforcing the safety requirements by participation in safety conferences, hazard analysis (see below), tool box meetings, walk-through inspections, correction of violations, etc., and including that of the subcontractor's work.

1.14.3 Activity Hazard Analysis

Based on the construction schedule, the Contractor shall submit an Activity Hazards Safety Analysis of each major phase or work prior to entering that phase of activity. The analysis shall include major or high risk hazards, as well as commonly recurring deficiencies that might possibly be encountered for that operation, and shall identify proposed methods and techniques of accomplishing each phase in a safe manner. The Prime Contractor's superintendent shall take active participation in the Activity Hazard Analysis, including the subcontractor's work. Prior to start of actual work a meeting shall be held with the Prime Contractor, Government, and affected subcontractor to review the Activity Hazard Analysis. In addition, job site meetings shall be held to train exhaustively foreman and workers on details of this analysis.

1.14.4 Violations

If recurring violations and/or gross violation indicate that the safety performance is unsatisfactory, corrective action shall be taken as direction and at the discretion of the Contracting Officer's Representative the retention or some part thereof will withheld from the progress payment until corrective action has been completed.

1.14.5 Fire Prevention

Cutting or welding will be permitted only in areas that are or have been made fire safe. Where possible, all combustibles shall be located at least 36 feet horizontally from the work site. Where such location is impracticable, combustibles shall be protected with flame-proofed covers or otherwise shielded with metal asbestos guards or curtains. Edges of covers at the floor shall be tight to prevent sparks from going under them. This precaution is also important at overlaps where several covers are used to protect a large pile. Other fire prevention precautions shall be in accordance with the latest National Fire Codes.

1.14.6 Record keeping/Reporting/Reporting Requirements

On all contract operations, the Prime Contractor shall be responsible for recording and reporting all accident exposure and experience incident work. (This includes exposure and experience of the Prime Contractor and his/her sub-Contractor(s)). As a minimum these records shall include exposure work-hours and a log of occupational injuries and illnesses. (OSHA Form

200 or state equivalent as prescribed by 29 CFR 1926) Reference COE EM 385-1-1.

1.14.7 Accident Reporting

As part of the requirements for reporting accidents in accordance with EM 385-1-1, Section 1, the Prime Contractor will submit at the 50% point and 100% of project completion, a written summary of worker's compensation claims filed by workers in the project. The report will include all subcontractors. The main report covering the Prime Contractor claims will be certified as "correct and true" by the Contractor's compensation insurance carrier. The same certification will be required for subcontractor reports.

All accidents are to be reported immediately to the Contracting Officer. The Government Safety Office must be notified within 24 hours and a written report of the incident must be submitted to the Contracting Officer within 24 hours.

1.15 SIGNAL LIGHTS.

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Department of the Army and of the Coast Guard governing lights and signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels, working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipelines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in a fairway or channel, and the passings by other vessels of floating plant working in navigable channels, as approved the commandant, U.S. Coast Guard (33 CFR 80-84 and 33 CFR 96). All Contractor's anchor buoys, floating line, and plant shall be marked with flashing beacon lights after dark. Obstructions and hazards to navigation mentioned above shall be painted for visibility during daylight hours.

1.16 PERMITS

General. Reference is made to the clause of the contract entitled: PERMITS AND RESPONSIBILITIES, which obligate the Contractor to obtain all required licenses and permits.

Equipment Requiring Air Quality Permits. For equipment that requires an Air Quality permits, the Contractor shall have a current, valid Air Quality permit from the South Coast Air Quality Management District. Reference paragraph POINTS OF CONTACT. A copy of the permit shall be provided to the Contracting Officer within 30 days after commencing work. The Contractor shall maintain a current record of equipment and permit information at the job site, and update the record on a weekly basis.

1.17 INSPECTION

1.17.1 General

Reference is made to the contract clause: INSPECTI0N OF CONSTRUCTION. In addition, the Contracting Officer may direct the maintenance of the gages, ranges, location marks and limit marks in proper order and position; but the presence of the Contracting Officer shall not relieve the Contractor of responsibility for the proper execution of the work in accordance with the specifications. The Contractor will be required:

a. To furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boatmen, laborers, and material forming a part of the ordinary and usual equipment and crew of the plant as may be reasonably necessary in inspecting and supervising the work. However, the Contractor will not be required to furnish such facilities for the surveys, prescribed in the SECTION 02020: DREDGING paragraph: FINAL EXAMINATION AND ACCEPTANCE.

b. To furnish, on the request of the Contracting Officer or any inspector, suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant, and to and from the work areas. Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

c. To allow, upon the request of the Contracting Officer's Representative, authorized representatives of the California Regional Water Quality Control Board and the South Coast Air Quality Management District to: enter upon the Contractor's premises where a regulated facility or activity is located or conducted, or where records are kept; have access to and copy, at reasonable times, any records that must be kept per agency requirements; inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated by these agencies; and sample or monitor at reasonable times any substances or parameters at any location for the purpose of assuring compliance with agency regulations.

1.17.2 Marine Equipment and Construction Equipment Inspection

Certification. All marine plant and equipment which are required by federal regulations to be inspected by the United States Coast Guard, shall have valid certifications. No marine plant or equipment requiring Coast Guard inspection shall be put into use on the project without the required certification issued by the U.S. Coast Guard Officer in Charge of Marine Inspections.

The Contracting Officer will make a detailed inspection of the Contractor's marine equipment and all construction equipment. A Marine Equipment Inspection Checklist and Construction Equipment Inspection Checklist will be completed by the Contracting Officer prior to start of dredging or other work. The Contractor may be required to modify or repair portions of its marine equipment and construction equipment that does not meet the minimum standards as identified in the Checklists before the marine equipment and construction equipment will be allowed to operate at the site. Any delays caused by the required modifications or repairs will not be cause for any

added costs to the contract and/or extension in the time specified for completion of the contract. A sample of the checklists are attached at the end of this section.

1.18 NAVIGATION

The contractor's operations shall conform to the U.S. Coast Guard publication "Navigation Rules, International-Inland", INST M16672.28, latest edition.

1.19 WORK AREAS AND EASEMENTS

The Contractor shall submit a Work and Storage Area Plan for approval within 15 days after receipt of Notice to Proceed. Contractor's work and storage areas, as shown in exhibits 2, 3 and 5 attached to this section, shall be enclosed by a 1.8 meter high chain-link fence. Fence material shall be provided by the Contractor and may be new or used. Upon completion of the work, the fence materials shall become property of the Contractor and shall be removed from the site.

1.20 CORPS OF ENGINEERS RESERVE FLEET

If the work specified in this contract is performed by a hopper dredge(s), the owner must have an active Basic Ordering Agreement (BOA) for the hopper dredge(s) on file with the Corps. The Contractor shall be obligated to make the hopper dredge(s) available to serve in the Corps of Engineers Reserve Fleet (CERF) at any time that the hopper dredge(s) is performing work under this contract. When the Contracting Officer is notified of the decision to activate this dredge(s) into the CERF, he shall take appropriate action to release the dredge(s). He may then extend or terminate the contract to implement whichever action is in the best interest of the Government. The CERF Contractor shall also be subject to the following conditions:

The Director of Civil Works may require the Contractor to perform emergency dredging at another CONUS (48 contiguous states) site for a period of time equal to the remaining time under this contract at the date of notification plus up to ninety (90) days at the previously negotiated rate which appears on the schedule of prices in the BOA.

The Chief of Engineers may require the Contractor to perform emergency dredging at an OCONUS (Outside CONUS which includes Alaska, Hawaii, Puerto Rico, the Virgin Islands, or U.S. Trust Territories) site for a period of time equal to the time remaining under this contract at the date of notification plus up to one hundred eighty (180) days at the negotiated rate which appears on the schedule of prices in the BOA.

The CERF shall be activated by the Chief of Engineers or the Director of Civil Works; then the Ordering Contracting Officer will notify the Contractor. From the time of notification, the selected hopper dredge(s) must depart for the emergency assignment within seventy-two (72) hours for CONUS or ten (10) days for OCONUS assignments.

A confirming delivery order will be issued pursuant to the Basic

Ordering Agreement (BOA) by the Ordering Contracting Officer. Such delivery order shall utilize the schedule of rates in the BOA for the specific hopper dredge(s).

If during the time period specified in the paragraphs above, a CERF vessel(s) is still required, the contract performance may be continued for additional time by mutual agreement.

1.21 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

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.

The following schedule of monthly anticipated adverse weather delays is based upon 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 DAYS
Work Days Based on Five (5) Day Work Week

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
5	4	3	1	0	0	0	0	0	0	1	3

Upon acknowledgment of the Notice to Proceed 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 workday. The number of actual adverse weather days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous 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, the Contracting Officer will convert any qualifying days 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).

1.22 METHOD OF DREDGING

This contract is suitable for the following methods of dredging: hydraulic (cutter head) and pipeline, hopper dredge, back-hoe and clamshell-barge. The following restrictions shall apply:

a. To minimize adverse turbidity watertight hopper bins, barges or scows will be required for holding and transporting dredged material from clamshell-barge and pipeline-barge operations.

b. A dredge fill plan shall be submitted in accordance with SECTION 02020: DREDGING and approved by the Contracting Officer prior to commencement of dredging operations.

c. The Contractor shall comply with all applicable Federal, State, County, and municipal laws, regulations, and permits governing the work.

1.23 AS-BUILT PLANS

1.23.1 General

The Contractor shall prepare and furnish the As-Built plans for the project. The as-built plans shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the contract set of plans and a record of all deviations, modifications, or changes from those plans, however minor, which were incorporated in the work, all additional work not appearing on the contract plans, and all changes which are made after final inspection of the contract work. In event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the as-built plans, the Contractor shall furnish revised and/or additional plans as required to depict as-built conditions. The requirements for these additional plans will be the same as for the as-built plans included in the original submission. The plans shall show the following information, but not be limited thereto:

(1) The location and description of any utility lines or other installations of any kind or description known to exist within the construction area. The location includes dimensions to permanent features.

(2) The location and dimensions of any changes to structures.

(3) Correct grade or alignment of roads, channels, structures or utilities if any changes were made from contract plans.

(4) Correct elevations if changes were made in site grading.

(5) Changes in details of design or additional information obtained from working plans specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, dimensions of equipment foundations, etc.

(6) All changes or modifications which result from the final inspection.

1.23.2 Preliminary As-Built Plans

The Contractor shall maintain one (1) set of full size, blueline prints marked up in red to show as-built conditions. This set of as-built prints shall be kept current and available at the job site at all times. All changes from what is shown on the contract plans, whether it be from changes requested by the Contracting Officer or resulting from additional information which might be uncovered in the course of construction, shall be accurately and neatly recorded as they occur by means of details and notes. The marked-up as-built prints will be jointly inspected for accuracy and completeness by the Contracting Officer and Contractor prior to submission of each monthly pay estimate. Information to be included on these preliminary plans shall conform to the requirements as stated above. Any and all as-built modifications shall be reflected on all sheets affected by the modifications.

1.23.3 Review Submittal

Not later than 14 calendar days after acceptance of the project by the Government, the Contractor shall deliver to the Contracting Officer one (1) full size set of blueline plans marked up to depict the as-built conditions. If upon review, the plans are found to contain errors and/or omissions, they shall be returned to the Contractor for corrections.

1.23.4 Computer Drawing Files (CADD)

The Contractor shall develop the final computer file as-built plans from the approved preliminary plans. The computer files shall be delivered in MicroStation Version 8 format, a Computer Aided Design and Drafting (CADD) program. plans shall be prepared in general accordance with the Los Angeles District manual "Standards for Drafting" and the "Standards Manual for U.S. Army Corps of Engineers Computer-Aided Design and Drafting (CADD) Systems."

1.23.5 Original Contract CADD Files.

The Government will provide all the computerized drawing files, along with a listing and description of the file contents, used to produce plans to advertise this contract. The Contractor shall be responsible for downloading the computer files via the method described below.

1.23.6 Receiving Data via the Corps' File Server.

A formal request for the project files shall be submitted two (2) weeks in advance of the anticipated downloading. The project files, in MicroStation (CADD) binary format, will then be stored on the file server for a period of two (2) weeks for the Contractor to retrieve via modem. The Contractor will be provided all relevant information regarding access to the server via modem or Internet address.

1.23.7 Delivery

Prior to finalizing the plans, two sets of plans shall initially be

provided to the Contracting Officer for review and approval. The Contracting Officer shall complete his or her review within ten (10) working days. Upon final approval, the Contractor shall furnish two (2) full size sets and two (2) half size sets of the final as-built plans on reproducible mylars, and the computerized project files in MicroStation format. All project files, whether revised or not, shall be provided to the Contracting Officer.

1.24 PROGRESS AERIAL PHOTOGRAPHS

The Contractor shall take monthly Aerial Photographs of the construction site depicting the construction progress. The Contractor shall take vertical photographs at a scale of 1-inch equals 500 feet, overlapping 20 percent. Two sets of 9-inch by 9-inch color contact photographic prints and negative and digital version of same shall be submitted to the Contracting Officer on a monthly basis.

1.25 NON CONTRACT WORK.

The contractor and/or his subcontractors shall not perform any work or erect any structure for third parties, landowners or otherwise, within the limits of the rights-of way without prior approval of the Contracting Officer.

1.26 OTHER CONSTRUCTION.

There are a number of projects 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 adopt scheduling and performing the work under this contract to accommodate the other work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any action that will interfere with the performance of work by any other Contractor or by Government employees. The Contractor shall coordinate work with port pilots (Port of Los Angeles, Port of Long Beach, and U.S. Navy), provide required reports with the construction activities in the area, and coordinate work with navigation activities or maritime efforts in the area.

1.27 CONTINUITY OF WORK

No final payment will be made for work performed in any area until the depth for each dredge element required under the contract is reached in the area. Nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full depth has been secured except by decision of the Contracting Officer. Should any such nonadjacent area be excavated to full depth during the operations carried on under the contract, payment for all work therein may be deferred until the required depth has been made in the area intervening. The Contractor may be required to stop construction operations at any time at no additional cost to the Government when for any reason the gages or ranges cannot be seen or properly followed.

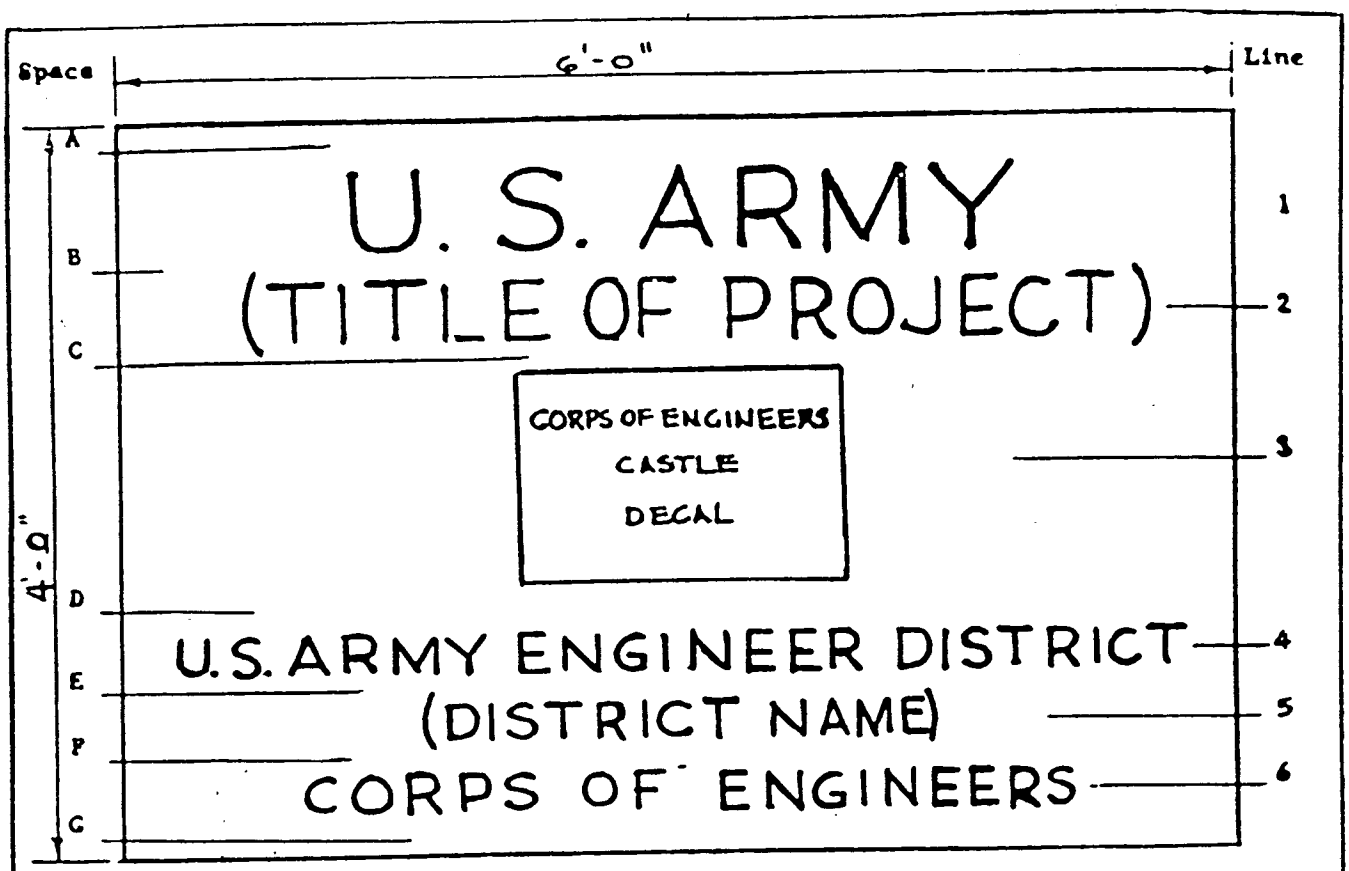
1.28 NOTICE OF PARTNERSHIP

The Contracting Officer intends to encourage the foundation of a cohesive partnership with the Contractor and its subcontractors. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance and intended to achieve completion within budget, on schedule, and in accordance with plans and specifications. This partnership would be bilateral in makeup, and participation will be totally voluntary. Any cost associated with effectuating this partnership will be agreed to by both parties and will be shared equally with no change in contract price. To implement this partnership initiative it is anticipated that within 60 days of notice to proceed the Contractor's on-site project manager and the Contracting Officer's Resident Engineer would attend a two days partnership development seminar/team building workshop together with the Contractor's key on-site staff and key Government personnel. Follow-up workshops of 1 to 2 days duration would be held periodically throughout the duration of the contract as agreed upon by the Contractor and Contracting Officer.

PART 2 Materials (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --



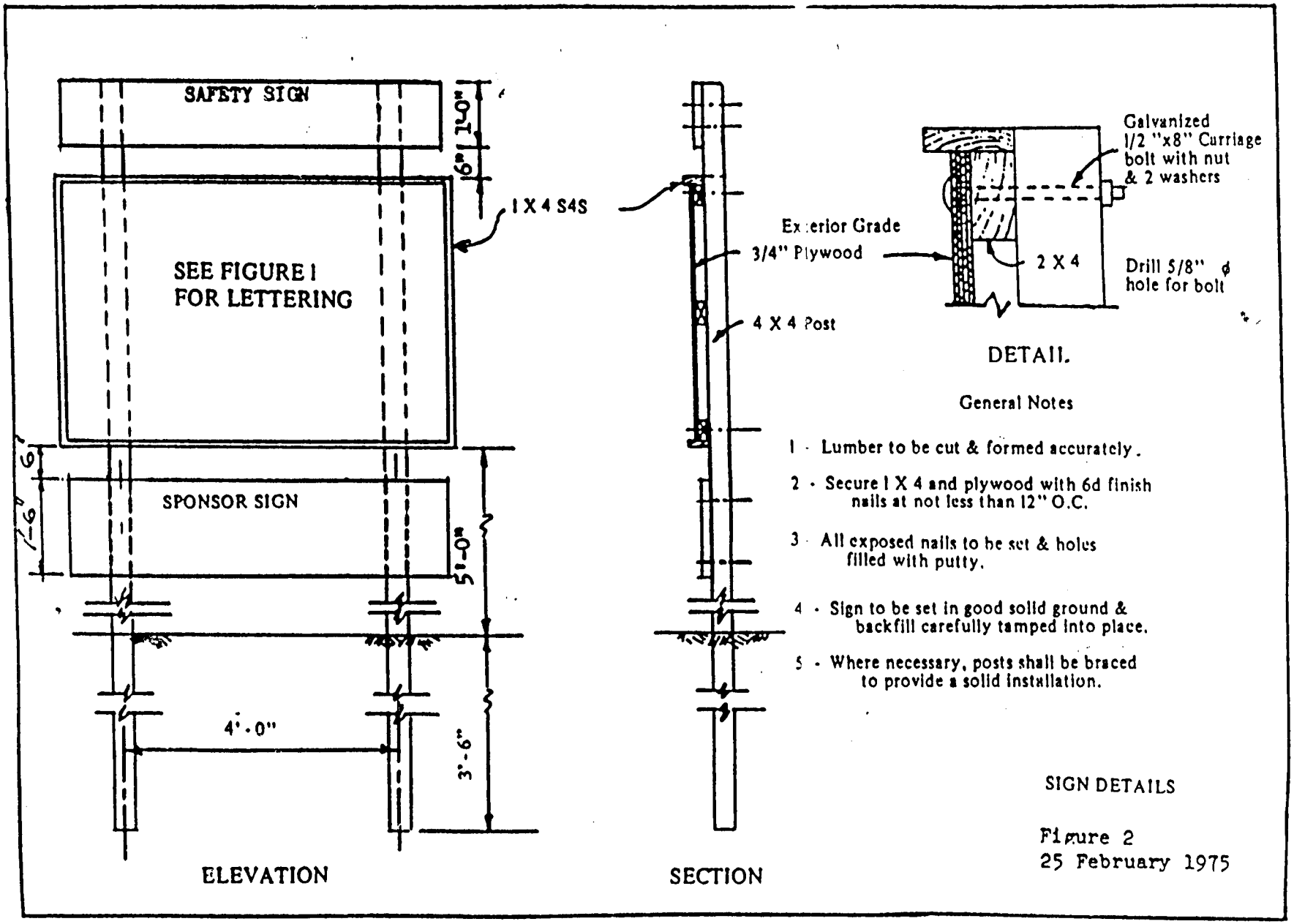
S C H E D U L E

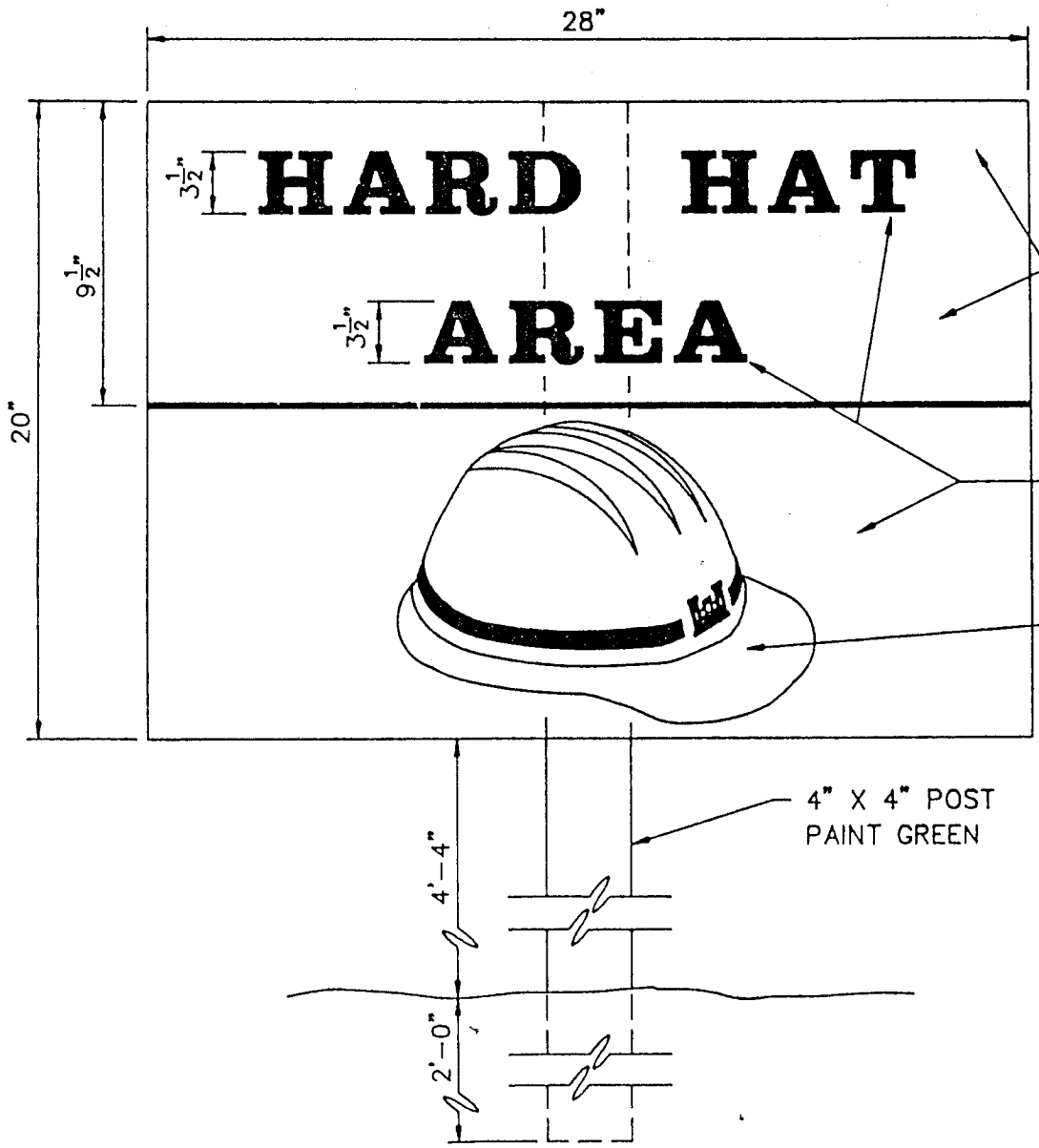
Space	Height	Line	Description	Letter Height	Stroke
A	3"				
		1	U. S. ARMY	5 1/2"	7/8"
B	2"				
		2	PROJECT NOMENCLATURE	4"	5/8"
C	2"				
		3	CORPS OF ENGINEERS CASTLE (DECAL)	14"	--
D	3"				
		4	U. S. ARMY ENGINEER DISTRICT	2 3/4"	3/8"
E	2"				
		5	DISTRICT NAME	2 1/4"	1/4"
F	2"				
		6	CORPS OF ENGINEERS	2 1/2"	3/8"
G	3"				

Lettering Color -- Black

PROJECT SIGN
(Army-Civil Works)

Figure 1
14 August 1972


SAFETY SIGN
1'-0"
16"
1 X 4 S4S
SEE FIGURE 1
FOR LETTERING
9"
1'-6"
SPONSOR SIGN
5'-0"
4'-0"
3'-6"
ELEVATION
Exterior Grade
3/4" Plywood
4 X 4 Post
SECTION
Galvanized
1/2 "x8" Carriage
bolt with nut
& 2 washers
2 X 4
Drill 5/8" ϕ
hole for bolt
DETAIL
General Notes
1 - Lumber to be cut & formed accurately.
2 - Secure 1 X 4 and plywood with 6d finish nails at not less than 12" O.C.
3 - All exposed nails to be set & holes filled with putty.
4 - Sign to be set in good solid ground & backfill carefully tamped into place.
5 - Where necessary, posts shall be braced to provide a solid installation.
SIGN DETAILS
Figure 2
25 February 1975



WHITE:
PAINT BACK OF SIGN WHITE

GREEN

HARD HAT DECAL FURNISHED BY GOVERNMENT

4" X 4" POST
PAINT GREEN

GENERAL NOTES:

1. Green & White Paint shall be opaque glossy as specified in ANSI Standard Z53.1.
2. Bolt Sign to post w/$2\frac{1}{2}$" dia. Carriage Bolts.

STANDARD DETAIL

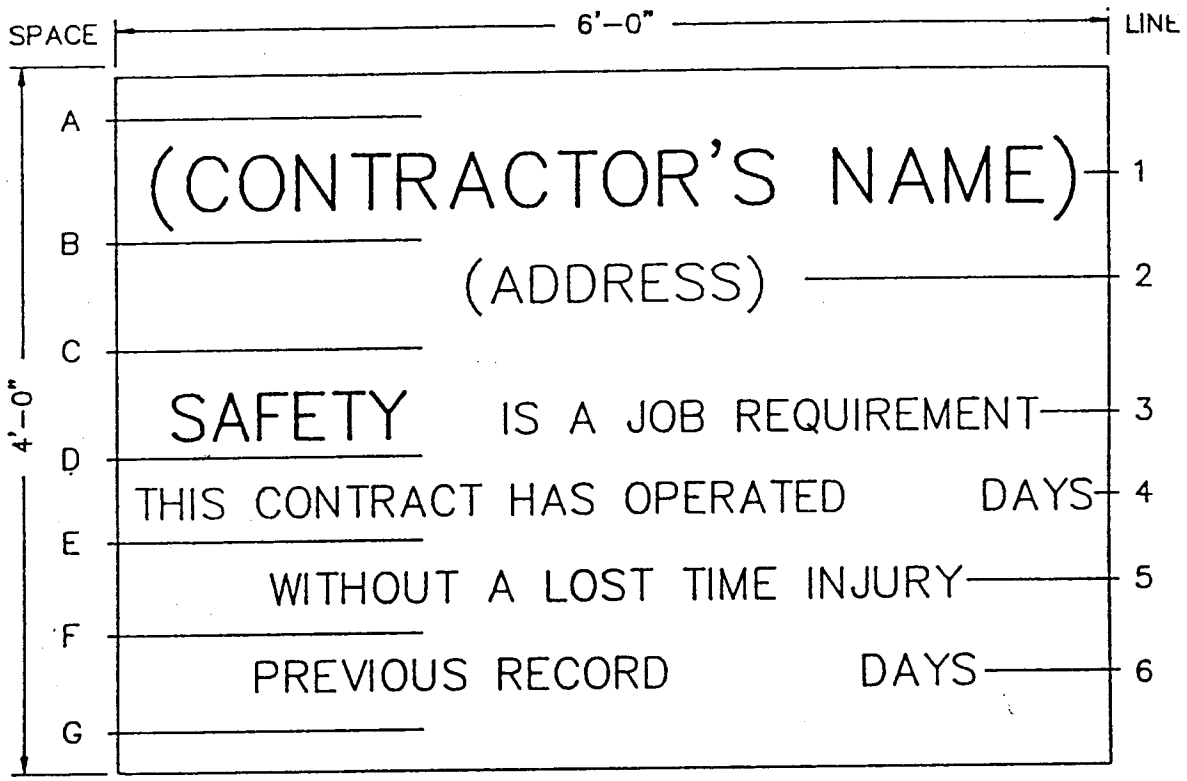
HARD HAT SIGN

U.S. ARMY ENGINEER DISTRICT
SACRAMENTO

Drawn T. Tufts — Not to Scale
Checked R. Simmons — NOV. 1987
File No. 80-25-774

CORPS OF ENGINEERS

U. S. ARMY



SCHEDULE

SPACE	HEIGHT	LINE	DISCRIPTION	LETTER HEIGHT
A	5"			
		1	CONTRACTOR'S NAME	5"
B	3"			
		2	ADDRESS	3"
C	6"			
		3	SAFETY IS A JOB REQUIREMENT	4 1/2" & 3"
D	3"			
		4	ALL LETTERING	3"
E	3"			
		5	ALL LETTERING	3"
F	3"			
		6	ALL LETTERING	3"
G	5"			

NOTE:

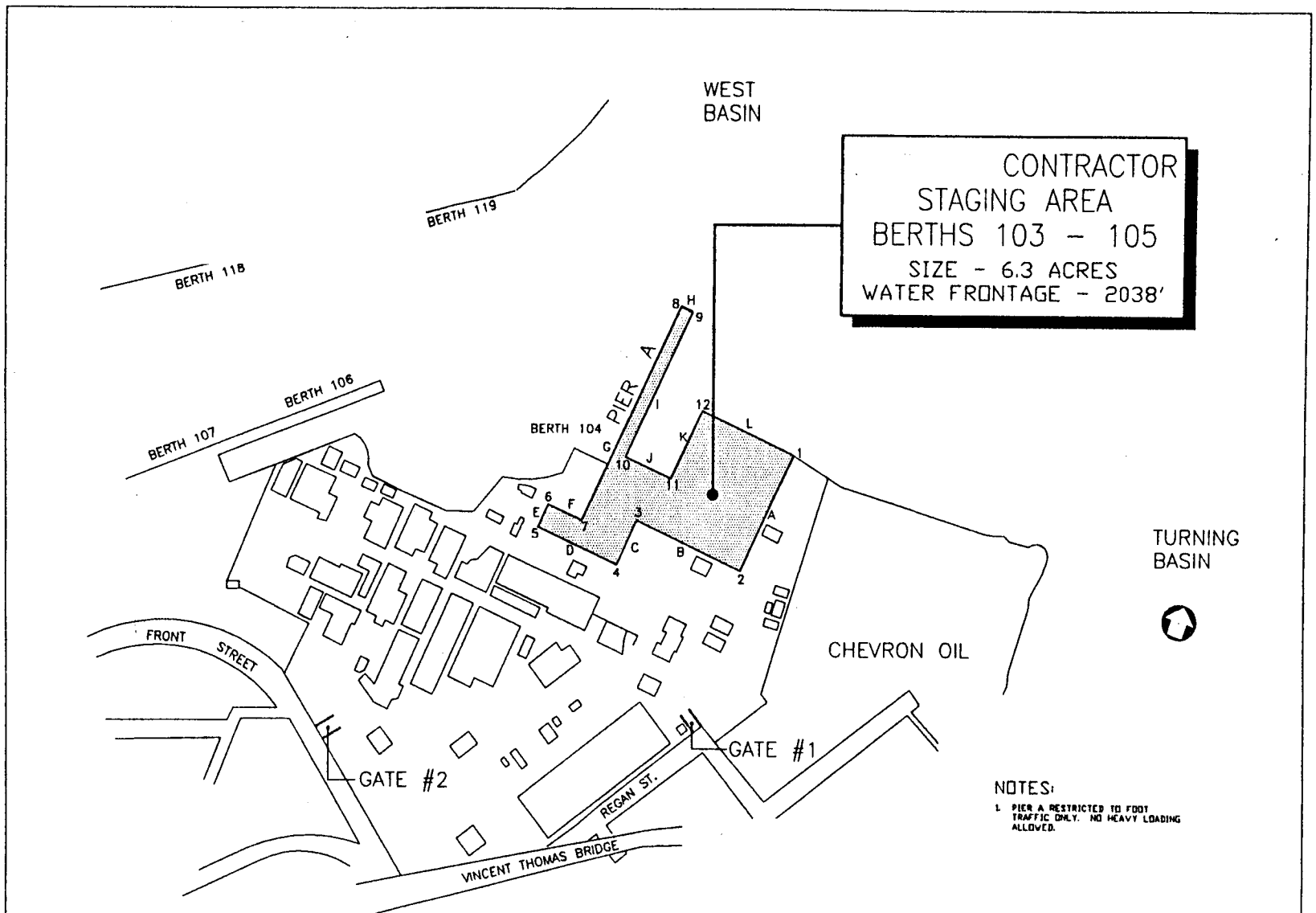
LETTERING SHALL BE BLACK No. 27038, FEDERAL STANDARD 595.
SIGN SHALL BE INSTALLED IN THE SAME MANNER
AS THE PROJECT SIGN.

STANDARD DETAIL

SAFETY SIGN

U S ARMY ENGINEER DISTRICT
SACRAMENTO

Drawn T. Tufts Not to Scale
Checked R. Simmons NOV. 1987
File number 80-25-707



NO	DATE	DRAWN	REVISIONS	CHKD	APPROVED	SCALE	DATE
						DRAWN TRINH G.	
						CHECKED FOXWORTHY	
						DESIGNED DIGBY/BRGH	

CHIEF OF DESIGN

ASSISTANT CHIEF HARBOR ENGINEER

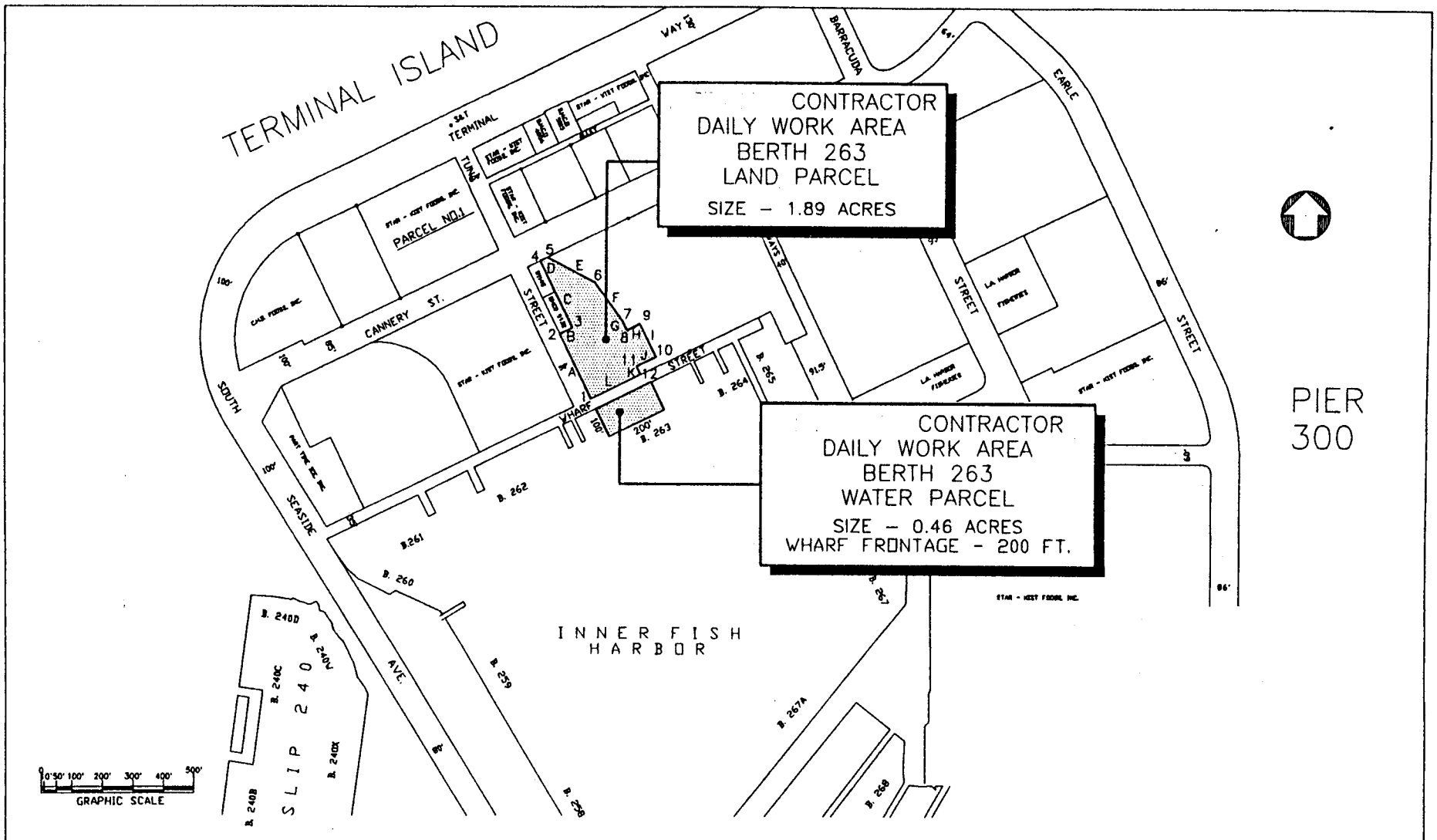
CHIEF HARBOR ENGINEER

FORMER TODD SHIPYARD, BERTHS 103 - 105

CONTRACTOR STAGING AREA

WORLDPORT LA

EXHIBIT 2



NO.	DATE	DRAWN	REVISIONS	CHKD	APPROVED	SCALE	DATE
						DRAWN TRINH Q.	
						CHECKED FOXWORTHY	
						DESIGNED ENGR/ARCH	

CHIEF OF DESIGNS

ASSISTANT CHIEF HARBOR ENGINEER

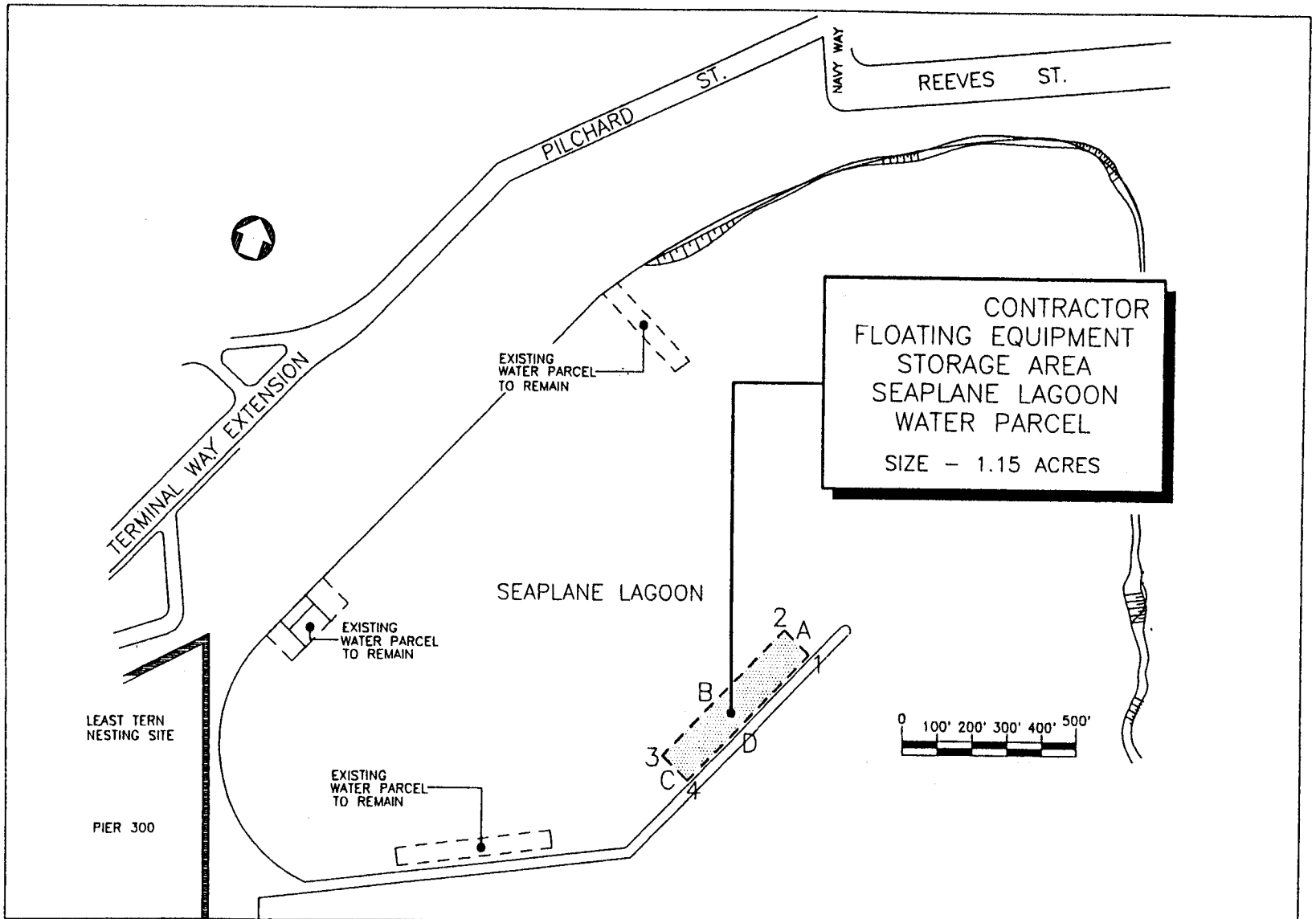
CHIEF HARBOR ENGINEER

BERTH 263 – FISH HARBOR

CONTRACTOR DAILY WORK AREA

WORLDPORT LA

EXHIBIT 3



NO	DATE	DRAWN	REVISIONS	CHKD	APPROVED	SCALE	DATE
						DRAWN TRAN G.	
						CHECKED FOWNORTHY	
						DESIGNED ENGR/ARCH	

CHIEF OF DESIGN

ASSISTANT CHIEF HARBOR ENGINEER

CHIEF HARBOR ENGINEER

SEAPLANE LAGOON

FLOATING EQUIPMENT STORAGE AREA

WORLDPORT LA

EXHIBIT 5

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01201

CONTRACTING OFFICER'S FACILITY

03/01

[statement of section scope]

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-- End of Section Table of Contents --

SECTION 01201

CONTRACTING OFFICER'S FACILITY
03/01

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Layout; G

1.2 WORK INCLUDED

Contracting Officer's Facility consists of furnishing transportation, labor, materials, equipment, facilities, and incidentals necessary to provide shelter, furniture and service to Contracting Officer Representative at Project Site.

1.2.1 OFFICE REQUIREMENTS

A. The Contractor shall furnish and install three separate Office Trailers, complete and functional for the exclusive use of the Contracting Officer for the duration of the construction period, as defined by the construction schedule. The Office Trailers shall be located at the Channel Deepening Project Daily work Area, and shall be adjacent to each other. Please refer to Specifications Section GENERAL REQUIREMENTS 01200 for exact locations.

B. The Contractor shall furnish office space at rock quarry for exclusive use of Contracting Officer Representative for the duration of construction as defined by the construction schedule. Contractor shall provide another identical office space whenever the rock production is moved to a different quarry. Should the Contractor be providing rock from two separate quarries simultaneously, the Contractor shall provide two separate office spaces, one for each of the quarries.

C. The Offices shall be weather tight, secure and lockable independently from other offices or facilities.

D. If other than the continued use of existing trailers on site, offices shall be new Contractor may not provide used or re-built office trailers for the Contracting Officer's use on this Project.

E. All windows and doors shall have security bars with the quick release safety feature. Security bars must conform to current standard building codes.

F. Procure any required permits, licenses, inspections or approvals from the City of Los Angeles and other authorities having jurisdiction over the work.

1.2.1.1 QUALITY ASSURANCE

The following criteria shall establish a general minimum standard of quality for items that are not expressly specified herein.

1. "Mobile Modular Standard Specifications for DOH Modulars"

1.2.2 JANITORIAL SERVICE

A. Provide continuous janitorial service to clean field offices and quarry site office space, at least twice a week.

B. Replace kitchen and toilet supplies as necessary.

C. Bathrooms and Kitchen areas shall be sanitized with appropriate cleaning products upon each cleaning visit.

1.2.3 LAYOUT

Within 21 calendar days from the date of the Notice of Award, submit to the Contracting Officer proposed Layout, detailed shop drawings, samples, product data for furnishings, equipment, telephone systems and other items needed to provide a complete office facility, including the rock quarry site office space.

PART 2 PRODUCTS

2.1 OFFICE SIZE AND CONSTRUCTION

A. The area size of the three Office Trailers shall be as follows:

1. Construction Management Office: 24 ft. x 60 ft. or 1440 square feet.

2. Survey Office: 24 ft. X 40 ft; or 960 square feet.

3. Inspection Office: 12 ft. X 40 ft. or 480 square feet.

4. The area size for the quarry site office shall be an enclosed office space of at least 10 ft. X 12 ft. or 120 square feet.

B. Provide Offices with a minimum of 8 feet ceiling height; ceiling to be acoustic tiles with fluorescent lighting.

C. Provide firm low profile, stain resistant carpet on all floors except bathrooms and kitchenette areas which are to be provided with vinyl floor tiles. Carpet color to be chosen by the Contracting Officer.

D. Provide all sliding type windows, 4 ft. X 4 ft., with aluminum frame and insect screens. All windows shall have mini blinds. Windows are to be provided by Contractor in designated locations as shown on the floor plans. All walls to be covered with vinyl or wood paneling.

E. All outside doors shall be 3 ft. by 7 ft. with glass lite and automatic closers. All outside doors shall have lock sets keyed differently. The two outside doors of the Construction Management Office shall be keyed to a master. Outside doors to include a deadbolt keyed to match exterior knob. Bathrooms shall have privacy locks.

F. Provide security doors on the outside of all doors. The security doors shall include a deadbolt keyed to match the exterior knob and shall be keyed to a master.

G. Provide security bars on all windows with quick release safety feature.

H. Inside spaces shall be "earth tone" colors which do not readily show soiling. All shelving shall be wood shelving.

I. Provide 100 foot-candle (1000 lux) fluorescent lighting measured at floor, in all areas except bathrooms.

J. Provide office identification signs, one for each of the Offices outside front entrances. All signs shall be ¾ inch plywood, white background, black letters Logos on signs to match samples furnished by the Contracting Officer in terms of graphic design and color. Signs to be affixed in locations designated by the Contracting Officer.

K. Provide all necessary anchoring and appurtenances for installation, including all materials needed to fasten the two 12 ft. X 60 ft. units together to form the 24 ft. X 60 ft. Office.

L. Provide all needed stairways at exterior doors, decks, handrails and skirting in accordance with manufacturer's standard items. Provide raised wood deck walkways between the three adjacent Office Trailers. Final layout and configuration of the walkways shall be as approved by the Contracting Officer. All wood within 12 inches of the earth shall be pressure treated to resist rot and insect attack.

M. Provide exterior lighting mounted at poles or at eaves of the Trailers to provide adequate lighting for the Trailer's areas and the adjacent parking areas. Pole/Light locations shall be as directed by the Contracting Officer.

2.2 UTILITIES AND SERVICES

A. Telephone service, with telephone outlets including the telephone jacks and inside wiring, electrical convenience outlets, lighting,

plumbing, sewer hook-ups, septic tanks if needed, heating, ventilating, air conditioning, janitorial service, and hot and cold drinking water shall be provided in accordance with Los Angeles Building Codes. Air conditioning and heating and return to be ducted above ceiling or under floor.

B. Telephone Service: Provide each of the three Trailers, Construction Management Office, Survey Office, Inspection Office with a telephone backboard enclosed in a cabinet at a convenient location inside the Trailer approved by the Contracting Officer. If located outside, the telephone backboard shall be a NEMA 3R.

The Contractor shall connect each Trailer's telephone backboard to the minimum point of entry (MPOE) established by PAC Bell with a 2 inch conduit and 50 pair level 3 twisted pair telephone wire.

Contractor shall terminate all telephone wires at telephone backboard cabinets of each individual trailer and at the customer side of each MPOE. Contractor shall provide and install cross connections to connect the customer side to the PAC Bell side of MPOE.

At each Trailer, Contractor shall provide two pair level 3 twisted pair telephone wire between the backboard and each of the telephone jacks indicated in rooms in paragraphs 2.3, 2.4, 2.5, 2.8 & 2.9 of this Specification Section. Contractor shall install level 3 telephone jacks and shall connect the telephone jacks to the telephone backboard. The exact location of telephone jacks shall be determined during Contracting Officer's review of Contractors' shop drawings.

At the Quarry Site Office, Contractor shall provide an independent secure telephone line for Contracting Officer Representative.

C. Provide, throughout the construction period, bottled drinking water including paper cups for each of the Offices.

D. Pay for monthly use charges and for all utilities, including power, telephone, gas, water and sewer.

E. Pay for all maintenance and repair costs necessary to maintain the offices in satisfactory functional condition. Maintenance costs shall include those needed to maintain, in working condition, the office equipment, including, telephones, copy and facsimile machines, refrigerators, microwave ovens, etc.

Failure to maintain the offices and furnishings shall result in withholding portions of Contractor's progress payment commensurate with the Contracting Officer's estimate of the costs of performing needed maintenance and/or repairs.

F. Contractor shall provide and furnish digital telephone service served by Pacific Bell's or Government approved equivalent, digital switch. Telephone lines shall have the following features:

1. Telephone line service shall be digital Centrex service.

2. Each telephone line service shall have call forwarding, transfer, speed call, conference, intercom, and voice mail features built into the line service.

3. Telephone instruments shall be digital. Northern Telecom Meridian model 8000. Each instrument shall have the capacity to have 4 line buttons in addition to features

4. Contractor shall provide, furnish install the telephone instruments and shall make the telephone instruments operation.

2.3 CONSTRUCTION MANAGEMENT OFFICE. (24 ft x 60 ft.)

The Construction Management Office shall include the following.

A. Construction Manager Offices (2 each) shall be each equipped with the following:

1 - 36 inch x 72 inch executive wood desk
1 - executive swivel chair
4 - guest chair
1 - 24 inch x 36 inch wood side table
1 - 24 inch x 48 inch wood conference table
1 - telephone jacks
4 - 110 V duplex outlets
1 - 32 inch x 84 inch wood door with keyed lock
1 - 36 inch x 40 inch transparent floor chair mat
1 - 4 ft x 6 ft. dry erase white marker board
1 - shelving, 1 ft. deep x 6 ft. long x 6 ft. high, with at least one intermediate upright divider and multiple adjustable shelves.
1 - trash receptacle
Full height partition walls acoustically insulated

B. Offices No. 1, 2, 3 & 4 shall be each equipped with the following:

1 - 30 inch x 60 inch wood desk
1 - swivel chair
1 - guest side chair
1 - 24 inch x 36 inch wood side table
1 - telephone jack
1 - 110V duplex outlets
1 - shelving, 1 ft. deep x 3 ft. long X 6 ft. high, with multiple adjustable shelves.
1 - trash receptacle
5 ft. high partition walls with doorway openings

C. Men's and Women's Bathroom (Handicap Accessible) shall include the following:

1 - standard vitreous china water closet
1 - standard urinal (men's restroom only)
1 - 14 inch x 19-inch lavatory in countertop with splash back (hot & cold water fixture)

1 - toilet paper holder
1 - trash receptacle
1 - sanitary napkin receptacle (women's restroom only)
1 - paper towel dispenser
1 - liquid soap dispenser
1 - toilet seat cover dispenser
1 - 3 ft. x 4 ft. mirror
1 - 4 ft. wall light over mirror
1 - ceiling mounted exhaust fan
1 - 3 ft. x 7 ft. wood door with privacy lock
1 - 110V ground fault duplex outlet
1 - set of grab bars for handicap access as required by Code
Built-in cabinets below counter top Full height partition walls acoustically insulated

D. Plan Room shall be equipped with the following

3 - "Plan Hold" rolling stand series, pivot filing plan racks suitable for 36 inch X 48 inch prints
36 - "Plan Hold" binders suitable for 36 inch X 48 inch prints
1 - 4 ft. X 8 ft. layout table (mount at 42 inch above finished floor)
6 - two-drawer lockable legal file cabinets
1 - 7 ft. H X 4 ft. W X 2 ft. D lockable metal storage cabinet with shelving
3 - secretary chairs
1 - trash receptacles
1 - telephone jack
4 - 110V duplex outlets
1 - fire extinguisher
1 - ceiling mounted smoke detector
1 - shelving, 1 ft. deep X 3 ft. wide X 6 ft. high
5 ft.-0 inch high partition with doorway opening

E. Conference Room shall be equipped with the following:

2 - 4 ft. x 8 ft. wood conference tables
16 - swivel conference chairs
2 - 24 inch x 24 inch wood side tables
1 - 5 ft. x 10 ft. dry erase white marker board
1 - telephone jack
4 - 110V duplex outlets
1 - electronic wall clock
1 - 32 inch x 84 inch wood door
1 - trash receptacle.
Full height partition walls acoustically insulated

F. Kitchenette Room shall be equipped with the following:

1 - six cubic foot under counter refrigerator (frost free)
1 - bottled water dispenser (hot and chilled water)
1 - 12 inch x 15 inch counter top sink with goose neck hot and cold water fixture
1 - two pot drip brew coffee maker
1 - standard size microwave oven

1 - ten gallon under counter hot water heater
1 - roll type paper towel dispenser
1 - first aid kit
10 - linear feet of over counter wall cabinets
8 - linear feet of under counter floor mounted cabinets
8 - linear feet of 30 inch wide kitchen counter top with 4 inch high back splash
2 - 110V duplex outlets (44 inch A.F.F.)
2 - 110V duplex receptacles (20 inch A.F.F.) for water dispenser & refrigerator.
1 - 4 ft. over counter light fixture (mount at wall under cabinets)
1 - ceiling mounted smoke detector
Full height partition walls acoustically insulated

G. Clerical/Copy Area shall be equipped with the following:

1 - 30 inch x 60 inch wood desk
1 - secretarial chair
1 - 24 inch x 36 inch wood side table
2 - guest chairs
2 - telephone jacks (one for the facsimile machine)
5 - 110V duplex outlets
4 - four drawer legal lockable file cabinets
2 - trash receptacle
1 - high volume copier, Xerox 5340 or equal. Copier shall provide 40 copies per minute, automatic document feeder, automatic two sided copying up to 11 inch X 17 inch, front loading paper drawer automatically switching, 20 bin sorter/stacker, and zoom reduction/enlargement
1 - lockable floor mounted corner cabinet, located under 30 inch high table top copier
1 - hard hat rack for six hats
1 - coat rack
1 - Facsimile machine: The machine shall have 30 page automatic feeder, 6 second transmission speed, up to 118 stored faxed numbers, standard 250 sheet paper tray, varying copy quality modes, 14,400 bps modem, and group dialing and shall be Okidate or equivalent.
1 - US postage machine with postage scale
1 - ceiling mounted smoke detector
1 - shelving, 1 ft. deep X 6 ft. long X 6 ft. high, with at least one intermediate upright divider and multiple adjustable shelves.

2.4 SURVEY OFFICE (24 ft. X 40 ft.)

The Survey Office shall include the following:

A. Survey Manager Offices (2 each) shall be each equipped with the following:

1 - 30 inch X 60 inch wood desk
1 - executive swivel chair
1 - 3 ft. X 8 ft. wood table
2 - guest chairs
1 - 5 drawer file cabinet

1 - trash receptacle
1 - telephone jack
4 - 110V duplex outlets
1 - shelving, 1 ft. deep x 3 ft. wide X 6 ft. high 1 - 32 inch X 84 inch wood door with keyed lock Full height partition walls acoustically insulated

B. Copy/Fax/Storage Area shall be provided with the following

1 - shelving 1 ft. deep x 6 ft. high along 2 walls as shown on Exhibit 2
1 - 32 inch X 84 inch wood door with keyed lock
3 - 110V duplex outlets
1 - high volume copier, Xerox 5340 or equal. Copier shall provide 40 copies per minute, automatic document feeder, automatic two sided copying up to 11 x 17, front loading paper drawer automatic tray switching, 20 bin sorter/stacker, and zoom reduction/enlargement
1 - telephone jack for the facsimile machine
1 - Facsimile machine: The machine shall have 30 page automatic feeder, 6 second transmission speed, up to 118 stored taxed numbers, standard 250 sheet paper tray, varying copy quality modes, 14,400 bps modem, and group dialing.
Full height partition walls acoustically insulated

C. Kitchenette Area shall be provided with the following

1 - six cubic foot under counter refrigerator (frost free)
1 - bottled water dispenser (hot and chilled water)
1 - 12 inch x 15 inch counter top sink with goose neck hot and cold water fixture
1 - roll type paper towel dispenser
1 - first aid kit
8 - linear fee of over counter wall cabinets
6 - linear feet of under counter floor mounted cabinets
6 - linear feet of 30 inch wide kitchen counter top with 4 inch high back splash
1 - 24 inch x 48 inch wood table
2 - guest chairs
2 - 110V duplex outlets (44 inch A.F.F.)
2 - 110V duplex receptacles (20 inch A.F.F.) for water dispenser & refrigerator
1 - 4 ft. over counter light fixture (mount at wall under cabinets)
1 - ceiling mounted smoke detector
Full height partition walls acoustically insulated

D. Bathroom shall include the following:

1 - standard vitreous china water closet
1 - standard urinal
1 - 14 inch x 19 inch lavatory in countertop with splash back (hot & cold water fixture)
1 - toilet paper holder
1 - trash receptacle
1 - Sanitary napkin receptacle

1 - paper towel dispenser
1 - liquid soap dispenser
1 - toilet seat cover dispenser
1 - 3 ft. X 4 ft. mirror
1 - 4 ft. wall light over mirror
1 - ceiling mounted exhaust fan
1 - 2 ft. X 7 ft. wood door with privacy lock
1 - 110V ground fault duplex outlet
Built-in cabinets below counter top
Full height partition walls acoustically insulated

E. Processing Area

1 - 3 ft. x 10 ft. wood table
2 - 3 ft. x 8 ft. wood table
1 - 3 ft. x 6 ft. wood table
2 - swivel chair
2 - guest chair
3 - 4 drawer filing cabinets
2 - trash receptacle
5 - 110V duplex outlets
2 - telephone jack
1 - 32 inch x 84 inch wood door
1 - hard hat rack for six hats
2 - 4 ft. wide x 2 ft. -10 inch deep map drawers (containing 5 drawers each)

2.5 INSPECTION OFFICE (12 ft. x 40 ft.)

The Inspection Office shall consist of the following

A. Senior Inspector shall be equipped with the following:

1 - 30 inch x 60 inch wood desk
1 - swivel chair
2 - guest side chair
1 - 32 inch x 84 inch wood door with keyed lock
1 - 36 inch x 40 inch transparent floor chair mat
1 - 24 inch x 36 inch wood side table
1 - telephone jack
4 - 110V duplex outlets
1 - shelving, 1 ft. deep x 3 ft. long x 6 ft. high, with multiple, adjustable shelves.
1 - trash receptacle
1 - 4 ft. x 6 ft. dry erase white marker board
1 - trash receptacle
Full height partition walls acoustically insulated

B. Inspectors Office shall be each equipped with the following:

4 - 30 inch X 60 inch wood desk
4 - swivel chair
4 - guest chair
4 - 24 inch X 36 inch wood side table

3 - "Plan Hold" rolling stand series, pivot filing plan racks suitable for 36 inch X 48 inch prints
36 - "Plan Hold" binders suitable for 36 inch x 48 inch prints
2 - 4 ft. x 8 ft. Layout table (mount at 42 inch above finished floor)
4 - telephone jacks
6 - 110V duplex outlets
4 - shelving, 1 ft. deep x 3 ft. long X 6 ft. high, with multiple adjustable shelves.
4 - trash receptacle

C. Bathroom shall include the following:

1 - standard vitreous china water closet
1 - standard urinal
1 - 14 inch x 19 inch lavatory in countertop with splash back (hot & cold water fixture)
1 - toilet paper holder
1 - sanitary napkin receptacle
1 - trash receptacle
1 - paper towel dispenser
1 - liquid soap dispenser
1 - toilet seat cover dispenser
1 - 3 ft. x 4 ft. mirror
1 - 4 ft. wall light over mirror
1 - ceiling mounted exhaust fan
1 - 2 ft. x 7 ft. wood door with privacy lock
1 - 110V ground fault duplex outlet
Built-in cabinets below counter top
Full height partition walls acoustically insulated

2.6 ROCK QUARRY SITE OFFICE

A. The Contracting Officer shall have an inspector present at the rock quarry site. Contractor' shall provide an enclosed office space of at least 10 ft. X 12 ft. or 120 square feet for the exclusive. use of the Contracting Officer Representative throughout the rock production period as defined in the construction schedule. The office space could be located within an existing office facility at the quarry site.

B. Contractor shall provide, power, lighting, heat and air conditioning. The office shall be provided with an independent secure telephone line.

C. If the Office is not within an existing office facility, Contractor shall provide an enclosed bathroom facility, with lavatory, running water and all standard accessories.

D. Rock Quarry Office shall be equipped with the following:

1 - 30 inch x 60 inch wood desk
1 - swivel chair
1 - guest side chair
1 - 24 inch x 36 inch wood side table
1 - 32 inch x 84 inch wood door. Door to be provided with a secure lock ~keyed to an independent master

1 - telephone jack
1 - multi-line conference capacity speaker telephone. Provide with 15 ft. coil phone cord
3 - 110V duplex outlets
1 - shelving, 1 ft. deep x 3 ft. long x 6 ft. high, with multiple adjustable shelves.
1 - trash receptacle
Full height partition walls acoustically insulated

2.7 DOCKING FACILITIES

Contractor shall provide docking facilities for five 28 foot long vessels for the Contracting Officer's use. Separate slips for each vessel shall be provided and furnished each with 110 AC electrical power and fresh water. Provide floating dock and, ramps as needed to ensure smooth access and for loading/unloading of Equipment.

2.8 TRANSPORTATION

Contractor shall provide three cars for sole use by the Contracting Officers staff. The cars shall be of the following type, or equivalent as approved by the Contracting Officer:

Cars 1 & 2: Sports Utility Vehicle, four-wheel drive, Engine six cylinder, 3 liter minimum, petrol unleaded gasoline, such as Ford Explorer or equivalent.

Car 3: Sports Utility Vehicle, four-wheel drive, Engine six cylinder, 4 liter minimum, petrol unleaded gasoline, such as Ford Excursion or equivalent.

Cars shall be in good working order, with no visible damage, both interior and exterior, and not older than three years.

Contractor shall provide and pay for all car consumables, maintenance and repair costs throughout the contract period. Cars shall bear full car insurance, with extended third party liability with maximum insurance coverage.

Contractor shall provide a boat for the sole use of the Contracting Officers staff. The boat shall be of the following type, or equivalent as approved by the Contracting Officer:

Boat 1: Length Overall 18'6"
Beam 8'
Draft 1'
Weight 2000 lbs
Capacity (persons) 8
Material Unsinkable Unibond TM
Engine 125 B.H.P. Four stroke, four cylinder
Control: Central console, hydraulic steering
Rigging: Standard Equipment
Sun top
8 Life Jackets

Signals
VHF radio

Boat and engine shall be new, Boston Whaler 180 Dauntless or equivalent. Contractor shall provide and pay for all boat consumables, maintenance and repair costs throughout the contract period. Boat shall bear full insurance, with extended third party liability with maximum insurance coverage.

2.9 COMMUNICATION

Contractor shall provide for four mobile telephone sets for the sole use by Contracting Officer's staff. The mobile phones shall be new at the start of contract and shall be completely fitted with spare battery and loader. The Contractor shall pay for all connection charges and all business related telephone charges incurred on the mobile telephone sets. A provider shall be selected which has good area coverage in both the project site, Contractor's working areas, as well as in the quarry (if possible).

PART 3 EXECUTION

3.1 INSTALLATION

A. Within 45 calendar days after Contracting Officer's review of the Contractor's submittal, the three Field Office Trailers shall be delivered to the project site, installed and completely functional.

B. The rock quarry office shall be made available and fully functional within 60 calendar days of the Notice to Proceed or by the start of rock production, whichever date comes first.

-- End of Section --

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02/94

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-- End of Section Table of Contents --

SECTION 01270A

MEASUREMENT AND PAYMENT
02/94

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates
Weight Certificate
Scale Tickets and/or Records of Weights

1.2 LUMP SUM PAYMENT ITEMS

1.2.1 General

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the PRICING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

1.2.2 Mobilization and Demobilization (Bid Item 0001)

Payment will be made at the applicable contract price, which payment shall constitute full compensation for mobilizing and demobilizing the plant and equipment in accordance with SECTIONS 00800:SPECIAL CONTRACT CONDITIONS and 02000:MOBILIZATION AND DEMOBILIZATION.

Mobilization and Demobilization shall be measured as lump sum. No separate measurement will be made for incidental work associated with mobilization and demobilization. Payment for work under Mobilization and Demobilization shall constitute full compensation for establishing all general plants, shops, tools, apparatus, equipment, materials, personnel, storage areas, offices and other facilities, removal of said facilities, and all work incidental thereto necessary to complete mobilization and demobilization in accordance with contract drawings, specifications and directions of the Contracting Officer. Excluded from the mobilization and demobilization

shall be the mobilization and demobilization costs specifically associated with the removal and disposal of utility lines.

1.2.3 Demolition (Bid Item 0002)

Payment will be made for costs associated with demolishing and removing from site all items as indicated on the plans and in accordance with Section 02220A: DEMOLITION AND REMOVALS. This item is measured as a Lump Sum. Demolition will be measured as percentage complete.

Payment for demolition will be made at the applicable contract price, which payment shall constitute full compensation for percentage complete and incidentals necessary to complete the work. Determination of percentage complete after having once been paid for, will not be reopened, except on evidence of collusion, fraud or obvious error. Monthly partial payments will be based on percentage of demolition work completed.

1.2.4 Drainage Structures (Bid Items 0003 through 0007)

Payment will be made for costs associated with construction of drainage structures as indicated on the plans and in accordance with Section 02630: STORM DRAIN SYSTEM and Section 03300: FORMWORK, REINFORCING STEEL, AND CAST-IN-PLACE CONCRETE. This item is measured as a Lump Sum. Construction of drainage structures will be measured and paid for completed storm drain structure including construction and maintenance of any temporary drainage work.

Payment for construction of drainage structures will be made at the applicable contract price, which payment shall constitute full compensation for percentage complete and incidentals necessary to complete the work.

1.2.5 Fill Quality Control and Instrumentation Installations (Bid Items 0008 through 0009)

Payment will be made at the applicable contract price, which payment shall constitute full compensation for multiple mobilizations and demobilizations for subsurface investigation/instrumentation locations, and performing subsurface exploration and instrumentation installation in accordance with SECTION 02216: GEOTECHNICAL INSTRUMENTATION AND POST CONSTRUCTION INVESTIGATIONS.

1.2.6 Abandoned Pipeline and Cable Removal (Bid Items 0010 through 0018)

Payment will be made for costs associated with removal from site all abandoned pipelines and cables as indicated on the plans and in accordance with Section 02225: UTILITY REMOVAL. The costs for removal will include the mobilization and demobilization cost for these items. This item is measured as a Lump Sum. Abandoned pipeline and cable removal will be measured and paid for complete removal and disposal of each line or cable or set of lines or cables. Contractor will be required to show proof of disposal in accordance with applicable City, County, State and Federal Regulations.

1.2.7 Marker Buoys (Bid Item 19)

Payment will be made for costs associated with placement of marker buoys as indicated on the plans and in accordance with the specifications. The costs for placement will include provision of the marker buoys, anchor chains, concrete anchor blocks, mobilization and demobilization for placement of all marker buoys indicated on the plans.

Payment for placement of marker buoys will be made at the applicable contract price, which payment shall constitute full compensation for percentage complete and incidentals necessary to complete the work.

1.3 UNIT PRICE ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the PRICING SCHEDULE and described-below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

1.3.1 Dredging (Bid Items 0020 through 0026)

1.3.1.1 General

Measurement and payment for Dredging will be made of the volume of material removed by dredging within the Dredging Prism as shown on the plans and in accordance with SECTION 02020 DREDGING. Dredging Prism is: the required dredging prism covering the project depth and width dimensions; allowable overdepth; and side slopes exclusive of overdepth. Reference is made to the BIDDING SCHEDULE which itemizes the estimated quantities of materials indicated in the dredging prism and will be the basis for variations in estimated quantities.

1.3.1.2 Unit of Measure

The total amount of dredged material will be measured in cubic yards.

1.3.1.3 Measurement

The total amount of dredged material will be measured by computing the volume between the bottom surface shown by the soundings of the Government's pre-dredge survey, and the bottom surface shown by the soundings of the Government's post-dredge survey along with the dredging prism and in accordance with the survey time frame indicated in SECTION 02020 DREDGING. The drawings are believed to represent conditions existing as of the survey date shown and were primarily used in the design and quantity estimates only, and are not intended to be used for measurement and payment for dredging. Misplaced materials (including any required removal and placement), excessive overdepth dredging and material falling or drawn into the cut from beyond the side slope plane or beyond the limits indicated will be excluded from the quantities for which payment will be

made. Excessive overdepth dredging is for the purpose of defining measurement and payment limits in this contract as dredging outside the dredging prism as defined above. Utilizing commercially available software, the Triangulated Irregular Networks (TIN) made from post-processed survey soundings, representing the pre-dredge and post-dredge dredging conditions, will be used for quantity determination. Post-processed survey soundings includes reduction of data points by binning the multi-beam data into a maximum 3.28-foot by 3.28-foot (or 1-meter by 1-meter) cell size, using the average of all depths recorded in the cell as representative of the depth of cell center for computation purposes. The method of reducing the survey sounding data, including the cell size and the cell representative depth, is subject to change by the Contracting Officer. The dredging prism shall be subtracted from the TINs, and the pre-dredge difference minus the post-dredge difference will represent the quantity dredged. For dredge elements, or portions thereof, physically below other dredge elements, the neat-lines shown on the drawings will be used for the pre-dredge surface of dredge elements. Reference is made to SECTION 02020 DREDGING which discusses the Government Pre-dredge and Final Survey requirements.

1.3.1.4 Payment

General

Payment for Dredging will be made at the applicable contract price which payment shall constitute full compensation for dredging (whether hard or soft), including allowable overdepth dredging, obtaining a valid Air Quality permit, sampling of dredged material, coordination with Quality Assurance sampling and testing activities, monitoring, hydrographic survey, disposal of dredged materials at the designated disposal sites, maintenance of weir/spillway, landfill grading, removal and disposal of debris, rubbish, foreign objects or obstructions and obstacles found in or on the seabed, idle time of the dredger, subcontractor's plant and attendant craft due to stoppages caused by ship traffic or debris, rubbish, foreign objects or obstructions and obstacles found in or on the seabed, complete. Determination of quantities after having once been paid for, will not be reopened, except on evidence of collusion, fraud or obvious error. Monthly partial payments will be based on approximate quantities determined by soundings in accordance with SECTION 02020: DREDGING, paragraph: CONTRACTOR'S SURVEYS.

Allowable Overdepth

The allowable overdepth is specified on the contract drawings. Payment for overdepth will be paid at the applicable contract price for each dredge element where overdepth is allowed. No overdepth will be allowed for dredge elements and those portions of dredge elements physically above another dredge element.

1.3.2 Wick Drain Installation (Bid Items 27 and 28)

1.3.2.1 General

Measurement and payment will be made for costs associated with installation

of wick drains as indicated on the plans and in accordance with SECTION 02145 WICK DRAINS. Wick drain installation could be carried out either from land or where necessary over water.

1.3.2.2 Unit of measure

The quantity of installation of wick drains within the limits indicated on the plans will be measured in lineal feet of installed wick drains.

1.3.2.3 Measurement

The installation of wick drains shall be measured by lineal feet completed over the entire areas as required by the plans and specifications.

1.3.2.4 Payment

Payment for installation of wick drains will be made at the applicable contract price, which payment shall constitute full compensation for each lineal foot of wick drain installation and incidentals necessary to complete the work. Included herein is removal of debris in the Southwest Slip Basin. Determination of quantities after having once been paid for will not be reopened, except on evidence of collusion, fraud or obvious error. Monthly partial payments will be based on lineal feet of wick drain installation.

1.3.3 Gravel Drainage Blankets (Bid Items 29 and 30)

1.3.3.1 General

Measurement and payment will be made for costs associated with installing a gravel drainage blanket between the seafloor and the dike for the dike drainage blanket, and between the top of the fill and the surcharge layer for the surcharge drainage blanket, as indicated on the plans.

1.3.3.2 Unit of Measure

The quantity of the gravel drainage blanket within the limits indicated on the plans will be measured in tons (1 ton = 2,000 pounds).

1.3.3.3 Measurement

The surcharge drainage blanket shall be measured by tons in place over the entire areas as required by the plans and specifications. Measurement shall be by displacement method when delivered on barges or weight and scale tickets certified by authorized weighters when delivered by rail or truck as described in paragraph Stonework, Measurement, below.

1.3.3.4 Payment

Payment for surcharge drainage blanket will be made at the applicable contract price, which payment shall constitute full compensation for each ton of surcharge drainage blanket placement and incidentals necessary to complete the work. Determination of quantities after having once been paid for, will not be reopened, except on evidence of collusion, fraud or

obvious error. Monthly partial payments will be based on tons of gravel drainage blanket completed.

1.3.4 Stone Work (Bid Items 0031 through 0033)

1.3.4.1 General

Measurement and payment will be made for costs associated with furnishing, transporting, stockpiling (if applicable), placing, and constructing the stone dikes and protection as indicated on the plans and in accordance with SECTION 02600 STONE WORK.

1.3.4.2 Unit of Measure

The quantity of stone for quarry run and rock revetment within the limits indicated will be measured in short tons (1 short ton (US)= 2,000 lbs.).

1.3.4.3 Measurement

Weighing Stone by Displacement

Stone delivered on barges may have its weight calculated by the displacement method. In such calculation, one cubic foot of displacement will be defined as 64 lbs. of weight. All facilities for verifying displacement and for determining the relation between draft tonnage, between depth of water in hold and bilges, and net stone tonnage shall be placed on barges by and at the expense of the Contractor. All barges shall be loaded to approximate level displacement. All barges shall be plainly numbered. Where the bottom of load compartments is below the draft of the loaded barge, stone in water will be defined as occupying 70 percent of any water in the compartment with a buoyancy of 64 lbs. per cubic foot. Displacement weight for each barge shall be obtained prior to loading, subsequent to loading, on arrival at the construction area and after offloading of stone.

Each load will be measured to the nearest 0.1 short ton, and the final quantity of the whole sum will be rounded to the nearest whole ton. Payments once having been made, quantity measurements for such payments will not be reopened except on evidence of collusion, fraud, or obvious error. The quantity to be paid for will be the number of tons of stone acceptably placed within the lines and grades indicated on the drawings or directed by the Contracting Officer.

Weighing Stone by Rail and Truck Delivery

General: All stone delivered by rail or truck shall be weighed and the scale tickets certified by authorized weighers. All railroad cars and trucks used for delivering stone shall be plainly numbered.

Stone will be measured for payment by the ton by weighing each truckload to the nearest 0.1 short ton, and the final quantity of the whole sum will be rounded to the nearest whole short ton. The stone will be measured for payment by being weighed on approved scales before being placed in the work. Quarry weights will not be accepted. Scales shall be of sufficient

length to permit simultaneous weighing of all axle loads and shall be inspected, tested and sealed as directed to assure accuracy within 0.5 percent throughout the range of the scales. The scales, located at the site of the work, shall be certified as to accuracy by an acceptable scales company representative prior to weighing any stone. Scales will be checked and certified before stone hauling and rechecked and recertified whenever a variance is suspected. The Contractor shall furnish the scales. If commercial scales are readily available in close proximity, the Contracting Officer may approve the use of the scales. The stone shall be weighed in the presence of the Government representative. The Contracting Officer may elect to accept certified weight certificate, to be furnished by a public weightmaster, in lieu of scale weights at the jobsite.

Scales: Scales shall be standard truck scales of the beam type. The scales shall be of sufficient size and capacity to accommodate all trucks used in hauling the material. Scales shall be tested, approved, and sealed by an inspector of the State Inspection Bureau charged with scales inspection within the State of California. Scales shall be calibrated and resealed as often as necessary to insure continuous accuracy. The necessary number of standard weights for testing the scales shall be on hand at all times and, if an official inspection bureau of the State of California is not available, the scales will be tested by the Contracting Officer. Where scales are found to be defective or questionable, stone deliveries shall immediately cease and shall not resume until approved scales are available.

Scale Tickets and Records

Copies of Scale Tickets and/or Records of Weights, including displacement weight date, shall be submitted to the Government Inspector during the progress of the work. The Government Inspector will determine from the displacement weight date, the weight of stone shipped by barge and will certify displacement weight records. Each scale ticket and/or record shall include the gross, rate, dunnage, and net weight of stone. The weight of dunnage for each load, will be determined, recorded, and certified by the Government Inspector. Deliveries and numbered scale tickets and/or records using an approved system to maintain delivery control shall be used. Copies of scale tickets and/or records shall accompany each load of stone for all methods of transportation, and a copy shall be delivered to the Government Inspector on delivery of the stone. Before the final statement is allowed, the Contractor shall file with the Government Inspector certified scale tickets and/or certified records for stone used in the construction covered by the contract.

1.3.4.4 Payment

Payment for Stone for quarry run and rock revetment will be made at the applicable contract price, which payment shall constitute full compensation for obtaining and placing new stone required for the dike and revetment, complete. Payment will also include resetting of adjacent stone as necessary for interlocking with A-500 stone. Payment will also include removal and reuse and/or disposal of stone work as indicated on the plans for Pier 300 Expansion. Determination of quantities, after having once been paid for, will not be reopened except on evidence of collusion, fraud, or obvious error. The quantity to be paid for will be the number of tons

of stone acceptably placed within the lines and grades indicated on the drawings or directed by the Contracting Officer, reference section 02600 STONEWORK.

1.3.5 Geotextile Filter (Bid Item 0034)

1.3.5.1 General

Measurement and payment will be made for costs associated with furnishing, transporting, stockpiling (if applicable), placing, and constructing the Geotextile Filter as indicated on the plans and in accordance with SECTION 02373 GEOTEXTILE.

1.3.5.2 Unit of Measure

The quantity of Geotextile Filter within the limits indicated on the plans will be measured in square yards.

1.3.5.3 Measurement

Geotextile Filter shall be measured by neat-line square yard of Geotextile Filter as required by the Plans and Specifications. The Geotextile Filter includes a double layer of filter material, and whatever excess material necessary to construct the Geotextile Filter to lines and grades shown on the plans.

1.3.5.4 Payment

Payment for Geotextile Filter will be made at the applicable contract price, which payment shall constitute full compensation for each neat line square yard of double layer Geotextile Filter placed and incidentals necessary to complete the work. Determination of quantities after having once been paid for, will not be reopened, except on evidence of collusion, fraud or obvious error. Monthly partial payments will be based on neat line square yards of Geotextile Filter placed.

1.3.6 Remove and Place Surcharge (Bid Item 0035, 0036 and 0037)

1.3.6.1 General

Measurement and payment will be made for costs associated with removing and placing surcharge material as indicated on the plans and in accordance with SECTION 02315N EXCAVATION AND FILL. This also includes grading the appropriate fill areas to the required rough grade as indicated on the drawings.

1.3.6.2 Unit of measure

The quantity of the surcharge removal within the limits indicated on the plans will be measured in cubic yards.

1.3.6.3 Measurement

The surcharge material removal and placement shall be measured by cubic

yards removed within the limits as indicated on the plans. Pre and post topographic surveys with a maximum 50 foot grid spacing of the removal area shall be conducted for measurement. The total quantity of excavated material for which payment will be made will be the computed difference between the ground surface prior to material removal and the ground surface after material removal, as determined by a survey. The Triangulated Irregular Networks (TIN) made from post-processed survey, representing the pre-excavation and post-excavation conditions, will be used for quantity determination. The TIN of the post-excavation shall be subtracted from the TIN of the pre-excavation, within the surveyed limits as indicated on the plans, and the difference will represent the quantity removed.

1.3.6.4 Payment

Payment for surcharge material removal and placement will be made at the applicable contract price, which payment shall constitute full compensation for each cubic yard of surcharge material removed, disposing at designated disposal sites and areas, and incidentals necessary to complete the work, including final rough grading. Determination of quantities after having once been paid for will not be reopened, except on evidence of collusion, fraud or obvious error. Monthly partial payments will be based on cubic yards of surcharge material removed.

1.3.7 Remove Unsuitable Material and Place Suitable Material (Bid Item 38)

1.3.7.1 General

Measurement and payment will be made for costs associated with excavating the unsuitable material below rough grade on Pier 400, disposal of the unsuitable material, and placing suitable Pier 400 surcharge material into the excavation area below rough grade. Work shall be accomplished as indicated on the plans and in accordance with SECTION 02315N EXCAVATION AND FILL. This also includes grading the appropriate fill areas to the required rough grade as indicated on the drawings.

1.3.7.2 Unit of Measure

The quantity of removal of unsuitable material within the limits indicated on the plans will be measured in cubic yards.

1.3.7.3 Measurement

The removal of unsuitable material and placement of suitable material within the limits indicated on the plans shall be measured in cubic yards of unsuitable material removed. Removal of the unsuitable material shall commence after the location of the unsuitable material has been identified and approved by the Contracting Officer and the area surveyed. Removal of the unsuitable material shall be complete upon approval of the Contracting Officer. Pre and post topographic surveys with a maximum 50 foot grid spacing of the removal area shall be conducted for measurement. The total quantity of excavated material for which payment will be made will be the computed difference between the ground surface prior to material removal and the ground surface after material removal, as determined by a survey. The Triangulated Irregular Networks (TIN) made from post-processed survey,

representing the pre-excavation and post-excavation conditions, will be used for quantity determination. The TIN of the post-excavation shall be subtracted from the TIN of the pre-excavation, within the surveyed limits as indicated on the plans, and the difference will represent the quantity removed.

1.3.7.4 Payment

Payment for removal of unsuitable material and placement of suitable will be made at the applicable contract price, which payment shall constitute full compensation for each cubic yard of unsuitable material removed, disposing at designated disposal sites and incidentals necessary to complete the work, including backfilling of excavation with suitable Pier 400 surcharge material and final rough grading. Determination of quantities after having once been paid for will not be reopened, except on evidence of collusion, fraud or obvious error. Monthly partial payments will be based on cubic yards of surcharge material removed.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

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SECTION 01312A

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03/02

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SECTION 01312A

QUALITY CONTROL SYSTEM (QCS)
03/02

PART 1 GENERAL

1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Import/Export of Data

1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01320A, PROJECT SCHEDULE, Section 01330, SUBMITTAL PROCEDURES, and Section 01451A, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to

download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS:

Hardware

IBM-compatible PC with 200 MHz Pentium or higher processor

32+ MB RAM

4 GB hard drive disk space for sole use by the QCS system

3 1/2 inch high-density floppy drive

Compact disk (CD) Reader

Color monitor

Laser printer compatible with HP LaserJet III or better, with minimum 4 MB installed memory.

Connection to the Internet, minimum 28 kBPS

Software

MS Windows 95 or newer version operating system (MS Windows NT 4.0 or newer is recommended)

Word Processing software compatible with MS Word 97 or newer

Internet browser

The Contractor's computer system shall be protected by virus protection software that is regularly upgraded with all issued manufacturer's updates throughout the life of the contract.

Electronic mail (E-mail) compatible with MS Outlook

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a

CD-ROM containing these instructions.

1.4.2 Contractor Quality Control(CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file plans, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to

the Contractor will be prefixed with "C".

1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.2 Finances

1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451A, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451A, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 200.

1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work

progresses, and shall promptly provide this information to the Government via QCS.

1.6.4 Submittal Management

The Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or Section 01320A, PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF) (see Section 01320A PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of

running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

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the preparation and maintenance of the project schedule

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SECTION 01320A

CONSTRUCTION SCHEDULE
08/01

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11	(1995) Progress, Schedules, and Network Analysis Systems

1.2 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required construction schedule reports.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. Submittals shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Schedule

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a construction schedule as described below shall be prepared. The scheduling of construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate construction Schedule. The approved construction schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire construction schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where construction schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Construction Schedule, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Construction Schedule have been made.

3.3 CONSTRUCTION SCHEDULE

The computer software system utilized by the Contractor to produce the construction schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manual methods used to produce any required information shall require approval by the Contracting Officer.

3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the construction schedule. The Contractor shall provide the construction schedule in the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

The construction schedule shall include an appropriate level of detail. Failure to develop or update the construction schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the construction schedule:

3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations are greater than 20 days).

3.3.2.2 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the construction schedule. Long lead materials and equipment are those materials that have a procurement cycle

of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, and delivery.

3.3.2.3 Critical Activities

The following activities shall be listed as separate line activities on the Contractor's construction schedule:

a. Dredging Adjacent to the Los Angeles County Flood Control District Summerland Avenue Storm Drain LIne "D";

b. The portion of Southwest Slip Area 2 that is 300 feet landside of dike control line and dredging over a 300 feet wide waterside area in front of Southwest Slip Area 2;

c. Whole of Southwest Slip Area 2;

d. Whole of Southwest Slip Area 1;.

e. The portion of Pier 400 Excess Surcharge Material that is 300 feet landside of existing rock dike Face A, Face B and Face C;

f. Areas 1, 2, 3 and 4 of Pier 400 Excess Surcharge Material;

g. Areas 5 and 6 of Pier 400 Excess Surcharge Material;

h. Eelgrass Restoration Area;

i. Pier 300 Expansion;

j. Cabrillo Shallow Water Habitat Expansion;

k. Pier 400 Submerged Material Storage Site;

l. Dredging of each dredge element;

m. Removal of each pipeline and cable;

n. Prefinal inspection;

o. Correction of punchlist from prefinal inspection;

p. Submission and approval of as-built drawings;

q. Final inspection.

3.3.2.4 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: approvals, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.2.5 Responsibility

All activities shall be identified in the construction schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code.

3.3.2.6 Work Areas

All activities shall be identified in the construction schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall be identified by the Work Area Code.

3.3.2.7 Modification or Claim Number

Any activity that is added or changed by contract modification or used to justify claimed time shall be identified by a mod or claim code that changed the activity. Activities shall not belong to more than one modification or claim item. The modification or claim number of each activity shall be identified by the Mod or Claim Number. Whenever possible, changes shall be added to the schedule by adding new activities. Existing activities shall not normally be changed to reflect modifications.

3.3.2.8 Bid Item

All activities shall be identified in the construction schedule by the Bid Item to which the activity belongs. An activity shall not contain work in more than one bid item. The bid item for each appropriate activity shall be identified by the Bid Item Code.

3.3.2.9 Phase of Work

All activities shall be identified in the construction schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

3.3.2.10 Category of Work

All Activities shall be identified in the construction schedule according to the category of work which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

3.3.2.11 Feature of Work

All activities shall be identified in the construction schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project.

The feature of work for each activity shall be identified by the Feature of Work Code.

3.3.3 Scheduled Project Completion

The schedule interval shall extend from NTP to the contract completion date.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the construction schedule an activity called "Start Project". The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the construction schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.3.3 Early Project Completion

In the event the construction schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every construction schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

3.3.4.1 Start Phase

The Contractor shall include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

3.3.4.2 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase X" where "X" refers to the phase of work. The

"End Phase X" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.4.3 Phase X

The Contractor shall include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from the other shall be disabled.

3.3.6 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated construction schedule.

3.3.7 Negative Lags

Lag durations contained in the construction schedule shall not have a negative value.

3.4 SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph 3.5 SUBMISSION REQUIREMENTS of this section.

3.4.1 Preliminary construction schedule Submission

The Preliminary construction schedule, defining the Contractor's planned operations for the first 150 calendar days shall be submitted for approval within 20 calendar days after the NTP is acknowledged. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after NTP.

3.4.2 Initial construction schedule Submission

The Initial construction schedule shall be submitted for approval within 20 calendar days after NTP. The schedule shall provide a reasonable sequence of activities which represent work through the entire project and shall be at a reasonable level of detail.

3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and construction schedule data, which in the judgement of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11. This exact structure is mandatory, even if some fields are not used.

3.5 SUBMISSION REQUIREMENTS

Submit Construction Schedule, not later than 30 days after receipt of notice to proceed. The following items shall be submitted by the Contractor for the preliminary submission, initial submission, and every periodic construction schedule update throughout the life of the project:

3.5.1 Data Disks

Four data disks containing the construction schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11.

3.5.1.1 File Medium

Required data shall be submitted on 3.5 disks, formatted to hold 1.44 MB of data, under the MS-DOS Version 5. or 6.x, unless otherwise approved by the Contracting Officer.

3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number or person responsible for the schedule, and the MS-DOS version used to format the disk.

3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a

naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

3.5.2 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each update of the construction schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis.

3.5.3 Approved Changes Verification

Only construction schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceeding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from the

NTP until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission and on monthly schedule update submissions. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.5.3 Critical Path

The critical path shall be clearly shown.

3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the construction schedule required to reflect the current status of the project. The Contracting Officer will approve activity progress, proposed revisions, and adjustments as appropriate.

3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

3.6.2 Update Submission Following Progress Meeting

A complete update of the construction schedule containing all approved

progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. As a minimum, the Contractor shall address the following items on an activity by activity basis during each progress meeting.

3.6.3.1 Progress Report

A weekly Progress Report, showing the progress of the work in relation to the construction schedule, shall be submitted to the Contracting Officer not less than weekly. The construction schedule shall be revised and submitted, as needed, or whenever the actual progress is substantially (more than 10%) different than the proposed schedule.

3.6.3.2 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in-progress or completed .

3.6.3.3 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

3.6.3.4 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

3.6.3.5 Logic Changes

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

3.6.3.6 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning

the work necessary. 3) Changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, construction schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any approvals.

3.7.1 Justification of Delay

The construction schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the construction schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the contract completion date.

3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the contract completion date of under 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

a. A list of affected activities, with their associated construction schedule activity number.

b. A brief explanation of the causes of the change.

c. An analysis of the overall impact of the changes proposed.

d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The proposed revisions to the schedule will be approved by the Contracting Officer prior to inclusion of those changes within the construction schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the construction schedule. The Contractor shall include these revisions in the construction schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

-- End of Section --

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SECTION 01330

SUBMITTAL PROCEDURES

02/02

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SECTION 01330

SUBMITTAL PROCEDURES
02/02

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION (SD)

Submittals required are identified by SD numbers and titles as follows:

SD-01 Preconstruction Submittals

SD-02 Shop Drawings

SD-03 Product Data

SD-04 Samples

SD-05 Design Data

SD-06 Test Reports

SD-07 Certificates

SD-11 Closeout Submittals

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 Government Approved

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.2.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.3 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions,

the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.5 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.6 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signed, and dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.7 SUBMITTAL REGISTER

At the end of this section is a submittal register showing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor shall maintain a submittal register for the project in accordance with Section 01312A QUALITY CONTROL SYSTEM (QCS).The Government will provide the initial submittal register in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on

which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall track all submittals.

1.8 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 7 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

1.9 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

1.10 SUBMITTAL PROCEDURES

Submittals shall be made as follows:

1.10.1 Procedures

Submit submittals to:
Dan Moore
USACE
Los Angeles Project Office
P.O. Box 3157
Ontario, Ca. 91761-0916
Tel: 909-981-5571
FAX: 909-981-5649

1.10.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.11 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

1.12 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Four copies of the submittal will be retained by the Contracting Officer and two copies of the submittal will be returned to the Contractor.

1.13 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.14 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR
(Firm Name)
_____ Approved
_____ Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE: _____
TITLE: _____
DATE: _____

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

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		01200	SD-01 Preconstruction Submittals															
			Site Specific Safety and Health Plan	1.14.1	G													
			Activity Hazards Safety Analysis	1.14.3	G													
			Work and Storage Area Plan	1.19	G													
			SD-05 Design Data															
			Aerial Photographs	1.24														
			SD-11 Closeout Submittals															
			As-Built plans	1.23.1	G													
		01201	SD-01 Preconstruction Submittals															
			Layout	1.2.3	G													
		01270A	SD-07 Certificates															
			Weight Certificate	1.3.4.3														
			Scale Tickets and/or Records of Weights	1.3.4.3														
		01320A	SD-01 Preconstruction Submittals															
			Construction Schedule	3.3														
			Construction Schedule	3.5														
		01355	SD-01 Preconstruction Submittals															
			Environmental Protection Plan	1.7	G	ERB												
			Eelgrass Protection Plan	1.8	G	ERB												
			Eelgrass Restoration Area Construction Schedule	1.13	G	ERB												
			Notification of Completion of Eelgrass Restoration Area	1.13	G	ERB												
		01451A	SD-07 Certificates															

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		01451A	Contractor Quality Control (CQC) Plan	3.2	G													
		02020	SD-01 Preconstruction Submittals															
			Progress Surveys	3.11.1														
			SD-02 Shop Drawings															
			Dredge and Auxiliary Floating Plant Layout	3.7.1	G													
			Dredge and Disposal Plan	3.1	G													
			Wier/Spillway Plan	3.2.5	G													
			Special Procedures for Dredging Near Submarine Cable and Pipelines	3.3.6														
			Tide Gage Plan	3.11.4	G													
			SD-04 Samples															
			Sediment Samples	3.10														
			Representative Grab Samples	3.10														
			SD-05 Design Data															
			Dredge Sample Data Form	3.10														
			SD-06 Test Reports															
			Daily Report of Operations	3.4.4														
			SD-07 Certificates															
			Hydrographic Surveyor	3.11.2	G													
		02145	SD-03 Product Data															
			Manufacturer's Data	2.1	G													
			SD-07 Certificates															
			Certificates	2.1	G													

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		02145	Sequence and Method of Installation	Part 3	G													
			Wick Drain Installation Schedule	Part 3	G													
			Products to be installed	2.1														
			Qualifications	2.1														
			SD-04 Samples															
			Material samples	2.1														
		02216	SD-01 Preconstruction Submittals															
			Contractor Schedule	1.3	G													
			SD-06 Test Reports															
			Field CPT Data	1.3	G EDG													
			Corrected CPT Data	1.3														
		02220A	SD-07 Certificates															
			Permits and Certificates	3.1														
			SD-01 Preconstruction Submittals															
			Work Plan	3.1	G													
			SD-11 Closeout Submittals															
			As-built Pile Survey	3.6	G													
		02225	SD-01 Preconstruction Submittals															
			Permits and Certificates	3.1.1														
			Pipeline and Cable Removal Plan	3.4.1														
			Health and Safety Plan for Pipeline and Cable Removal (HASP)	1.5.1														
			SD-07 Certificates															
			Marine Chemist Certificates	3.1.2														

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(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02225	SD-11 Closeout Submittals															
			As-built Pipeline and Cable	3.1.3	G													
			Location Plan															
		02315N	SD-06 Test Reports															
			Fill and backfill test	3.5.2.1														
			Select material test	3.5.2.2														
			Density tests	3.5.2.4														
			Porous fill	3.5.2.3														
		02373	SD-01 Preconstruction Submittals															
			Geotextile Installation Plan and	3.2.3	G													
			Schedule															
			SD-06 Test Reports															
			Tests for Geotextile	2.1.1														
			SD-07 Certificates															
			Geotextile Mill Certificates or	2.1.1														
			Affidavit															
			SD-03 Product Data															
			Thread	2.1.2														
			Manufacturing Quality Control	2.2.1														
			Sampling and Testing															
			SD-04 Samples															
			Quality Assurance Samples and	2.2.1														
			Tests															
		02600	SD-01 Preconstruction Submittals															
			Stone Source	2.2.2														

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		02600	Non-listed Quarry Quality Test Data	2.2	G													
			Testing Laboratory	2.4	G EDG													
			Equipment List	3.1.1														
			Stonework Plan and Schedule	3.1.2	G													
			Special Procedures	3.1.3	G													
			Daily Report of Operations	3.1.4														
			SD-04 Samples															
			Stone Samples	2.3														
			SD-06 Test Reports															
			Gradation Tests	2.8														
			Specific Gravity Tests	2.8														
			Rock Test Data	2.3														
		02630	SD-07 Certificates															
			RC Pipes Certificates	2.1.3														
			SD-02 Shop Drawings															
			Layout of Storm Drain Extensions	3.1.1	G													
			Details for Concrete Pipe Joints	3.1.2	G													
			Temporary 42' Storm Drain design	3.1.3	G													
			Drawings and Design Calculations	3.2.4	G													
			Summerland Avenue Storm Drain/Headwall Design	3.1.4	G													
		03300	SD-01 Preconstruction Submittals															
			Mix Design	2.2	G EDG													

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		03300	Product Data	2.2														
			Reinforcing Steel	2.3														
			SD-07 Certificates															
			Delivery Tickets for concrete	2.2														

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating this form)*	DATE	TRANSMITTAL NO.

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO.	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____
SPECIFICATION SEC. NO. *(Cover only one section with each transmittal)*	PROJECT TITLE AND LOCATION		CHECK ONE: THIS TRANSMITTAL IS FOR ☐ FIO ☐ GOV'T. APPROVAL

ITEM NO. *a.*	DESCRIPTION OF ITEM SUBMITTED *(Type size, model number/etc.)*	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction no. 8)* *c.*	NO. OF COPIES *d.*	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE *g.*	VARIATION *(See Instruction No. 6)* *h.*	FOR CE USE CODE *i.*
				SPEC. PARA. NO. *e.*	DRAWING SHEET NO. *f.*			

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

_____

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.

3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.

4. Submittals requiring expeditious handling will be submitted on a separate form.

5. Separate transmittal form will be used for submittals under separate sections of the specifications.

6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".

7. Form is self-transmittal, letter of transmittal is not required.

8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.

9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted.

B -- Approved, except as noted on drawings.

C -- Approved, except as noted on drawings. Refer to attached sheet resubmission required.

D -- Will be returned by separate correspondence.

E -- Disapproved (See attached).

F -- Receipt acknowledged.

FX -- Receipt acknowledged, does not comply as noted with contract requirements.

G -- Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

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SECTION 01355

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05/02

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1.2.4 Waters of the United States
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-- End of Section Table of Contents --

SECTION 01355

ENVIRONMENTAL PROTECTION
05/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions
36 CFR 800	Properties Discovered during Implementation of an Undertaking
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 - 178	Hazardous Materials Regulations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps on Engineers Safety and Health Requirements Manual

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (I.e. methyl ethyl ketone, toluene etc.), waste thinners,excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

1.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government: ERB represents the Environmental Resources Branch. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals
- Environmental Protection Plan; G ERB
- Eelgrass Protection Plan;G ERB
- Eelgrass Restoration Area Construction Schedule; G ERB
- Notification of Completion of Eelgrass Restoration Area; G ERB

1.7 ENVIRONMENTAL PROTECTION PLAN

Submit ENVIRONMENTAL PROTECTION PLAN

Within twenty (20) calendar days of Notice of Award, the Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 30 days of operations. However, the Contractor shall furnish an acceptable final plan not later than 30 calendar days after receipt of the Notice to Proceed. Acceptance is conditional and is predicated upon satisfactory performance during construction. No physical work at the site shall begin prior to acceptance of the Contractor's plan or an interim plan covering the work to be performed. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met.

The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction

task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 Laws, Regulations, and Permits

The Contractor shall provide as part of the Environmental Protection Plan a list of Federal, State , and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations, and permits. Permits obtained by the Contact or shall be attached to, and specific conditions included in the Environmental Protection plan

1.7.3 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.

b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.

c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.

d. Description of the Contractor's environmental protection personnel training program.

e. An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan shall include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water Pollution Prevention Plan (SWPPP) may be substituted for this plan.

f. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.

g. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.

h. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.

i. Drawing showing the location of borrow areas.

j. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1 This plan shall include as a minimum:

1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.

2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

3. Training requirements for Contractor's personnel and methods of accomplishing the training.

4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

6. The methods and procedures to be used for expeditions contaminant cleanup.

k. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste shall be attached to this plan during the construction. The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October). The report shall indicate the total amount of waste generated and total amount of waste diverted in cubic yards or tons along with the percent that was diverted.

l. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source. The Contractor shall collect glass bottles, aluminum cans, and paper at the job site for recycling.

m. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.

n. A contaminant prevention plan that contains the following: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.

o. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines. If a settling/retention pond is required, the plan shall include the design of the pond including drawings, removal plan, and testing requirements for possible pollutants. If land application will be the method of disposal for the waste water, the plan shall include a sketch showing the location for land application along with a description of the pre-treatment methods to be implemented. If surface discharge will be the method of disposal, a copy of the permit and associated documents shall be included as an attachment prior to discharging the waste water. If disposal is to a sanitary sewer, the plan shall include

documentation that the Waste Water Treatment Plant Operator has approved the flow rate, volume, and type of discharge.

p. A historical, archaeological, cultural resources, and biological resources plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, and biological resources known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, and biological resources not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Contracting Officer.

1.7.4 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents shall be attached,as an appendix, to the Environmental Protection Plan.

1.8 PROTECTION FEATURES

This section supplements the Contract clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. The Contractor shall prepare a list of features requiring protection under the provisions of the contract clause which are not specially identified on the drawings as environmental features requiring protection. The Contractor shall protect those environmental features, indicated specially on the drawings, in spite of interference which their preservation may cause to the Contractor's work under contract.

The Contractor shall avoid impacts to existing eelgrass beds. A pre-construction survey of the existing eel grass beds will be provided to the Contractor prior to the start of work. The Contractor shall use the pre-construction survey to prepare an Eelgrass Protection Plan that will detail measures the Contractor will take to avoid impacts to existing eelgrass beds. The Eelgrass Protection Plan shall be submitted with the Environmental Protection Plan.

1.9 PERMITS

The Corps of Engineers will not obtain any permits for this project. See Contract Clause entitled "PERMIT AND RESPONSIBILITIES".

1.10 ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the environmental requirements included in PART 3 EXECUTION. These environmental requirements are an outgrowth of environmental commitments made by the Government during the project development.

1.11 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

The Contract specifications have been prepared to comply with the special conditions and mitigation measures of an environmental nature which were established during the planning and development of this project. The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternate borrow areas, fill areas, staging areas, alternate access routes, scheduling delays, unauthorized activities in designated "no work" areas etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and procedures indicated by the plans and specifications which may have an environmental impact will require an extended review, processing, and approval time by the Government. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.12 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

1.13 ENVIRONMENTAL NOTIFICATIONS

The Contractor shall submit an Eelgrass Restoration Area Construction Schedule detailing construction of the Eelgrass Restoration Area no later than 20 days after Notice to Proceed date.

The Contractor shall notify the Contracting Officer by telephone and in writing at least 60 days in advance of any dredging that will occur in areas shallower than -20 feet Mean Lower Low Water (MLLW).

The Contractor shall notify the Contracting Officer by telephone and in writing at least seven days prior to the start of dredging of contaminated sediments and within seven days of the completion of dredging of contaminated sediments, refernce SECTION 02020 DREDGING.

The Contractor shall submit Notification of Completion of Eelgrass Restoration Area to the Contracting Officer by telephone and in writing of completion of construction activities related to the Eelgrass Restoration Area. Notification will be within two working days following completion.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall be responsible for obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

3.2.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Erosion Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs). BMPs may include, but not limited to, vegetation cover, streambank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins.

3.2.3 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and

sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

3.3 WATER RESOURCES

3.3.1 General

Special management techniques as set out below shall be implemented to control water pollution by the construction activities. These techniques supplement requirements in the Environmental Impact Statement/Environmental Impact Report (EIS/EIR), the 404 (b)(1) Evaluation prepared for this project, and the safety requirements under this Contract.

3.3.2 Dredging and Fill Activities

All dredging and fill activities will remain within the boundaries specified in the plans. There will be no dumping of fill or material outside of the project area, reference SECTION 02020 DREDGING.

3.3.3 Turbidity Plume Reduction

The Government or an outside agency will be monitoring turbidity and other water quality parameters during construction. If turbidity exceeds parameters, reference paragraph: Mitigation Measures, the Contractor shall modify operations to reduce the turbidity plume caused by dredge and/or fill operations. The Contractor may be required to use a silt curtain or other modifications that control and localize the plume. Modifications may include the use of a floating debris boom, with a skirt not less than 1.5 feet deep. This boom shall be placed in a manner that will prevent spills, floating objects, and suspended sediments from drifting away from the site. Modifications may also include changes to dredging equipment or operations (i.e., converting type or size of clamshell bucket, ceasing overflow of hopper dredge or disposal scow, and limiting operations to ebb tide), and slowing or temporarily stopping operations until directed by the Contracting Officer to resume normal operations.

3.3.4 Spill and Fouling Prevention

During the performance of the work, the Contractor shall institute and enforce procedures to prevent spills and floating debris from fouling the local waters and beach. Dredge operations may be modified during ebb tide to prevent fouling of local waters and/or beaches. Should these procedures fail, the Contractor shall promptly clean up all spills and debris.

3.3.5 Daily Clean Up

At the end of each work shift, loose materials on adjoining structures and debris in the water and on the beach shall be removed by the Contractor and disposed of off site.

3.3.6 Material Causing Pollution or Danger to Navigation

Should the Contractor dump, throw overboard, sink or misplace material, plant, machinery appliance that may be dangerous to navigation, or cause pollution of the waters, the Contractor shall give immediate notice to the Contracting Officer and, if required shall boom, buoy or otherwise mark the location of the incident until the obstruction or pollution problem is removed. If diving is required to obtain specific/lost items, all contract diving operations will be in compliance with section 30 of EM 385-1-1. Should the Contractor refuse, neglect or delay compliance with these requirements, the necessary removal and cleanup may be accomplished by other forces and the costs of this removal and cleanup may be deducted from the monies due or to become due the Contractor.

3.3.7 Spill Contingency Plan

The Contractor shall develop a spill contingency plan prior to construction. Such a plan shall outline procedures for containing and handling spills from machinery during construction, and protect harbor waters from accidental hydrocarbon contamination. Oil containment and clean up equipment shall be kept on site during removal of the oil pipeline. Workers shall be trained in proper handling and disposal of waste materials. Reference paragraph: Environmental Protection Plan.

3.4 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

3.4.1 Mitigation Measures

a. If, while dredging uncontaminated materials, turbidity at 100 yards downcurrent of the dredge or disposal site (measured by light transmittance) is greater than 40% above the calculated daily average of background readings; or dissolved oxygen concentrations fall below 5.0 mg/l (unless background readings indicate low dissolved oxygen concentrations), the Contractor shall modify operations as necessary to reduce the turbidity. Reference paragraph: Turbidity Plume Reduction.

b. If, while dredging contaminated materials, turbidity at 100 yards downcurrent of the dredge or disposal site (measured by light transmittance) is greater than 30% above the calculated daily average of background readings; or dissolved oxygen concentrations fall below 5.0 mg/l (unless background readings indicate low dissolved oxygen concentrations), the Contractor shall modify operations as necessary to reduce the turbidity. Reference paragraph: Turbidity Plume Reduction.

3.5 PROTECTION OF AIR RESOURCES

3.5.1 General

Special management techniques as set out below shall be implemented to control air pollution by the construction activities. These techniques supplement the requirements of Federal, State, and local laws and regulations; and the safety requirements under this Contract. If any of

the following techniques conflict with the requirements of Federal, State, or local laws or regulations, or safety requirements under this contract, then those requirements providing added protection of air resources shall be followed in lieu of the following.

The Contractor shall keep construction activities under surveillance, management and control to minimize pollution of air resources All activities, equipment, processes, and work operated or performance by the Contractor in accomplishing the specified construction shall be in strict accordance with the South Coast Air Quality Management District (SCAQMD) permit (reference paragraph:ENVIRONMENTAL PERMITS AND COMMITMENTS) requirements and all Federal emission and performance laws and standards. Special management techniques described below shall be implemented to control/air pollution by the construction activities which are included in the contract.

3.5.2 Particulates

Airborne particulates, including dust particles, from construction activities and processing and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, and all other work areas within or outside the project boundaries free from particulates which would exceed local air pollution standards pursuant with the SCAQMD Permit (reference paragraph: ENVIRONMENTAL PERMITS AND COMMITMENTS). The Contractor must have sufficient competent equipment available to accomplish this task. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. Burning will not be allowed on the project site unless specified in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning shall be subject to approval.

3.5.3 Emissions

Permitted emissions will be in accordance with SCAQMD Permit (reference paragraph: ENVIRONMENTAL PERMITS AND COMMITMENTS).

3.5.4 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and State allowable limits at all times.

3.5.5 Odors

Odors shall be controlled at all times for all construction activities, processing and preparation of materials.

3.5.6 Other Commitments

a. Use electric hydraulic dredges inside the breakwater where feasible as determined by the SCAQMD permit, reference paragraph: ENVIRONMENTAL PERMITS AND COMMITMENTS.

b. Use clean, low NOx engines, alternate fuels, electrificaiton, catalytic converters, particulate traps, and other advanced technology when feasible.

c. Properly tune and maintain all construction equipment.

d. Encourage construction workers to carpool.

e. Discontinue construction activities during a Stage 2 Smog Alert if required by the contractor's SCAQMD permit, reference paragraph: ENVIRONMENTAL PERMITS AND COMMITMENTS.

f. Implement injection timing retard on diesel powered equipment where feasible.

g. Electrify booster pump and other stationary emission sources

h. Use ARB reformulated diesel fuel in off road equipment during construction.

3.6 NOISE

3.6.1 Noise Suppression

All internal combustion engines shall be fitted with noise suppressor equipment and all portable and support equipment shall be located as far as possible from any sensitive areas.

3.6.2 Engine Noise

All internal combustion powered equipment shall be equipped with properly operating mufflers and kept in a proper state of tune to alleviate back-fires. Engines; if exposed, shall be fitted with protective shrouds to reduce motor noise. All portable and support equipment shall be located as far as possible from sensitive areas.

3.6.3 Limit Use of Generators

Where feasible , electricity shall be obtained from the local power grid to avoid use of portable generators.

3.6.4 Response to Noise Complaints

The Contractor shall designate a disturbance coordinator responsible for responding to noise complaints. The disturbance coordinator's name and telephone number shall be clearly posted at the construction site. It would be this person's responsibility to respond to complaints abate noise, determine the cause, and implement measures to mitigate the impact.

All internal combustion engines shall be fitted with noise suppressor equipment. All portable and support equipment to be located as far as possible from any environmentally sensitive areas.

All internal combustion power equipment shall be equipped with properly

operating mufflers and kept in a proper state of tune to alleviate back-fires.

Engines, if exposed, shall be fitted with protective shrouds to reduce motion noise. All portable and support equipment shall be located as far as possible from environmentally sensitive areas.

3.7 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.7.1 Solid Wastes

Solid wastes (including trash and debris dredged from the work are, but excluding clearing debris and hazardous waste as defined in the following paragraphs.) shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate.

3.7.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.7.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing.

The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage.

The Contractor shall be responsible for storage, describing, packaging,

labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations.

The Contractor shall transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations.

Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.7.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations.

3.8 RECYCLING AND WASTE MINIMIZATION

The Contractor shall participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of the project.

3.9 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: anchors, shipwrecks, any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall cease all activities in the area of the find until the requirements of 36 CFR 800 are met. The Contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

3.10 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations. Endangered or protected species known to frequent the proposed areas and their respective nesting season include:

California least tern	15 April through 15 September
California brown pelican	non-breeding individuals may occur year-round, roosting on breakwater

No visible turbidity from project construction shall be allowed to enter either the Cabrillo Shallow Water Habitat or the Shallow Water Habitat east of Pier 300 during the least tern nesting season.

No construction staging area or construction related activities (i.e. driving, hauling, etc.) shall be located within 200 ft. of the designated least tern site during the least tern nesting season.

If California least tern or other protected species nests are found at a project fill during construction, work in the immediate area of nesting shall be halted, and the Contracting Officer shall be notified immediately.

Personnel shall not harass any marine mammals or waterfowl.

The Contractor shall report any incidental take (dead or injured species) immediately to the Contracting Officer. The Contracting Officer shall consult with U.S. Fish and Wildlife Service immediately in the event of incidental take in the form of direct mortality through accidental death of a California least tern, or California brown pelican. Operations may be stopped if it is suspected that the impact of the taking causes an irreversible and adverse impact on the species.

3.11 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

3.12 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.13 MILITARY MUNITIONS

In the event the Contractor discovers or uncovers military munitions as defined in 40 CFR 260, the Contractor shall immediately stop work in that area and immediately inform the Contracting Officer.

3.14 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

3.15 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

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SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

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SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS
03/02

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN PUBLIC WORKS ASSOCIATION

"Greenbook" Standard Specifications for Public Works Construction
Published by BNI Building News
Division of BNI Publications, Inc.
1612 So. Clementine St.
Anaheim, CA 92802
Ph: 714-517-0970

AMERICAN SOCIETY FOR TESTING AND MATERIALS

100 Barr HArbor Dr.
West Conshohocken, Pa 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
Internet:WWW.astm.org

CORPS OF ENGINEERS (COE)

U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services Branch, TIC

3909 Halls Ferry Rd
Vicksburg, MS 39180-6199
Ph: 601-634-2571 Fax: 601-634-2506
NOTE: COE Handbook for concrete and cement (Documents w/ prefix CRD-C) (1949-present; 2 vol) free to Government Offices; $10.00 plus $8.00 per yr for 4 qrtly supplements to others). Individual documents, single copies free. Order from address above.

DEPARTMENT OF COMMERCE (DOC)

Order From:
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Ph: 703-605-6000
Fax: 703-605-6900
Internet: http://www.ntis.gov

FEDERAL SPECIFICATIONS (FS)
Order from:
General Services Administration
Federal Supply Survice Bureau
470 L'Enfant Plaza, S.W.
Washington, DC 20407
Ph: 202-619-8925
Fax: 202-619-8978
Internet: http://pub.fss.gsa.gov

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH REGULATIONS

Internet://www.dir.ca.gov/Counter/t8index.htm

CODE OF FEDERAL REGULATIONS

Order from:
Government Printing Offices
Washington, DC 20407
Ph: 202-619-8925
Internet: http://pub.fss.gsa.gov/h1-pub,html

ENGINEERING MANUALS(COE)

USACE Publications Depot
Attn: CEIM-SP-D
2803 52nd AVE.
Ph: 301-394-0081
Fax: 601-634-2506

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Department of Commerce
Gaithersburg, MD 20899-0001
Ph: 301-975-4025
Fax: 301-926-1630

Order publications from:
Superintendent of Documents
U.S. Government Printing Office (GPO)
Washington, DC 20402
Ph: 202-512-1800
Fax: 202-512-2250
or
National Technical Information Services (NTIS)
5285 Port Royal Rd.
Sprinfield, Va 22161
Ph: 800-553-6847
Fax:703-321-8547
Internet: http://www.gov.ntis.gov

CITY OF LOS ANGELES

City of Los Angeles
Department of Public Works
Bureau of Engineering
600 S. Spring Street, Suite 1100
Los Angeles CA, 90014
or
Internet: http://eng.lacity.org/techdocs/stdplans

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SECTION 01451A

CONTRACTOR QUALITY CONTROL
03/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740	(2001) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E 329	(2000b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

1.3 Submittals

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Contractor Quality Control (CQC) Plan; G

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 QUALITY CONTROL PLAN

Submit for review by the Government, not later than 30 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 15 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager,

including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.

d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2.2 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 including removal of personnel, as necessary, to obtain the quality specified.

3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 15 calendar days prior to the Coordination Meeting. 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 Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization.The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a graduate engineer, graduate architect, or a graduate of construction management, with a minimum of 5 years construction experience on construction similar to this contract or a construction person with a minimum of 10 years in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's

absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: civil, mechanical, electrical, structural, rock work, dredging and submittals clerk. These individuals shall be directly employed by the prime Contractor and may not be employed by a supplier or sub-contractor on this project; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals shall have no other duties other than quality control.

Experience Matrix

	Area	Qualifications
a.	Civil	Graduate Civil Engineer with 2 years experience in the type of work being performed on this project or technician with 5 years related experience
b.	Mechanical	Graduate Mechanical Engineer with 2 yrs experience or person with 5 yrs related experience
c.	Electrical	Graduate Electrical Engineer with 2 years experience or person with 5 yrs related experience
d.	Structural	Graduate Structural Engineer with 2 yrs experience or person with 5 yrs related experience
e.	Rock Work	Experienced engineer or technician with 10 years of marine rock placement experience
f.	Dredging	Experienced engineer or technician with 10 years of marine dredging experience

3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered. Contact U.S. Army Corps of Engineers, Los Angeles District, Emmanual Molina, (213) 452-3384 for information.

3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.

b. A review of the contract drawings.

c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.

d. Review of provisions that have been made to provide required control inspection and testing.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. A review of the appropriate activity hazard analysis to assure

safety requirements are met.

h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The Government shall be notified at least 24 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record 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 and test identification control number system, including all of the test documentation requirements, have been prepared.

e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and

disapproval of the test facility for this contract.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

The Government reserves 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. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of $1,500.00 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing 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.

3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the following address:

For delivery by mail:
U.S. Army Corps of Engineers
ATTN: Baseyard Soils Laboratory
645 North Durfee Avenue
South El Monte, CA 91733-4399
Attn: Art Moncayo
Tel: (626) 401-4095

For other deliveries: Same as above.

Coordination for each specific test, exact delivery location, and dates will be made through the Area/Resident Office.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Special Clause, "Commencement, Prosecution, and

Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

a. Contractor/subcontractor and their area of responsibility.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) (Project Schedule)is used, identify each phase of work performed each day by NAS activity number.

d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.

f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.

g. Offsite surveillance activities, including actions taken.

h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

i. Instructions given/received and conflicts in plans and/or specifications.

j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS

Sample forms enclosed at the end of this section.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, 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 such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

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SECTION 01572

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

10/01

the management of non-hazardous construction and demolition waste materials

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SECTION 01572

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT
10/01

PART 1 GENERAL REQUIREMENTS

1.1 GOVERNMENT POLICY

Government policy is to apply sound environmental principles in the design, construction and use of facilities. As part of the implementation of that policy the Contractor shall: (1) practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction and demolition waste from landfills and incinerators and to facilitate their recycling or reuse.

1.2 MANAGEMENT

The Contractor shall take a pro-active, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. Construction and demolition waste includes products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process but not incorporated into the work. In the management of waste consideration shall be given to the availability of viable markets, the condition of the material, the ability to provide the material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates. The Contractor shall be responsible for implementation of any special programs involving rebates or similar incentives related to recycling of waste. Revenues or other savings obtained for salvage, or recycling shall accrue to the Contractor. Firms and facilities used for recycling, reuse, and disposal shall be appropriately permitted for the intended use to the extent required by federal, state, and local regulations.

1.3 PLAN

A waste management plan shall be submitted within 15 days after contract award and prior to initiating any site preparation work. The plan shall include the following:

a. Name of individuals on the Contractor's staff responsible for waste prevention and management.

b. Actions that will be taken to reduce solid waste generation.

c. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas and equipment to be used for processing, sorting, and temporary storage of wastes.

d. Characterization, including estimated types and quantities, of the waste to be generated.

e. Name of landfill and/or incinerator to be used and the estimated costs for use, assuming that there would be no salvage or recycling on the project.

f. Identification of local and regional reuse programs, including non-profit organizations such as schools, local housing agencies, and organizations that accept used materials such as materials exchange networks and Habitat for Humanity.

g. List of specific waste materials that will be salvaged for resale, salvaged and reused, or recycled. Recycling facilities that will be used shall be identified.

h. Identification of materials that cannot be recycled/reused with an explanation or justification.

i. Anticipated net cost savings determined by subtracting Contractor program management costs and the cost of disposal from the revenue generated by sale of the materials and the incineration and/or landfill cost avoidance.

1.4 RECORDS

Records shall be maintained to document the quantity of waste generated; the quantity of waste diverted through sale, reuse, or recycling; and the quantity of waste disposed by landfill or incineration. The records shall be made available to the Contracting Officer during construction, and a copy of the records shall be delivered to the Contracting Officer upon completion of the construction.

1.5 COLLECTION

The necessary containers, bins and storage areas to facilitate effective waste management shall be provided and shall be clearly and appropriately identified. Recyclable materials shall be handled to prevent contamination of materials from incompatible products and materials and separated by one of the following methods:

1.5.1 Source Separated Method.

Waste products and materials that are recyclable shall be separated from trash and sorted into appropriately marked separate containers and then transported to the respective recycling facility for further processing.

1.5.2 Co-Mingled Method.

Waste products and recyclable materials shall be placed into a single container and then transported to a recycling facility where the recyclable materials are sorted and processed.

1.5.3 Other Methods.

Other methods proposed by the Contractor may be used when approved by the Contracting Officer.

1.6 DISPOSAL

Except as otherwise specified in other sections of the specifications, disposal shall be in accordance with the following:

1.6.1 Reuse.

First consideration shall be given to salvage for reuse since little or no re-processing is necessary for this method, and less pollution is created when items are reused in their original form. Sale or donation of waste suitable for reuse shall be considered. Salvaged materials, other than those specified in other sections to be salvaged and reinstalled, shall not be used in this project.

1.6.2 Recycle.

Waste materials not suitable for reuse, but having value as being recyclable, shall be made available for recycling whenever economically feasible.

1.6.3 Waste.

Materials with no practical use or economic benefit shall be disposed at a landfill or incinerator.

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SECTION 02000

MOBILIZATION AND DEMOBILIZATION
02/99

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1.1 MOBILIZATION AND DEMOBILIZATION

Mobilization and Demobilization shall include all of the Contractor's plant and equipment for performance of the dredging work. Installation of electrical service, weir/spillway system, resultant reconstruction of dikes, and other associated work will be part of mobilization and demobilization. Upon completion of the work, the Contractor's plant and equipment shall be removed from the site.

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SECTION 02020

DREDGING
04/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CORPS OF ENGINEERS (COE)

EM 1110-1-1003	(August 1996) Navstar Global Positioning System Survey
EM 1110-2-1003	(January 2002) Hydrographic Surveying

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Progress Surveys

SD-02 Shop Drawings

Dredge and Auxiliary Floating Plant Layout; G

Dredge and Disposal Plan; G

Wier/Spillway Plan; G

Special Procedures for Dredging Near Submarine Cable and Pipelines

Tide Gage Plan; G

SD-04 Samples

Sediment Samples

Representative Grab Samples

SD-05 Design Data

Dredge Sample Data Form

SD-06 Test Reports

Daily Report of Operations

SD-07 Certificates

Hydrographic Surveyor; G

1.3 REQUIRED WORK

In the area to be dredged, an approximate quantity of 8,000,000 cubic yards shall be removed and placed as indicated on the plans. Nothing in this paragraph shall be construed as prohibiting the removal of excepted material by special means at prices agreed upon and approved in accordance with the contract clause: Differing Site Conditions. The dredging area shall be dredged to the indicated depths below mean lower low water (MLLW). Debris and other unsuitable material shall become the property of the Contractor and shall be removed from the site, see paragraph 1.5.5 Trash and Debris.

1.4 AVOIDANCE OF EXISTING CONSTRUCTION

1.4.1 General

It shall be the Contractor's responsibility to avoid damage to this or any other improvement in accordance with the CONTRACT CLAUSE: PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS.

1.4.2 Existing Structures

The Contractor shall conduct dredging operations in this area in such a manner to prevent undermining or endangerment of the existing structures. Excessive or unnecessary dredging may result in an unstable condition at the toe of the structures. The Contractor will be required to strictly adhere to the indicated dredging template when working near any structures, and shall be responsible for repairing any damage which may result from failure to comply with the requirements of these specifications.

There are several areas where dredging is required outside the federal channel limit and within a berth. These areas are shown on the plans.

The Contractor shall maintain a minimum bank width of 50 feet, measured horizontally from the pierhead line toward the channel, at the wharf design depth shown in the table below. If less than the 50 foot bank width is experienced at anytime throughout the period of construction, the Contractor shall place rock as per the detail shown on the plans within 7 days, reference paragraph CONTRACTOR'S SURVEYS. The Contractor shall be required to have available 15,000 tons of quarry run at all times for this purpose.

Berth Design Depths

Berth	Wharf Design Depth (ft MLLW)	Berth	Wharf Design Depth (ft MLLW)
45-47	-51	169	-35
49-50	-51	171	-35
51-55	na	172-173	-35
56	na	174-176	-45
57-60	na	176(old)	-35
68	na	177	-35
71	-35	178	-35
72-73E	-25	178-179	-35
73W-X	na	179-180	na
73Y-Z	na	181	na
74	-25	182	na
76	-25	187	na
78	-25	188	na
79	-25	189-191	-35
84	-25	192-194	-30
85	-30	195-198	-32
86	-20	199	-36
87-89	-35	200A South	na
90-92	-35	200A North	na
93A-B	na	200B	na
93C	na	200G-H	na
94	-25	200Z	na
95-96	-20	206	-45
100	-53	207-209	-40
103-109	na	210	-35
118-119	-35	211	-35
120	-32	212-215	-45
122-125	-45	216-217	-45
126-131	-35	218	-45
132	na	219-221	-45
133-135	na	222-225	-35
136(new)	-45	226-229	-45
136-139	-45	229(old)	-45
142	-35	230	-45
143	-35	231-233	-45
144	-53	234-235	-38
145-146	-45	236	-45
147	-35	238-239	-35
148-149	-35	240B	na
150	-33	240C	na
151	-35	240Z	na
153-154	-35	256	na
155	na	257	na
161A	na	259	na
161B	na	260	na
161C	na	261-264	na
161D	na	265-267	na
162	na	267A	na
163-164	na	301	-72

Berth Design Depths

165-166	na	302-305	-50
167-168	-35	401-403	-55

1.4.3 Outfall

An ocean outfall is located as shown on the plans adjacent to the Pier 400 Submerged Storage Site. The Contractor shall verify the location and alignment of the outfall prior to commencing fill operations. It shall be the Contractor's responsibility to avoid damage to the outfall.

The Contractor shall conduct rock placement and fill operations in this area in such a manner as to prevent damage to the outfall, and shall insure that all construction is offset a minimum of 500 feet from outfall.

1.4.4 Pipelines and Utilities

The Contractor shall protect in place all utilities and pipelines until such time for their removal. The Contractor shall refer to the plans and to Section 02225 Utility Removal for pipeline and utility removals.

1.5 CHARACTER OF MATERIALS

1.5.1 General

It is the Contractor's responsibility to evaluate and establish the consistency of the materials to be dredged. The Government and the Contracting Officer shall not at any stage be held responsible for any of the information provided and/or for the interpretation of the data provided. It is the Contractor's responsibility to satisfy himself to the nature of the work and the quality of the material to be dredged.

1.5.2 Geotechnical Investigations

Geotechnical Investigations have been undertaken, and the following reports are provided as .pdf files attached to this specification package. The Contractor can use these reports to establish the quality of materials expected to be present at the project site. The Contractor shall satisfy himself if the investigations are sufficient for him to determine the nature of the work and the quality of the material to be dredged. If he finds that the investigations are not sufficient for him to determine the nature of the work and the quality of the material to be dredged he can undertake his own investigations before submission of his bid at his own cost.

Filename	Report Title	Date	By
FW97a.pdf	Geotechnical Study Report DWP Reclaimed Water Pipeline Port of Los Angeles	June 1997	Fugro West, Inc.
FW97b.pdf	Geotechnical Investigation Results DPW Fries Avenue Force Main Relocation Port of Los Angeles	June 1997	Fugro West, Inc.
FW97c.pdf	Geotechnical Evaluation Main Channel Deepening Program Port of Los Angeles (Volume 1)	August 1997	Fugro West, Inc.
FW97d.pdf	Geotechnical Evaluation Main Channel Deepening Program Port of Los Angeles (Volume 2)	August 1997	Fugro West, Inc.
FW01a.pdf	Final Geotechnical Investigation Results DWP San Pedro Force Main Crossing Relocation Port of Los Angeles	February 2001	Fugro West,Inc.
FW01b.pdf	Final Geotechnical Investigation Results DWP Siphon Force Main Crossing Relocation Port of Los Angeles	February 2001	Fugro West, Inc.
FW01c.pdf	Geotechnical Investigation Results West Basin and Southwest Slip Port of Los Angeles	May 2001	Fugro West, Inc.
FW01d.pdf	Geotechnical Investigation Results Main Channel Deepening Program Port of Los Angeles	May 2001	Fugro West, Inc.
FW01e.pdf	Report of Subbottom Profiling and Side Scan Sonar Survey Port of Los Angeles Main Channel Deepening Project Phase 1 Field Surveys	August 2001	Fugro West, Inc.
KL02a.pdf	Summary Report Review of Chemical And Biological Data on Sediments for the Channel Deepening Project, Port of Los Angeles	January 2002	Kinnetic Laboratories/ Toxscan, Inc
FW02a.pdf	Subsurface Conditions Underlying Pier 400 Phase 2	February 2002	Fugro West, Inc.

Filename	Report Title	Date	By
	Terminal Surcharges Port of Los Angeles, California		
FW02b.pdf	Final Geotechnical Study Report Channel Deepening Project Port of Los Angeles, CA	April 2002	Fugro West, Inc.
KL02b.pdf	Project Memorandum Dredging of Contaminated Sediments in the Southwest Slip	April 2002	Kinnetic Laboratories, Inc.

1.5.3 Soils

Typical soils to be dredged include, but are not limited to sands, silts, and clays. Unified Soil Classification System classifications include SP-SM, SM, CL, CH, ML, MH. Other types of soils will also be encountered.

1.5.4 Bedrock

At least two types of bedrock formation material will be encountered during this project.

The Timms Point Silt consists of fine-grained sediments but locally includes layers of medium to coarse grained, angular to sub angular, slightly to moderately cemented, quartz sand. Occasional cobble-sized fragments of this material have been recovered. This material is described as heavily overconsolidated, very stiff to hard soil, or in geologic terms, a soft to moderately hard, slightly to moderately cemented bedrock.

The Malaga Mudstone consists primarily of low to high plasticity silt and some high plasticity clay, described in engineering terms, as a soft to moderately hard, slightly to moderately cemented bedrock. Throughout the Malaga Mudstone however, there are occasional very hard, more cemented layers of rock and concretions of limestone of limited thickness (up to 5 feet) and of variable length and width (as long and as wide as 9 feet), which occur at random throughout the area. Prior dredging operations have encountered these cemented layers of rock and concretions in the reach between Reservation Point and the SP Slip. Further geologic studies indicate that these materials extend seaward past Reservation Point for a distance of at least 1,600 to 1,800 feet in a direction parallel to Pier 400 and towards the San Pedro Breakwater. The Malaga Mudstone will also be encountered in the area close to and seawards of the Los Angeles Pilot Station in the non-Federal Channel. These same materials will be encountered again while dredging this time to the required project depth in the area described above. To date all of the bedrock encountered in the Outer Harbor, including the concretions of the Malaga Mudstone, have been able to be dredged with a hydraulic cutterhead dredge. No blasting has been required.

In the Malaga Mudstone, recent experience from the Pier 400 Project suggests that it has been common dredging practice to overexcavate and bury

the rock inclusions below the project dredge depth. Thus future dredging may encounter a non-typical large quantity of rock inclusions at the top exposure of the Malaga Mudstone. Reports of past geologic exploration in this area are available for inspection at the Geotechnical Branch of the U. S. Army Engineer District, Los Angeles, 911 Wilshire Boulevard, Los Angeles 90017.

Test results of laboratory tests undertaken on a number of samples ranged from undrained shear strengths of about 2 to 5 ksf (14 to 35 psi). Test results of laboratory tests undertaken on a number of samples ranged from Uniaxial compressive strength for the limestone rock-like layers in the Malaga Mudstone for about 1,150 to 6,800 psi.

1.5.5 Occurrences of Non-Native Stone

Non-Native Stone may be encountered. Typically, Non-Native Stone is a result of past construction activity. Sizes can range upward from cobbles and small boulders to larger stone would generally be encountered on or near the surface.

1.5.6 Trash and Debris

Trash, debris, and other miscellaneous man made and natural objects should be expected during the course of dredging. This material may be encountered at any location but is expected to be primarily limited to the surface and near surface areas. Material to be expected may include, but is not limited to probable wrecks, tires, cables, chains, anchors, sheet metal, plastics, lumber, tree branches and unidentified objects.

A debris survey which consisted of a side scan sonar survey was performed of the entire channel. Sonar targets and areas of scattered debris are shown on the plans. They are individually numbered, areas of scattered debris is also identified on the plans and a description and additional information is included in the Report of Subbottom Profiling and Side Scan Sonar Survey, Port of Los Angeles, Main Channel Deepening Project, Phase 1 Field Surveys, prepared for the United States Army Corps of Engineers by Fugro West, Inc.

1.5.7 Contaminated Material

Contaminated Material is defined as material unsuitable for open water disposal. For a description of the contamination levels in this dredge material, refer to Kinnetic Laboratories/ToxScan reports titled "Summary Report, Review of Chemical and Biological Data on Sediments for the Channel Deepening Project" dated January 2002 and memorandum titled "Dredging of Contaminated Sediments in the Southwest Slip" dated April 2002, both included as .pdf files attached to this specification package. It is Contractor's responsibility to assess if he requires specialized equipment, protective clothing, etc. in addition to the requirements listed in the specifications for handling contaminated dredge materials.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 DREDGE AND DISPOSAL PLAN

The Contractor shall submit three (3) copies of the Dredge and Disposal Plan to the Contracting Officer ten (10) days after Notice to Proceed, for approval. The plan shall detail the order and dates for completion and/or removal of each dredge element, disposal area, surcharge area, Pier 400 surcharge, and the plan shall include the following:

1. Indicate the proposed methods, equipment and schedule to dredge, transport and dispose of each dredge element at each disposal area.

2. Indicate the proposed methods, equipment and schedule to transport, deliver and place rock at each disposal site.

3. Indicate the proposed methods, equipment and schedule for removal, transport and disposal of debris for the dredge and fill areas.

4. Indicate the proposed methods, equipment and schedule for placement, removal and transport of surcharge to and from the disposal areas.

5. Indicate the proposed methods, equipment and schedule for removal, transport and placement of surcharge from Pier 400.

6. Indicate the proposed methods, equipment and schedule for grading of subgrade, removal of unsuitable material and replacement with coarse grain material from Pier 400.

7. Special procedures for dredging near submarine cables and pipelines.

8. Layout of pipelines in the dredge area.

3.2 DISPOSAL OF DREDGED MATERIAL

3.2.1 General

The material excavated shall be transported and placed in accordance with lines and grades shown on plans. Disposal areas shown on plans consist of:

- The Southwest Slip Areas 1 and 2
- Pier 300 Expansion
- Cabrillo Shallow Water Habitat Expansion (CSWHE)
- Pier 400 Submerged Storage Site
- Eel Grass Restoration Area

Except as otherwise authorized by the Contracting Officer in writing, no placement shall be done unless an inspector appointed by the Contracting Officer is present at the time.

Dredged material shall be transported and deposited within the fill limits of the areas indicated and as specified herein. Any dredged material that is deposited other than in the areas indicated on the plans, or approved by

the Contracting Officer, will not be included in the measurement for payment and the Contractor may be required to remove such misplaced material and deposit it where directed by the Contracting Officer at Contractor's own expense.

3.2.2 Placement Behind Dikes

Discharge of material by pipeline and discharge barge shall be sequenced to be placed as shown on the Drawings. Sequence shall be such that initial disposal shall be at the dike face and any mounding which takes place will be such that discharged material will flow away from the dike face. The coarse-grain material which is placed in the Pier 400 Submerged Storage Site shall be placed from east to west.

3.2.3 Misplaced Material

Any material that escapes or is lost at any time while dredging, loading, transporting, or which is deposited other than in an area designated on plans, or change approved in writing by the Contracting Officer, shall be redredged, and material shall be redeposited where directed by the Contracting Officer, at the Contractor's expense.

3.2.4 Hydraulic Dredge Discharge

For hydraulic dredging operation placing material directly into any submerged disposal site, a manned discharge barge with positioning capability is required to provide control of discharge location. Barge will be capable of being maneuvered to any location in the discharge area. Barge will contain a vertical variable depth discharge pipeline capable of reaching the maximum depth of discharge site. Vertical variable depth discharge pipe will be capable of reducing velocity of discharged material by 80 percent compared to that in the discharge line leaving the dredge.

When placing coarse-grained materials over soft materials, a discharge method arrangement shall be used to prevent the displacement of soft materials.

3.2.5 Weir/Spillway

The Contractor shall furnish, install and maintain the appropriate size and number of weir/spillways, (i.e., outlet structure, discharge, weir) required to return the dredge water from the fill area to the harbor. For all disposal sites, Contractor shall submit the Wier/Spillway Plan showing the design and plans of spillways for Contracting Officer's approval. This shall include bunds, stilling basins, discharge procedures, permit limits and how acceptable limits are obtained, etc. Discharge from spillways shall be submerged at -3.0 feet MLLW or below. Spillways must be in place and functioning when the overall level of any fill area rises above an elevation of -5.0 feet MLLW. Spillways must conform to requirements of Section 01355 ENVIRONMENTAL PROTECTION and the requirements of the Work.

Spillway from Pier 300 Expansion shall discharge to the south.

3.3 GENERAL DREDGING PROCEDURE

3.3.1 Purpose

Overall purpose of dredging is to deepen the length of the channel as required for navigation and to provide dredged material for construction an engineered landfill and submerged environmental mitigation areas.

3.3.2 Sequence of Work

Where applicable, restrictions on sequence of dredging are described for elements of dredging work, described below.

3.3.3 Restrictions

To achieve engineering and environmental purposes of several fills, restrictions on types of dredging equipment to be used on certain dredging elements have been imposed and are described, where applicable, by dredge element.

3.3.4 Description of Dredge Elements

Elements of dredging work are described in paragraph 3.8 Dredge Elements. Placement of each dredge element is described in paragraphs titled "Dredge Material Placement" and shown on the plans. Where specific elements must be preceded by other elements, it is noted under "Sequence of Work", in each description of dredge element as specified. Dredge elements represent a specific volume of material to be removed within a defined geometric prism as shown on the plans. Variations in kinds of material encountered within each element are possible, reference paragraph 1.5 CHARACTER OF MATERIALS.

3.3.5 Tolerances

Dredging shall be carried to lines, depths, and tolerances as indicated on plans and as directed by Contracting Officer. Contracting Officer may change the lines and depths shown in plans. If such changes increase or decrease quantity of dredging, such revised quantities will be used as basis for payment under unit price for dredging element involved.

Dredging work carried out beyond the maximum dredging tolerance given shall be considered excessive dredging and, if required by the Contracting Officer, the Contractor shall, at his own expense, be responsible for back filling these areas to elevations and with materials specified by the Contracting Officer.

3.3.6 Special Procedures

The Contractor shall develop and submit to the Contracting Officer detailed work methods and Special Procedures for Dredging Near Submarine Cable and Pipelines. The Contracting Officer's review of these work methods and procedures does not waive Contractor's liability for damages to these utilities and all required repairs will be at the Contractor's expense.

3.3.7 Discharge Pipelines

The channels to be dredged are major ship lanes serving the Port and cannot, under any circumstances, be blocked by floating dredge discharge pipes. All discharge pipelines proposed for use by Contractor which would cross, block or impede navigation, or create a hazard shall be trenched and installed in channel bottom below the currently maintained depth. Contractor shall include all costs of submerged pipelines in the contract unit prices for dredging and no additional compensation for this work will be allowed. Contractor shall be responsible for obtaining all permits and approvals for constructing submerged pipelines and shall bear all of risk and costs for maintenance and potential damage to pipeline. Contractor shall remove the discharge pipelines before the end of contract.

3.4 DISPOSAL OF DREDGED MATERIAL

3.4.1 Electronic Positioning System

The Contractor shall obtain, operate, and maintain a short range ElectronicPositioning System (EPS) or Differential Global Positioning System (DGPS) for disposal operations. This EPS or DGPS shall be established, operated, and maintained by the Contractor when disposal is actively underway. The EPS or DGPS shall be capable of displaying and recording the disposal vessel's location in the State Plane Coordinate System based on the California Lambert Conformal Projection System for Zone 5 as appropriate (SPCS 83 Feet) at 30 second time intervals while traveling to or from the disposal site.

3.4.2 EPS/DGPS Configuration

The EPS or DGPS shall be similar, or equal, in design, performance, accuracy, operation characteristics, and frequency to equipment specified in the following technical materials:

USACE EM 1110-1-1003 Navstar Global Positioning System Surveying and
USACE EM 1110-2-1003 Hydrographic Surveying

Information on the above mentioned manuals may be obtained from: U.S. Army Corps of Engineers, Los Angeles District. It is emphasized that Differential GPS positioning techniques shall be used for GPS surveying and further emphasized that an EPS system with a low and medium frequency (long-range navigation system) will not comply with the above specifications. The complete system shall be subject to the approval of the Contracting Officer. The Contractor shall provide access for the Contracting Officer to the EPS or DGPS equipment as part of the Government's quality assurance responsibility.

3.4.3 Shore-Based Control

The Contractor shall establish horizontal control necessary to locate active and/or passive short range EPS or DGPS transmitter/receiver devices. Survey control shall meet third order, class I, accuracy standards in accordance with USACE EM 1110-2-1003 "Hydrographic Surveying".

The Contractor shall obtain all necessary permits, rights-of-entry, or

leases required for operating and maintaining shore-based electronic equipment on public/private property. The actual number of shore-based control points shall be determined by the Contractor and shall be determined by the operating characteristics of the approved system (i.e., circular, hyperbolic, elliptical, etc., for EPS or Differential GPS). As a minimum, the EPS shall provide at least three redundant lines-of-position from the shore-based network, and for DGPS, ranges from 4(minimum) or more satellites will be needed for 3-dimensional positioning. The shore-based control points shall be located such that the generated lines-of-position shall intersect at the final vessel location at not less than 40 degrees.

3.4.4 Disposal Vessel Location

Except as specified hereinafter, electronic positioning data shall be received, displayed, and recorded on board the disposal vessel. Positional data may be received, displayed, and recorded on a towing or other adjacent vessel provided the eccentric distance between the vessels is less than 100 feet and that the eccentric distance and bearings remain essentially constant for each successive disposal operation. Eccentric distance measurements shall be computed by means of an electronic data transmitter/telemetry system. Gyro-radar distance/bearing measurements will not be permitted for eccentric distance measurements. Eccentric coordinates, if any, shall be clearly identified and computed on the hard copy positional record required under paragraph: Electronic Positioning System.

The EPS or DGPS shall be activated continuously at least 1 mile from the disposal site when transiting, and shall not be deactivated until at least 1 mile from the site on the return trip. Positional data shall be annotated for the time when actual dumping begins and ends. A record of each dump's positional data, automatically correlated with time, and annotated with date and eccentric distance measurement, if any, shall be submitted to the Contracting Officer as a part of the Daily Report of Operations. The hard copy shall plot the continuous course of each disposal trip once inside the disposal site. The plot shall show: the continuous course of the disposal vehicle, the center point and boundary of the site, and the time and position of the disposal vehicle when disposal commenced and ceased. The Contractor shall provide the Contracting Officer at the completion of dredging operations on an electronic media (IBM compatible, ASCII format) in delimited files of dump number, date, time, disposal area, easting and northing of dump, depth of water in which dump is made (meters), quantity of dump (cubic yards), cumulative quantity, and area from which the load was dredged (station number).

Dump # / Date / Time / Disposal Area / Easting / Northing / Depth / Quantity / Quantity (cumulative) / Location (Station)

3.4.5 Calibration

EPS calibration techniques shall conform to standard hydrographic surveying practice in accordance with Chapter 6 of USACE EM 1110-2-1003, "Hydrographic Surveying". The Contractor shall be responsible for maintaining effective, accurate, and reliable EPS calibration, including periodic survey checks throughout the duration of the contract.

Calibration records shall be submitted as part of the daily Quality Control records. Degradation in offshore positional accuracy during the course of this contract may cause a suspension of disposal operations.

3.4.6 Backup Equipment

The Contractor shall provide and maintain the following backup equipment:

For EPS System:
- One shore control transmitter/receiving device.
- One line printer and/or plotter.
- One offshore guidance controller.
- One power supply.
- Spare parts kit for the receiver.

For GPS System:
- One Complete Differential GPS (DGPS) equipment and accessories.

In the event of a failure of the EPS or DGPS, the Contractor shall immediately notify the Contracting Officer.

3.5 ADDITIONAL MONITORING

3.5.1 Hopper and Hydraulic Dredges

The Contractor shall provide:

a. Continuous records of measurement of bulk density and mass flow rate with time, and location - cutterhead/draghead coordinates (horizontal and vertical). Data shall be recorded electronically and shall be made available in time increments as designated by the Contracting Officer and in either printed record or electronic format as designated by the Contracting Officer.

b. Records of continuous loading of hoppers, barges, or scows based on hull displacement (load charts).

These records shall be submitted to the Contracting Officer with the Daily Report of Operations.

3.5.2 Barges and Scows

The Contractor shall provide a record of the measurements of the draft of the hull and freeboard of bins of each barge or scow when empty, before each trip to the disposal sites, and five (5) minutes prior to disposal at the fill site. Measurement for displacement shall be taken at each corner, on the outside of the barge or scow. The two sets of draft measurements shall be compared to determine the amount, if any, of dredged material or water lost during transit to the fill site. Any barge or scow vessel that leaks shall not be used for disposal operations. These records shall be submitted to the Contracting Officer with the Daily Report of Operations.

3.6 OVERDEPTH AND SIDE SLOPES

3.6.1 Overdepth

To cover inaccuracies of the dredging process, a allowable overdepth or tolerance is indicated on contract plans. Material dredged from below the allowable overdepth will not be estimated and will not be included in the measurement of work.

3.6.2 Side Slopes

Material actually removed within limits approved by the Contracting Officer, shall provide for final side slopes not flatter than those indicated on the plans and will be estimated and paid for. The Contractor shall not dredge outside the pay slope defined on the plans. In computing the limiting amount of side slope dredging, net dimension without allowance for overdepth will be used. Side slopes are given for pay purposes only and are not necessarily the angle of repose of the soil. Sloughing side slopes shall not be the basis for claims against the Government. End slopes, where indicated on the plans shall be treated in the same manner as side slopes.

Dredge elements D211, D212, D213 and D214 are designed to prepare the foundation for the quarry run dikes. The quantity and cost of additional quarry run material required for backfill due to excessive dredging outside the dredge prism defined on the plan will be computed and deducted from the actual quantity of quarry run material placed, in accordance with Section 02600, STONE WORK, paragraph 3.5 SURVEYS.

3.6.3 Excessive Dredging

Material taken from beyond the limits as extended in the provisions above will be deducted from the total amount dredged as excessive overdepth dredging, or excessive side-slope dredging for which payment will not be made. Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with paragraph 3.13 SHOALING.

3.7 EQUIPMENT

3.7.1 General

The Contractor shall, at all times during the progress of the works, provide, operate and maintain in proper working conditions the necessary dredges and plant, barges, tugs and other floating craft and boats, surveying equipment and sounding equipment necessary for the execution and completion of the works. The capacity of the dredging plant shall be such as to allow completion of the dredging works within the programmed period with reasonable margins for downtime due to breakdowns, bad weather and interruptions arising from plant movements. The Contractor shall submit three (3) copies of the Dredge and Auxiliary Floating Plant Layout describing the plan layout of the dredge and major auxiliary floating plants, and dredge cut plan to the Contracting Officer for approval at the preconstruction conference. The plan shall include locations of engines and fuel storage, engine types, power ratings, electrical rooms, transformer rooms, emergency generating equipment, and vertical and horizontal access. The plan shall be furnished to the local police, Port

Police, U.S. Coast Guard and local fire departments by the Contractor.

3.7.2 Size

Contractor's equipment shall be of sufficient size and quantity to meet productivity requirements of Work, and shall be kept in good working order to efficiently perform Work.

3.7.3 Pipelines

All pipelines shall be kept in good condition at all times, and any leaks or breaks along their length shall be promptly and properly repaired.

3.7.4 Floating Attendant Plant

All floating equipment shall be kept in good condition.

3.7.5 Electric Dredge

Contractor shall make all arrangements and pay all costs associated with installing electrical service for operating electric dredges. Refer to Section 02000, MOBILIZATION AND DEMOBILIZATION.

3.7.6 Diesel Powered Dredge and Equipment

Contractor shall make all arrangements and pay all costs associated with meeting applicable regulations and permit requirements of authorities including Southern California Air Quality Management District and City of Los Angeles. Refer to Section 01355 ENVIRONMENTAL PROTECTION.

3.7.7 Positioning System

Contractor shall install and maintain a positioning system with capability of providing horizontal and vertical control for dredging and surveying operations. Survey system shall be compatible with system employed by Contracting Officer. See Section 01200, GENERAL REQUIREMENTS.

3.7.8 Display System

Contractor shall install and maintain a sensor and related instrumentation to measure and display depth of suction mouth or bucket on dredge(s)to be used for excavation work. A display system capable of displaying to operator in real time the cross-section on which dredge is working, including original ground line, design depth, and position of suction mouth or bucket, shall be installed and maintained.

3.7.9 Silt Curtains and/or Other Devices

The Contractor may be required to use silt curtains settlement basins or other devices or construction methods to maintain compliance with regulatory requirements per the permit conditions for dredging, fill, and rock placement activities. Reference Section 01355 ENVIRONMENTAL PROTECTION

3.7.10 Clamshell Bucket

The Contractor shall use a clamshell bucket per the permit conditions.

3.8 DREDGE ELEMENTS

3.8.1 Dredge Element D201

3.8.1.1 Purpose

Excavate harbor bottom sediments unsuitable for open water disposal that overlay Malaga Mudstone formation material and dispose of this material in the Southwest Slip Disposal Site Area 1.

3.8.1.2 Depth and Extent of Dredging

To stations, lines, and grade as shown on plans. Depth and location of contaminated harbor bottom sediments shown on the plans are based on subbottom profiling performed in July and August of 2001. The depth and location of the harbor bottom sediment at the time of dredging may vary. Contractor shall be required to remove all harbor bottom sediment within the defined area of Dredge Element D201.

Grade shall be to the top surface of the Malaga Mudstone and Timm's Point Silt and Coarse Grain material(D202).

3.8.1.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the Southwest Slip Disposal Site Area 1 on top of dredge elements D211, D212 and D213.

3.8.1.4 Sequence of Work

Material shall be placed in disposal site after D211, D212 and D213 materials. The material shall be placed in the disposal site before D205 material.

3.8.1.5 Restrictions

Excavation shall be performed by mechanical dredge utilizing a light material rehandling bucket and placement of material by bottom-dump barges. The surrounding seabed and sand berms shall be at a higher elevation than the placement level.

3.8.2 Dredge Element D202

3.8.2.1 Purpose

Excavate Malaga Mudstone and Timms Point Silt that is overlain with Harbor Bottom Sediments and dispose of this material in the Cabrillo Shallow Water Habitat Expansion (CSWHE) and Pier 400 Submerged Material Disposal Site.

3.8.2.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.2.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the CSWHE fill and Pier 400 Submerged Storage Site fill. Placement in the Pier 400 Submerged Storage Site shall be West to East.

3.8.2.4 Sequence of Work

The material shall be placed in the CSWHE and Pier 400 Submerged Storage Site, before the surface cover layer and after the placement of the rock dikes to the levels and sequence shown on the plans.

3.8.2.5 Restrictions

Excavation may be performed by mechanical dredge or cutter suction dredge. Transportation and placement of material will be by barges or pipeline, depending on dredge method selected. If transportation and placement is by pipeline, discharge shall be from a controlled discharge barge. See Paragraph 3.2.4 Hydraulic Dredge Discharge.

3.8.3 Dredge Elements D203, D206, D208 and D209

3.8.3.1 Purpose

Excavate predominately coarse grained material that may include interlayered and fine grained deposits and is overlain by harbor bottom sediment. Material shall be placed in the Southwest Slip Area 1, Southwest Slip Area 2, CSWHE and may be placed in the Pier 300 Expansion.

3.8.3.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.3.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed, to the limits shown on the plans, in the: Southwest Slip Area 1 sand berm and surface cover layer and may be placed as surcharge; Southwest Slip Area 2 sandberm, fill, surface cover layer and surcharge; CSWHE surface cover layer; and may be placed as the Pier 300 Expansion sand berm.

3.8.3.4 Sequence of Work

The material shall be placed in the Southwest Slip disposal sites after the placement of the rock dikes and other materials as shown on the plans. The material shall be placed in the CSWHE after the placement of the containment dikes and the Dredge Element D202. The material may be placed in Pier 300 Expansion Site after placement of the containment dikes and after placement of dredge element D214.

3.8.3.5 Restrictions

Excavation may be performed by mechanical dredge or cutter suction dredge. Transportation and placement of material will be by barges or pipeline, depending on dredge method selected. If transportation and placement is by pipeline, discharge shall be from a controlled discharge barge for submerged placement, by "rainbow" diffuser or equivalent when needed to prevent mudwaves, and shore pipe for upland placement. See Paragraph 3.2.4 Hydraulic Dredge Discharge.

Deposition of the solids out of the flow will be induced by dispersing the flow over the greatest possible area. Where it is necessary to disturb any of the hydraulic placed fill in order to achieve the required shape and profile of the disposal area, the Contractor shall employ caterpillar tracked plant and shall ensure that the material being reworked does not dry out to moisture content of less than 10%, re-sluicing it if necessary. In addition the Contractor shall route his plant over any material so disturbed in order to achieve compaction of this material to the satisfaction of the Contracting Officer.

3.8.4 Dredge Element D204

3.8.4.1 Purpose

Excavate predominately fine grained material that may include interlayered and some coarse grained deposits and is overlain by harbor bottom sediment. Material shall be placed in the Southwest Slip Area 1 and/or Pier 300 Expansion and/or the Eel Grass Restoration Area.

3.8.4.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.4.3 Dredge Material Placement

The placement of this material shall be as shown on the plans. The material shall be placed, to the limits shown on the plans, in the: Southwest Slip Area 1 fill; and/or Pier 300 Expansion fill; and/or the Eel Grass Restoration Area fill.

3.8.4.4 Sequence of Work

The material shall be placed in the Southwest Slip Area 1 disposal sites after the placement of the sand berm to the lines and grades shown on the plans and after placement of D205 material. The material shall be placed in Pier 300 Expansion after the placement of the sand berm to the lines and grades shown on the plans and after placement D214 material. The material shall be placed in the Eel Grass Restoration site after placement of containment dike.

3.8.4.5 Restrictions

Excavation may be performed by mechanical dredge or cutter suction dredge. Transportation and placement of material will be by barges or pipeline, depending on dredge method selected. If transportation and placement is by

pipeline, discharge shall be from a controlled discharge barge, "rainbow" diffuser or shore pipeline, as appropriate. See Paragraph 3.2.4 Hydraulic Dredge Discharge.

3.8.5 Dredge Element D205

3.8.5.1 Purpose

Excavate contaminated interlayered and some contaminated coarse grained material that is overlain by harbor bottom sediment. Material shall be placed in the Southwest Slip Area 1.

3.8.5.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.5.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the Southwest Slip Area 1 disposal site on top of dredge elements D212, D213, D211 and D201 to the limits shown on the plans.

3.8.5.4 Sequence of Work

The material shall be placed in the Southwest Slip Area 1 disposal site after the placement of the containment dikes and sand berms and dredge elements D213, D212, D211 and D201 to the lines and grades shown on the plans.

3.8.5.5 Restrictions

Excavation may be performed by mechanical dredge or cutter suction dredge per the permit conditions. Transportation and placement of material will be by barges or pipeline, depending on dredge method selected. If transportation and placement is by pipeline, discharge shall be from a controlled discharge barge, or shore pipeline, as appropriate. See Paragraph 3.2.4 Hydraulic Dredge Discharge. The surrounding seabed and sand berms shall be at a higher elevation than the placement level.

3.8.6 Dredge Element D207

3.8.6.1 Purpose

Excavate predominately fine grained material and some interlayered deposits that are overlain with harbor bottom sediment. The material shall be placed in the Southwest Slip Area 1 and/or Pier 300 Expansion and/or Pier 400 Submerged Storage Site.

3.8.6.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.6.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the Southwest Slip Area 1 fill, and/or the Pier 300 Expansion fill and/or Pier 400 Submerged Storage Site fill to the limits shown on the plans.

3.8.6.4 Sequence of Work

The material shall be placed in the Southwest Slip Area 1 after the placement of dredge element D205 material, in Pier 300 Expansion after placement of the sand berm to the lines and grades shown in the plans and after placement of D214 material, and to Pier 400 Submerged Storage Site after placement of D202 material.

3.8.6.5 Restrictions

Excavation may be performed by mechanical dredge or cutter suction dredge. Transportation and placement of material will be by barges or pipeline, depending on dredge method selected. If transportation and placement is by pipeline, discharge shall be from a controlled discharge barge, "rainbow" diffuser or shore pipeline, as appropriate. See Paragraph 3.2.4 Hydraulic Dredge Discharge.

3.8.7 Dredge Element D210

3.8.7.1 Purpose

Excavate predominately fine grained material, that may include interlayered and some coarse grained material, and is overlain by harbor bottom sediment. Material shall be placed in Pier 300 Expansion and/or the Pier 400 Submerged Storage Site and/or Eelgrass Restoration Area.

3.8.7.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.7.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in Pier 300 Expansion fill and/or the Pier 400 Submerged Storage Site and/or Eelgrass Restoration Area fill to the limits shown on the plans.

3.8.7.4 Sequence of Work

The material placed in Pier 300 Expansion shall be placed after the containment dike and sand berm are in place and after placement of D214 material. The material placed in the Pier 400 Submerged Storage Site shall be placed after the placement of dredge element D202. The material shall be placed in the Eel Grass Restoration site after placement of containment dike.

3.8.7.5 Restrictions

Excavation may be performed by mechanical dredge or cutter suction dredge.

Transportation and placement of material will be by barges or pipeline, depending on dredge method selected. If transportation and placement is by pipeline, discharge shall be from a controlled discharge barge, "rainbow" diffuser or shore pipeline, as appropriate. See Paragraph 3.2.4 Hydraulic Dredge Discharge.

3.8.8 Dredge Element D211

3.8.8.1 Purpose

Excavate contaminated fine grained material for the key of the rock dike for the Southwest Slip Area 3 disposal site. Material shall be placed in the Southwest Slip Area 1.

3.8.8.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.8.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the bottom of the Southwest Slip Area 1 disposal site to the limits shown on the plans.

3.8.8.4 Sequence of Work

The material shall be placed before dredge elements D201 and D205, and shall be placed before, concurrent with or after dredge elements D212 and D213 in the Southwest Slip Area 1 to the lines and grades shown on the plans.

3.8.8.5 Restrictions

Excavation shall be performed by mechanical dredge and placement of material by barges. The surrounding seabed and sand berms shall be at a higher elevation than the placement level.

3.8.9 Dredge Element D212

3.8.9.1 Purpose

Excavate contaminated fine grained material for the key of the rock dike for the Southwest Slip Area 1, a portion of the rock dike for the Southwest Slip Area 2, the Southwest Slip basin dredging and dredging adjacent to the existing LACFCD. Material shall be placed in the Southwest Slip Area 1.

3.8.9.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.9.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the bottom of the Southwest Slip Area 1 to the limits

shown on the plans.

3.8.9.4 Sequence of Work

The material shall be placed before dredge elements D201 and D205, and shall be placed before, concurrent with or after dredge elements D211 and D213 in the Southwest Slip Area 1 to the lines and grades shown on the plans.

3.8.9.5 Restrictions

Excavation shall be performed by mechanical dredge and placement of material by barges or side casting. The surrounding seabed and sand berms shall be at a higher elevation than the placement level. Contractor shall provide for worker safety in handling these materials, reference Kinnetics Laboratories/ToxScan report memorandum dated April 2002.

3.8.10 Dredge Element D213

3.8.10.1 Purpose

Excavate contaminated material at the LACFCD. Material shall be placed in the Southwest Slip Area 1.

3.8.10.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.10.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the bottom of the Southwest Slip Area 1 to the limits shown on the plans.

3.8.10.4 Sequence of Work

The material shall be placed to the lines and grades shown on the plans before dredge elements D201 and D205, and shall be placed before, concurrent with or after dredge elements D211 and D212.

3.8.10.5 Restrictions

Excavation shall be performed by mechanical dredge and placement of material by barges or side casting. The surrounding seabed and sand berms shall be at a higher elevation than the placement level. Contractor shall provide for worker safety in handling these materials, reference Kinnetics Laboratories/ToxScan report memorandum dated April 2002.

3.8.11 Dredge Element D214

3.8.11.1 Purpose

Excavate interlayered deposits along the northern and eastern dike face portion of the dredge element. Excavate coarse-grained material that may

include interlayered deposits along the southern dike face portion of the dredge element. Dispose of the material from D214 in the Pier 300 expansion disposal site.

3.8.11.2 Depth and Extent of Dredging

To stations, lines, and grades shown on plans.

3.8.11.3 Dredge Material Placement

The placement of this material is as shown on the plans. The material shall be placed in the bottom of the Pier 300 Expansion fill.

3.8.11.4 Sequence of Work

The material shall be placed in the Pier 300 Expansion disposal site before any other dredge element.

3.8.11.5 Restrictions

Excavation shall be performed by mechanical dredge and placement of material by side casting or barges. No work shall commence on Pier 300 Expansion (including D214) until 2 months after completion of Eelgrass Restoration Site.

3.8.11.6 Dredge and Disposal Summary

The Dredge and Disposal Summary, Table 1, is included at the end of this specification section. The table is a supplement to the specifications presented above.

3.9 DREDGING OF CONTAMINATED MATERIAL

The Contractor shall avoid causing contaminated material to slough into adjacent areas and being dredged with uncontaminated material.

3.10 SAMPLING OF MATERIAL

The Contractor shall obtain representative Sediment Samples at the pipeline discharge point as material is being discharged, or in the case of a hopper dredge or scow, as material is placed into the hopper or scow.

Contractor shall obtain as a minimum three (3) samples per dredge element, and as a minimum three (3) samples per 100,000 cy of dredge material per dredge element.

The samples shall be taken at evenly spaced intervals of material volume in each dredge area as the areas are dredged. Each sample (water extracted) shall not be less than one (1) liter and shall be obtained in clear plastic bottles. Immediately after collection the samples shall be delivered to the address specified herein below. The bottle lids shall be suitably secured to preclude opening or leaking during shipment. The sample number shall be placed on the lid using indelible ink. Sufficient cushioning

material shall be placed around the samples to prevent excessive movement and damage during shipment.

Address:

U.S. Army Corps of Engineers
ATTN: Baseyard Soils Laboratory
645 North Durfee Avenue
South El Monte, CA 91733-4399
Attn: Art Moncayo
Tel: (626) 401-4095

Contractor shall also collect a total number of thirty (30) Representative Grab Samples in the disposal areas from depths and locations as directed by the Contracting Officer. Each grab sample shall consist of a minimum of 20 lbs of material. The material shall be sealed in a clear durable double plastic bag. The grab samples shall be submitted to the Contracting Officer's Site Facility for further processing.

A Dredge Sample Data Form shall accompany each sample in a clear, sealed plastic bag and shall include the description of the dredge cut location by coordinates and stationing, dredge cut elevation, disposal location, date, time, sample number, and the name of the person who collected the sample. A copy of the sample form is provided at the end of this section. The Contractor shall notify the Contracting Officer's Representative 48 hours in advance of sample collection.

3.11 CONTRACTOR'S SURVEYS

3.11.1 Survey Data

Reference is made to SECTION 00800: SPECIAL CONTRACT REQUIREMENTS, QUANTITY SURVEYS, FAR 52.236-16, which requires payment based on Government surveys. Progress payments will be based upon Contractor's hydrographic surveys. The Contractor shall submit on a weekly basis dredging and fill placement Progress Surveys in ASCII format (x,y,z). The Contractor's survey shall provide full coverage of an entire area, as defined by the Dredge Elements or as defined by the Contracting Officer, for which progress payment is being submitted. The Contractor shall survey dredge side slopes on a daily basis for 5 days after excavation.

Contractor's hydrographic surveys shall be performed electronically (automated) and the data shall be provided and submitted to the Government on an electronic media (IBM compatible, ASCII format) in delimited files of easting, northing, and depth (x,y,z), where the depth is indicated as negative if recorded below MLLW. The first lines of the data file will list the information as follows:

* Project Name (Main Channel Deepening Project)
* Surveyor's Name
* Area Surveyed
* Date of Survey
* Vertical Datum
* Horizontal Datum

These first 6 lines will be preceded by an asterisk (*), which indicates a comment line.

A plot of soundings will accompany the x,y,z data and all data shall be collected and plotted in imperial units (feet and inches).

3.11.2 Sounding Data Standards

The Contractor's hydrographic surveys for progress payment shall meet or exceed the survey standards listed in EM 1110-2-1003 (Hydrographic Surveying) for Class I surveys. Surveys shall be in State Plane, NAD 83, California 5 - 0405, survey feet, and be performed by an independent hydrographic survey contractor with at least three (3) years of experience in hydrographic surveying of navigable channels and have either a current Land Surveyor's or a Professional Engineer's license, authorized to certify surveys in the State of California. The Hydrographic Surveyor firm selected by the Contractor must be approved by the Contracting Officer prior to performing surveys for this contract.

3.11.3 Positioning System

It is required that hydrographic surveys shall be conducted using an Automated Range-Azimuth Positioning System or Differential Global Positioning System (DGPS) with positional accuracy to Class I surveys or better that is linked to an automated (digital) depth recording device capable of continuous logging of x,y,z positional data with depth measurement resolution to the nearest 1/10 of a foot. Digital depths shall be supplemented by analog depth records if survey is performed by single beam echosounder. Sounding lines shall be verified by crosslines at least 10 percent of the principal lines and along the centerline of channel. Distance between successive soundings (sounding interval) shall be no more than 5 feet. Soundings shall be reduced to sounding datum (Mean Lower Low Water) by using actual tides and other appropriate corrections resulting in an accuracy to meet or exceed Class I survey standard.

Horizontal Positioning Control

Accurate (+ or - 10 feet, with 97% of data + or - 3 feet), horizontal control of the sounding surveys will be maintained by acceptable means, and the methods proposed must have prior approval of the Contracting Officer Representative. Care shall be taken to ensure that the sounding surveys proceed along representative cross-sections, and/or areas so as not to introduce erroneous profile determination.

3.11.4 Tide Gage Locations

The Contractor shall measure tides for each dredge element based on the following table referencing dredge element and tide gage location. The Contractor shall use the existing tide gage at TIDAL 8 and shall install tide gages at the other locations. The Contractor shall place the tide gages within 100 feet of location listed. The Contractor shall submit a Tide Gage Plan for approval by the Contracting Officer. The plan shall include the type of gage to be deployed and the location.

Tide Gage Ref. No.	Location	Dredge Elements
1	South End Berth 60 (TIDAL 8)	D201, D202, D214
2	Berth 84 (Maritime Museum)	D203
3	South End Berth 147	D204, D205, D206, D207, D208, D209, D211, D212, D213
4	North End Berth 194	D210

All tide gages shall be referenced to the vertical datum as shown on the plans.

3.11.5 Survey Firm Acceptance

For the Contracting Officer to approve the selected survey firm, the Contractor must provide documentation indicating that modern electronic horizontal positioning and sounding system equipment will be used for the surveys to be performed as well as documentation verifying the experience of the operators using the equipment. Typical information that will be required, as a minimum, includes the name, model, and year of manufacture of the electronic equipment, the electronic frequencies of the horizontal positioning equipment and sounding equipment, and the manufacturer's stated positioning and sounding accuracies, and capability of the equipment proposed for usage. In addition, the Contractor must provide information that a safe and suitable vessel meeting U.S. Coast Guard requirements is available and will be used for operation in the waters where the surveys are to be performed. The Contractor shall submit credentials/qualifications as evidence that qualified, experienced staff are available and will be used for the operation of the vessel as well as for the electronic positioning and sounding equipment.

3.11.6 Data Processing

The Contractor shall use a Data Processing System to map the sounding data and calculate quantities. Reduced sounding data shall then be imported into the Data Processing System where cross-sections are compared to dredge templates and volume quantities are calculated. The software shall be capable of digital terrain modeling and shall produce, as a minimum, sounding sheets, cross-section profiles, 3-dimensional area profiles, and quantity volume calculations using the Triangulated Irregular Network (TIN) method.

3.12 GOVERNMENT PRE-DREDGE AND POST-DREDGE SURVEYS

3.12.1 General

The Government will perform one pre-dredge survey for each dredge element after the award of contract and as close to commencement of each dredge element as possible, but not more than 14 calendar days prior to commencement of work. For the post-dredge survey for each dredge element,

the Contractor shall notify the Contracting Officer not less than ten (10) working days prior to completion of the entire work. The Government will perform the post-dredge survey as soon as practicable after completion of the work for each dredge element or portion therefor as approved by the Contracting Officer, generally within 7 calendar days after completion of the entire work at no cost to the Contractor. All areas found to be in compliance with the contract requirements will be measured for payment in accordance with SECTION 01270A MEASUREMENT AND PAYMENT.

If the Government is unable to perform the final survey(s) due to the failure of the Contractor to complete the work in accordance with his prior notification, the Contracting Officer will charge the cost of the survey plant and standby labor, at $3,500.00 per day, to the Contractor. Preliminary data will be available within ten (10) calendar days after the Government survey is performed. If the preliminary survey data indicates that the dredged area is not at the required depth, the Contractor will be directed to resume dredging and to complete the work to project depth. Adjustment in cost for additional Government post-dredge surveys shall be as specified in paragraph: FINAL EXAMINATION AND ACCEPTANCE.

3.12.2 Methods of Soundings

The material removed will be measured by cubic yard in place, by means of soundings taken before and after dredging, reference SECTION 01270A MEASUREMENT AND PAYMENT. Soundings shall be conducted using commercially available Automated Range-Azimuth Positioning System or Differential Global Positioning System (DGPS), in State Plane, NAD 83, California 5 - 0405, feet. Soundings shall be taken by an acoustic multi-beam swath method (nominally 200 kHz). The multi-beam swath survey may be supplemented with dual frequency single-beam acoustic surveys (nominally 24-38 kHz and 200 kHz). Other methods such as lead line, trigonometric leveling (total station)/differential leveling, or single-beam acoustic survey methods, may be used if multi-beam method is not warranted as determined by the Contracting Officer. Results of soundings by any of these methods, singularly or in combination, will be the basis for payment. The Contractor has the option of being present when such soundings are made.

3.13 SHOALING

If, before the contract is completed, additional shoaling occurs in any section (area) including shoaling in the finished channel, because of the natural lowering of the side slopes or from sediments transported inside the project area, re-dredging at contract price, within the limit of available funds, may be done if agreeable to both the Contractor and the Contracting Officer.

3.14 REPORTING REQUIREMENT

The Contractor will be required to prepare and maintain a Daily Report of Operations and furnish copies thereof to the Contracting Officer's representative. The daily reports shall document dredging operations for all shifts in a 24-hour period. During the performance of all dredging operations, equipment operators shall fill out a Daily Dredging Report and Leverman's Shift Log for each calendar day's activity on each dredge being

operated. Forms and reporting format to be used shall be submitted to Contracting Officer for approval prior to use. Forms shall be filled out completely and legibly; including signatures, using black ink. Original forms shall be given to Contracting Officer by 12:00 noon on the day following date shown on reports. Daily Dredging Report shall be filled out for every calendar day and every dredge on site, even when equipment is not working. Copies of sample forms are provided at the end of Section 01451A CONTRACTOR'S QUALITY CONTROL.

3.15 FINAL EXAMINATION AND ACCEPTANCE

As soon as practicable after the completion of the entire work, a final examination of the work will be conducted by the Contracting Officer. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination, the Contractor will be required to remove same by dragging the bottom or by dredging. However, if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoal may be waived by the discretion of the Contracting Officer. The Contractor or his authorized representative will be notified when soundings are to be made, and will be permitted to accompany the survey. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two sounding operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding, the cost of such third and any subsequent sounding operations will be charged against the Contractor at the rate of $5,000.00 per day for each day in which the Government plant is engaged in sounding and/or is enroute to or from the site or held at or near the said site for such operations.

Final acceptance of the whole or a part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

Dredge Sample Data Form

Port of Los Angeles Channel Deepening Project

Contract No.:_____ Sample No.:_____

Contractor Name:_____ Date:_____

Name of Dredge:_____ Time:_____

Type of Dredge: ___Clamshell ___Hopper ___Hydraulic Cutterhead ___other

If other, specify:_____

Cut Location

area: _____ northing: _____

station: _____ easting: _____

range: _____

elevation: _____

Placement Location

area: _____ northing: _____

station: _____ easting: _____

range: _____

elevation: _____

Sample Obtained By: _____

Sample Obtained From:_____

Remarks:_____

_____

Note: A copy of this completed form shall accompany the sample when shipped to the laboratory for testing.

-- End of Section --

TABLE 1. DREDGE AND DISPOSAL SUMMARY (1)

Dredge Element	Dredge Neat Line Quantity KCY (2)	Volume 2 Feet Over-depth KCY	Disposal Site (4)	Equipment Restrictions (3)	Fill Restrictions
D201	177	NA	SWS-Area 1	-mechanical dredge with light re-handling bucket -barges	-on top of D211, D212, D213 -before D205
D202	1,454	539	CSWHExp P400SMSS	-mechanical or hydraulic cutter-suction dredge	-placement level below containment level -before surface cover layer in CSWHExp -after sand berm in P400SMSS
D203 D206 D208 D209	807 236 634 391	365 72 190 143	SWS-Area 1: -sandberm -surface cover layer -surcharge SWS-Area 2: -sandberm -fill -surface cover layer -surcharge CSWHExp surface cover layer P300Exp sandberm		-placement level below containment level -after D202 in CSWHExp -after D214 in P300Exp
D204	527	216	SWS-Area 1 fill P300Exp fill Eelgrass RA		-after sandberm and D205 in SWS-Area 1 -after sandberm and D214 in P300Exp -after containment dikes in Eelgrass RA
D205	151	41	SWS-Area 1		-after sand berm and after D213, D212, D211 & D201 in SWS-Area 1
D207	83	30	SWS-Area 1 fill P300Exp P400SMSS		-sandberm and after D205 in SWS-Area 1 -after sandberm and D214 in P300Exp -after D202 and sandberm in P400SMSS
D210	1,137	363	P300Exp P400SMSS Eelgrass RA		-after sandberm and D214 in P300Exp -after D202 and sandberm in P400SMSS -after containment dikes in Eelgrass RA
D211	16	NA	SWS-Area 1 fill	-mechanical -barges	-before D201 and D205 -before, concurrent with or after D212 and D213 -placement level below containment level
D212	128	NA	SWS-Area 1 fill	-mechanical -barges or side casting	-before D201 and D205 -before, concurrent with or after D211 and D213 -placement level below containment level
D213	37	NA	SWS-Area 1 fill	-mechanical -barges or side casting	-before D201 and D205 -before, concurrent with or after D211 and D212 -placement level below containment level
D214	352	NA	P300Exp	-mechanical -barges or side casting	-2 months after Eelgrass RA -first dredge element

Note (1): This summary does not incorporate all project requirements for dredge and disposal.

Note (2): Neat Line Quantities are approximate and subject to change.

Note (3): See Specifications Section 01355 ENVIRONMENTAL PROTECTION for requirements on use of an electric dredge.

Note (4): Disposal Site Abbreviations

SWS-Area 1 (or 2) = Southwest Slip Area 1 (or 2)

CSWHExp = Cabrillo Shallow Water Habitat Expansion

P300Exp = Pier 300 Expansion

P400SMSS = Pier 400 Submerged Material Storage Site

Eelgrass RA = Eelgrass Restoration Area

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SECTION 02145

WICK DRAINS

03/02

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SECTION 02145

WICK DRAINS
03/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS(ASTM)

ASTM D 638	Standard Test Method for Tensile Properties of Plastics
ASTM D 774	Test for Bursting Strength of Paper
ASTM D 792	Standard Test Method For Density & Specific Gravity (Relative Density) Of Plastics By Displacement
ASTM D 3884	Standard Test Methods for Abrasion Resistance of Textile Fabrics
ASTM D 4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D 4533	Standard Test Method for Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	Standard Test Methods for Breaking Load and Elongation of Geotextiles (Grab Method)
ASTM D 4716	Test Method for Constant Head Hydraulic Tranmissivity (In-Plane Flow) of Geotextiles and Geotextile Related Products
ASTM D 4751	Standard Test Method for Determining Apparent Opening Size of a Geotextile
ASTM D 4833	Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
ASTM D 5199	Standard Test Method for Measuring Nominal Thickness of Geotextiles and Geomembranes

AMERICAN PUBLIC WORKS ASSOCIATION

300-3.5.2	Standard Specifications for Public Works Construction, 1997 Edition

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Manufacturer's Data; G

Manufacturer's literature documenting the physical and mechanical properties of the drain (as a minimum those properties required by the specifications).

SD-07 Certificates

Certificates; G

Retain a supplier's purchase certificate to verify the type and physical characteristics of the drain actually installed.

Sequence and Method of Installation; G

Details of the sequence and method of installation. The submittal shall, at a minimum, contain the following specific information:

1. Size, type, weight, maximum pushing force, vibratory hammer rated energy, configuration of the installation rig and barge used for underwater installation
2. Dimensions and length of mandrel
3. Details of wick drain anchorage
4. Detailed description of proposed installation procedures
5. Proposed methods for splicing drains
6. Three 2-foot samples of materials
7. Survey of existing piles
8. Wick drain layout drawing showing location of wick drain and existing piles

Wick Drain Installation Schedule;G

Products to be installed

State which wick drain products are to be installed at the time of the submission with tender.

Qualifications

Installer Qualification per this Specification

SD-04 Samples

Material samples

For both land based and underwater installations, submit a sample of the unspliced wick drain to be used, and three samples of proposed splices, with the accompanying manufacture specifications of the wick drain material prior to the installation of drains. The sample of the unspliced drain shall be at least 5 feet long. Samples of spliced wick drain shall be long enough to include the splice plus 2 feet of unspliced drain on both sides of the splice. The samples shall be stamped or labeled by the manufacturer as being representative of the drain material having its specified trade name.

For both land based and underwater installation, submit samples of gravel drainage blanket material. Sample shall be between 10 and 20 pounds.

1.3 WORK INCLUDED

WICK DRAINS consists of furnishing labor, equipment, materials, and transportation for the installation of vertical prefabricated wick drains. The drains shall consist of a band-shaped plastic core enclosed in a jacket material. The wicks require both land and underwater installation and shall be installed at locations shown on the Drawings or as directed by the Contracting Officer.

1.4 GEOTECHNICAL EVALUATION

A Geotechnical Report entitled "Draft Dike & Landfill Report", dated March 19 2002, has been made for the site by Earth Mechanics, Inc. The soil boring logs are included in this report. The over-water boring logs referenced within this report are available from Fugro reports tabulated in Section 02020 of these specifications. The Earth Mechanics report may be reviewed within the offices of the Los Angeles District Corps of Engineers.

1.5 QUALITY CONTROL

A. Approval of wick installation equipment and wick drain material by the Contracting Officer will not relieve the Contractor of the responsibility to install drainage wicks correctly. If, at any time, the Contracting Officer considers that the method of installation does not produce a satisfactory drain, the Contractor shall alter the method and equipment necessary to comply.

B. Approval of the sample material by the Contracting Officer shall be obtained by the Contractor prior to site delivery of the wick drain material.

C. The drains shall be free of defects, rips, holes or flaws. During shipment and storage, the drains shall be wrapped in a protective covering.

The drains shall be protected from sunlight, mud, dirt, dust, debris, and detrimental substances during shipping and on-site storage.

D. The Contractor shall certify and provide proof to the Contracting Officer of experience in the work described.

PART 2 PRODUCTS

2.1 WICK DRAINS

Submit Manufacturer's Data, a minimum of 14 days before the start of construction.

Submit Certificates, within 14 days after purchase of the wicks.

Submit Products to be installed, within 14 days after purchase of the wicks.

Submit Qualifications, a minimum of 14 days before the installation

Submit Material samples

2.1.1 Prefabricated Wick Drain

The prefabricated wick drain shall consist of a continuous plastic drainage core wrapped in a nonwoven geotextile material jacket. The jacket shall allow free passage of pore water to the core without loss of soil material or piping. The core shall provide continuous vertical drainage. The prefabricated wick drain material shall meet the following specifications:

TABLE 1
MINIMUM PHYSICAL REQUIREMENTS FOR PREFABRICATED WICK DRAIN

PROPERTY	ACCEPTABLE VALUES	TEST METHOD
Minimum thickness:	1/8" (3.2mm)	ASTM D 5199
Minimum width:	4" (101.6mm)	ASTM D 5199
Tensile strength:	1kN(225 lb) at elongation minimum 2 percent, maximum 10 percent	ASTM D 638
Discharge capacity	20x10-6m3/s (7x10-4 ft3/sec) at 350 kN/m2 (7,310 lbf/ft2) soil pressure after 4 weeks	ASTM D 4716
Discharge capacity at deformation:	10x10-6 m3/s (3.5x10-4 ft 3/sec) at 25 percent relative compression	ASTM D 4716
Apparent opening size, fabric:	U.S. size no. 200-270	ASTM D 4751

TABLE 1
MINIMUM PHYSICAL REQUIREMENTS FOR PREFABRICATED WICK DRAIN

Water Permeability (K-value), fabric:	10-4 m/s (3.28x10-4 ft/s)	ASTM D 4491
Tear Strength, fabric:	50 Newtons (11 lb)	ASTM D 4533

Table continued.

PROPERTY	ACCEPTABLE VALUES	TEST METHOD
Tensile Strength, fabric:	300 Newtons (67 lb)	ASTM D 4632
Elongation at break:	50%	ASTM D 4632
Modulus:	1,350 Newtons (300 lb) at 10% Elongation	ASTM D 4632
Puncture strength, fabric	50 lb	ASTM D 4833
Mullen burst, fabric:	130 psi	ASTM D 774
Abrasion resistance, fabric:	42 lb	ASTM D 3884
Specific gravity, fabric:	0.95	ASTM D 792
Flux, fabric:	55 gal/ft2/min	ASTM D 4491

2.1.2 Jacket and Core

The jacket and core components shall conform to the following:

1. The jacket shall be synthetic non-woven geotextile capable of resisting bending, punching and tensile forces imposed during installation and during the design life of the drain.

2. The jacket material shall not be subject to localized damage (e.g., punching through the filter by sand/gravel particles).

3. The jacket material shall be rigid enough to withstand lateral earth pressures due to embedment and surcharge so that the vertical flow capacity through the core will not be adversely affected.

4. The jacket material shall be flexible enough to bend smoothly during installation and induced consolidation settlement without damage.

5. Jacket material shall not undergo cracking and peeling during installation of the drain.

6. The core shall be continuous plastic material fabricated to promote

drainage along the axis of the vertical drain.

7. The mechanical properties (strength and modulus) of the assembled wick drain shall equal or exceed those specified for the component jacket and core.

8. The assembled drain shall be resistant against wet rot, mildew, bacterial action, insects, salts in solution in the ground-water, acids, alkalis, solvents, and other ingredients in the site groundwater.

2.1.3 Materials Identification

Wick drain materials shall be labeled or tagged in such a manner that the information for sample identification and other quality control purposes can be read from the label. As a minimum, each roll shall be identified by the manufacturer as to lot or control numbers, individual roll number, date of manufacture, manufacturer and product identification of the jacket and core.

2.1.4 Damaged Materials

Material which is damaged during shipment, unloading, storage, or handling or which does not meet the requirements of the drain material will be rejected by the Contracting Officer and immediately removed from the project site. No payment of any kind will be made for rejected material.

2.2 Gravel Drainage Blanket

Gravel drainage blanket for both land-based and underwater wick drains installation shall meet the specifications for Pervious Backfill per American Public Works Association Greenbook, Section 300-3.5.2.

PART 3 EXECUTION

Submit Sequence and Method of Installation, a minimum of 14 days before the installation

Submit Wick Drain Installation Schedule, a minimum of 14 days before the installation

3.1 CONSTRUCTION INSTALLATION

A. Where shown on the Drawings or as directed by the Contracting Officer, wick drains shall be installed with equipment which will cause minimum disturbance of the subsoil during installation operation and maintain the mandrel in a vertical position. The prefabricated drains shall be installed using a mandrel or sleeve that will be advanced through the gravel drainage pad and soils to the required depth. The mandrel or sleeve shall protect the drain material from tears, cuts, and abrasion during installation, and shall be retracted after each drain is installed. To minimize disturbance of the subsoil, the mandrel or sleeve shall have a maximum cross-sectional area of 10 square inches. The mandrel or sleeve

shall be sufficiently stiff to prevent wobble or deflection during installation.

B. The Wick drains are to be installed also in the location of the side transfer platform structure of the former Todd Shipyard. Numerous concrete piles are located in this area. Contractor shall demolish and remove the structure and the piles as shown on the drawings. Contractor shall survey location of existing piles prior to demolition and removal. In location where the piles interfere with the wick installation, Contractor shall displace the wick as shown on the drawings.

C. Constant load or constant rate of advancement methods shall be used. A vibrator may only be used when approved by the Contracting Officer in areas where constant load or constant rate of advancement methods cannot install the wicks to the design depths. The vibrator may not be used except in cases where design penetration cannot be achieved by using the full static push force available to the mandrel. Use of falling weight impact hammer will not be allowed.

D. The drain shall be provided with an "anchor" plate or similar arrangement at the bottom to anchor the bottom of the drain at the required depth during the mandrel removal and to prevent the soil from entering the bottom of the mandrel during drain installation. The corresponding dimension of the anchor shall conform as closely as possible to the breadth dimensions of the mandrel so as to minimize soil disturbance. The projected cross-sectional area of the mandrel and anchor combination shall not be greater than 14 square inches.

E. Prior to the installation of the production wick drains, the Contractor shall demonstrate that the equipment, method, and materials produce a satisfactory installation. For this purpose, the Contractor shall install (5 to 10) trial drains at up to 10 locations within the work area as designated by the Contracting Officer.

F. Land installed vertical wick drains will be located, numbered, and staked by the Contractor. The Contractor shall take precautions to preserve the stake locations, and is responsible for re-staking if necessary.

G. Drains that deviate from the Drawing locations by more than 6 inches, or that are damaged, or improperly installed will be rejected. Rejected drains may be removed or abandoned in place, at the Contractor's option. Replacement drains shall be placed as close as possible to the correct original location.

H. The Contractor shall provide the Contracting Officer with a means of verifying the plumbness of the mandrel. The equipment shall be checked for plumbness prior to installing each drain and shall not deviate from the vertical more than 0.25 inch per foot during installation.

I. Splices or connections in the vertical drain material shall be done in accordance with the manufacturer's instructions and in a manner to insure continuity of the wick material. Splicing of wick drain material shall be done by stapling so as to provide structural and hydraulic continuity of

the drain. The jacket and core shall be overlapped a minimum of 6 inches.

J. Wick drains shall be installed from the working surface (top of gravel drainage blanket). The Contracting Officer may vary the depths, spacing or the number of wicks to be installed and may revise the Drawing limits for this work.

K. Wick shall be installed to the depth indicated on the Drawings.

L. The prefabricated drain shall be cut off neatly at least 4 inches above the top of drainage blanket or as otherwise specified on the Drawings.

M. During wick drain installation, the Contractor shall provide the Contracting Officer with a means of determining the depth of the advancing drain at any given time and the length of the drain installed at each location. A summary tabulation of the number and length (to nearest foot) of acceptable wicks shall be submitted daily to the Contracting Officer.

N. Where obstructions are encountered, the Contractor shall install a new drain within an 18-inch radius of the original location of the obstructed drain. A maximum of one additional attempt shall be made as directed by the Contracting Officer for each obstructed drain. If the drain still cannot be installed to the design tip elevation, the drain location shall be abandoned and a new drain installed at a location directed by the Contracting Officer. Locations where wicks do not meet the depth criteria due to obstructions shall be clearly marked in the field. The Contracting Officer shall have the right to waive the replacement wick drain requirement upon written notice to the Contractor.

O. The Contractor may use auguring, spudding, or other approved methods to loosen the soil and obstructing material prior to installation of the drains. The obstruction clearance procedure is subject to the approval of the Contracting Officer. However, such approval shall not relieve the Contractor of the responsibility to clear obstructions.

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SECTION 02216

GEOTECHNICAL INSTRUMENTATION AND POST CONSTRUCTION INVESTIGATIONS
04/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN PUBLIC WORKS ASSOCIATION

201-1.1.2	Concrete Specified by Class

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 53	Standard Specification for Pipe, Steel, Black and Hot-Dipped Zinc-Coated Welded and Seamless
ASTM C 150	Standard Specification for Portland Cement
ASTM D 1586	Standard Method for Penetration Test and Split-Barrel Sampling of Soils
ASTM D 3350	Standard Method for Soil Sampling Using A Ring-lined Barrel Sampler

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government: EDG represents the Engineering Division Geotechnical Branch. Submit in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Contractor Schedule; G

Contractor shall submit a schedule that indicates the date to begin the Geotechnical Instrumentation and Post Construction Investigation Program. This shall include a procurement schedule for instruments which indicates fabrication, shipping and delivery dates.

SD-06 Test Reports

Field CPT Data; G EDG

Contractor shall prepare and submit all CPT field data in hard copy and on magnetic disk in ASCII Text format for interpretation on a PC. Copies of raw data shall be made available to the Contracting Officer in the field as they become available. Approval of follow-on work is dependent upon Contracting Officer review of data.

Corrected CPT Data

Contractor shall submit corrected CPT data, and interpretations in hard copy and on magnetic disk in ASCII Text format for interpretation on a PC within ten (10) calendar days after completion of CPT soundings.

1.3 WORK INCLUDED

Submit Contractor Schedule, a minimum of 14 days before the start of construction.

Submit Field CPT Data.

Submit Corrected CPT Data.

1.3.1 Geotechnical Instrumentation

Geotechnical instrumentation consists of work necessary to detail, procure and install dike and landfill settlement monuments, inclinometers, piezometers installed in landfill and foundation soil, and settlement plates, in landfill soils and dike, and protection of said instruments from damage.

1.3.2 Post Construction Investigations

Post construction investigations consists of work necessary to perform Cone Penetrometer Testing (CPT's), drill 4 inch diameter bore holes into the landfill and foundation soils and retrieve samples of these soils and provide means for monitoring of pore pressures in landfill and foundation soils.

1.3.3 Purpose

The purpose of the geotechnical instrumentation is to document as-built locations and elevations of dikes, monitor short and long term landfill soil and dike movements, monitor short and long term foundation and landfill settlement and monitor short and long term pore pressures in landfill and foundation soils.

The purposes of the post construction investigations are to provide information necessary to assess the properties of the landfill and

foundation soils after landfill and dike construction are completed.

1.3.4 Soil Samples

Soil samples obtained during the geotechnical investigations will be subjected to laboratory testing at a laboratory selected by the Contracting Officer. The Contracting Officer will determine the types and number of tests to be performed.

1.3.5 Definitions

A. Dike Settlement Monuments: A dike settlement monument consists of a steel pipe set in a concrete foundation on top of the completed dike.

B. Landfill Settlement Monuments: A surface settlement monument consists of a steel pipe welded to a base plate and placed below the top of surcharge grade. Steel pipe is brought above the top of surcharge grade.

C. Landfill Settlement Plates: A settlement plate consists of a steel pipe welded to a base plate and placed at the top of the landfill grade. Steel pipe is brought above the top of surcharge grade.

D. Piezometers: A piezometer consists of a pneumatic piezometer encapsulated in geofabric and installed in the landfill and foundation soil below with connecting tubing attached to it and brought to the top of the surcharge.

E. Cone Penetrometer Test: A Cone Penetrometer Test (CPT) consists of pushing an electronic cone into the landfill and foundation soils at a specified location to collect engineering data on the properties of the soils. CPT's are terminated at a specified depth or when the cone can no longer be pushed into the ground (refusal).

F. 4 inch Diameter Bore Hole: A 4 inch diameter bore hole consists of drilling a hole, using mud rotary drilling method, into the landfill and foundation soils to collect Standard Penetration Test #(SPT) Data and obtain disturbed and relatively undisturbed samples of the landfill and foundation soils for laboratory testing.

G. Surcharge: A surcharge consists of loosely-placed fill material above the top of the landfill grade to a specified elevation.

H. Inclinometer: An inclinometer is a device used to monitor long term horizontal movement of the landfill and dike. Inclinometer casings are installed in a bore hole located behind the completed dike.

1.4 APPROACH

1.4.1 General

The Contracting Officer will provide technical direction and inspection for installation of geotechnical instrumentation and will oversee performance of the post construction investigations.

1.4.2 Division of Responsibilities

1.4.2.1 Contractor's Responsibilities

Contractor's responsibilities include:

A. Detail, procure and install geotechnical instrumentation including dike and landfill settlement monuments, settlement plates, piezometers, and incidentals.

B. Provide equipment, operators and incidentals and perform, post construction investigations immediately following completion of hydraulic fill/fill placement including CPT's, borings, and sampling of landfill and foundation soils.

C. Prepare quarry rock dike, landfill, and surcharge for installation of settlement monuments and plates and piezometers.

D. Survey layout and as-built locations of settlement monuments, settlement plates, piezometers, CPT's and bore holes. Report survey data to Contracting Officer.

E. Protect all settlement monuments, plates and piezometers from damage until contract closeout.

F. Prepare a final survey plan showing the as-built locations, elevations and other pertinent information for all monuments, instruments and investigations.

G. Survey dike and landfill settlement monuments and settlement plates immediately after installation and periodically survey them afterwards. Transmit data to the Contracting Officer within 48 hours of collection.

H. Monitor piezometers immediately after installation and periodically monitor them afterwards. Transmit data to the Contracting Officer within 48 hours of data collection.

1.4.2.2 Contracting Officer's Responsibilities

Contracting Officer's responsibilities include:

A. Oversee CPT operations performed by Contractor.

B. Observe drilling of bore holes and sampling.

C. Log borings performed by Contractor.

D. Retain and transport samples obtained during investigations to laboratory for testing.

E. Determine types and number of laboratory tests.

F. Coordinate with the Contractor.

G. Arrange to perform all laboratory soils testing services.

H. Perform geotechnical investigations approximately 6 months following completion of surcharge placement.

1.4.3 Cooperation Between Contractor and Contracting Officer

Contractor shall cooperate with the Contracting Officer during all phases of the geotechnical instrumentation and post construction investigation program. The Contractor shall provide necessary vehicular access to all settlement monuments and plates, boring, and CPT locations at all times.

1.5 QUALITY ASSURANCE

A. The Contractor shall engage the services of an instrument specialist to oversee the installation of instruments and insure proper installation techniques.

B. The Contractor shall engage the services of a Professional Surveyor licensed in the State of California to perform all survey work for this section.

C. All products and materials shall be stored in accordance with the manufacturers or suppliers recommendations. Any materials damaged as a result of improper storage at the site shall not be used in the work and shall be replaced by the Contractor at no additional cost.

PART 2 PRODUCTS

2.1 SAMPLE CONTAINERS

2.1.1 Standard Penetration Test (SPT)

SPT sample containers shall be new 16 ounce, wide mouth glass jars with metal tops subject to approval by the Contracting Officer. Quantity: 225

2.1.2 Ring Samples

Ring samples containers shall be new brass sample rings, 2.4 inch diameter. An adequate number of 1 inch high sample rings shall be provided. All ring samples shall be put in new 6 inch high PVC or plastic type liners with new plastic end caps subject to approval by the Contracting Officer. Quantity: 150 6-inch high sets.

2.1.3 Thin-Walled Tube

Thin-walled tubes shall have 3 inch outside diameter with 1/16-inch thick wall subject to approval by the Contracting Officer. Quantity: 30

2.2 SETTLEMENT MONUMENTS

2.2.1 Dike Settlement Monuments

Dike settlement monuments monuments shall consist of a nominal 2-inch-diameter galvanized steel pipe set in a concrete foundation on the final dike lift. The top of the pipe shall be not more than 5 feet above the final armor rock lift. The monuments shall be placed at a spacing along the dike, at locations where they will not be destroyed by filling.

The dimensions of the foundation for the survey monuments shall be 2 feet square or 2 feet in diameter and be a minimum of 4 feet deep with 1 foot of the foundation above grade. The pipe shall be embedded 3 feet into the concrete foundation. Pipe shall have a minimum of 4 anchor studs in the concrete foundation, 2 each on opposite sides of the pipe. Anchor studs shall be 4 inches long.

2.2.2 Landfill Settlement Monuments and Plates

Landfill settlement monuments and plates shall consist of a nominal 2-inch-diameter galvanized steel pipe welded to a 2-foot-square galvanized steel plate. The top of the monument shall be threaded so that extra lengths of pipe can be added as the fill height increases. Additional pipe lengths and couplings shall be galvanized steel.

A. The pipe shall be encased in a larger diameter pipe having an inside diameter at least 2 inches greater than the outside diameter of the monument pipe coupling.

B. There shall be no contact between the inner monument pipe or couplings and the outer encasement pipe or surrounding soil.

C. Monument pipe couplings shall be coated with grease prior to placing the outer encasement pipe over the monument pipe.

2.2.3 Galvanized Pipe and Fittings

All pipe and couplings for survey monuments shall be schedule 40 galvanized pipe in accordance with ASTM A 53. The top of each monument shall be fitted with a threaded galvanized end cap permanently fixed to the last pipe section on the monument. All pipe, couplings, end caps and studs shall be hot dip zinc galvanized.

2.3 CONCRETE AND GROUT

Concrete for dike settlement monuments and inclinometers shall be "Class 560-C-3250 concrete for Street Light and Traffic Signal Foundations and Survey Monuments" as specified in accordance with Section 201-1.1.2 -Concrete, Mortar and Related Materials of the Greenbook.

Grout for inclinometer casing installations shall be a Portland cement grout. Proportions for grout shall be as recommended by the manufacturer or supplier of the casing and approved by the Contracting Officer's

Representative. Portland cement shall be Type V as specified in ASTM C 150.

2.4 PIEZOMETERS

Contractor shall furnish piezometers of the pneumatic type that meet the following specifications:

Range: 0 to 1,400 kPa (0 to 200 psi)

Accuracy: 0.1% of Full-Scale

Displacement: 0.002 cc (0.00012 cu. in.)

Material: Glass reinforced, nylon 12 with ethylene propylene diaphragm.

Individual piezometers shall be attached to appropriate plastic bases. Each base and piezometer shall be encapsulated and sealed within an envelope of geotextile fabric having a maximum apparent opening size (AOS) of 70 microns. The outside filter area of each assembled unit shall be a minimum of 50 square inches.

The Contractor shall also furnish digital readout instrument compatible with the piezometer and shall meet the following requirements:

Range: 0 to 1,400 kPa (0 to 200 psi)

Total System Accuracy (piezometers and readout): 0.1% of Full-Scale

Resolution: 0.05% of Full-Scale

The length of the connecting tubes for each piezometer shall be determined before ordering. Piezometers shall be supplied from the manufacturer with a single continuous connecting tube length, calibrated and ready to install. Tubing splices shall not be permitted without approval of the Contracting Officer. When tubing is laid over original ground or a working table, it shall be snaked to allow for ground and fill movements during settlement. All piezometers shall be labeled, properly logged, and protected during construction. Piezometers shall be handled and monitored in accordance with the manufacturer's specifications. Manufacturer name, type, operating pressure range, sensitivity, and other pertinent information shall be furnished to the Contracting Officer before installation at the site.

2.5 INSTRUMENT IDENTIFICATION PLATES

2.5.1 Dike Monuments

Each dike monument shall have a 6 inch wide, 4 inch long, 1/8 inch thick brass plate permanently fixed to the top of the concrete foundation using a suitable grout or concrete anchor studs.

2.5.2 Landfill Monuments and Plates

Each landfill monument and plate shall have a brass strip 4 inches wide, 3 inches long and 1/16 inch thick permanently fixed to the top of the pipe

with brass screws. The plate shall be bent and fitted around the pipe and be located 2 inches below the end cap.

2.5.3 Brass Plates

Brass plates for all settlement monuments and settlement plates shall be permanently engraved with the following as-built information:

A. The monument designation number as shown on the drawings;

B. Date monument was set;

C. Monument end cap elevation to the nearest 100th of a foot at the time of setting;

D. Base plate elevation to the nearest 100th of a foot at the time of setting #(landfill monuments and plates only);

E. Northing and Easting coordinates, in Zone 5 feet, of the end cap to the nearest 100th of a foot and the survey control line station #(dike monuments only) at the time of setting.

F. Inclinometer Casings: The top of each inclinometer casing shall be encased in concrete 60 centimeters square or 60 centimeters in diameter and 60 centimeters deep. Each concrete encasement shall have 150 millimeters wide, 100 millimeters long, 3 millimeters thick brass plate permanently fixed to it using a suitable grout or concrete anchor studs. All inclinometer plates shall be permanently engraved with the following as-built information:

The inclinometer designation number as shown on the drawings.

Date casing was set

Elevation of casing locking cap to within 5 centimeters at the time of setting.

Bottom elevation of casing to within 5 centimeters at the time of setting.

Northing and Easting coordinates, in Zone 5, feet, of the locking cap at the time of setting.

The survey bearings of the grooved x-y casing axes at the time of setting.

2.6 INCLINOMETER SENSING SYSTEM PRODUCTS

Inclinometer Probe: Part No. 50302500 English Digitilt Inclinometer Probe as manufactured by Slope Indicator Co. or equal. Sensor shall include protective storage case. Quantity: One (1)

Operating Principal: The inclination of the probe body is measured by two force-balanced servo-accelerometers. One accelerometer measures tilt in

the plane of the inclinometer wheels, which track the longitudinal grooves of the casing. The other accelerometer measures tilt from the vertical in a plane perpendicular to the wheels. Inclination measurements are converted to lateral deviations. Changes in lateral deviation, determined by comparing data from current and initial surveys, indicate ground movement.

Pulley Assembly: Part No. 51104606 Inclinometer Probe Pulley Assembly for 2.75 or 3.34 inch casing as manufactured by Slope Indicator Co. or equal. Quantity: One (1)

Connector for Readout: Part No. 50301800 for cable connection to readout as manufactured by Slope Indicator Co. or equal. Quantity: One (1)

Connector for Probe: Part No. 50303100 for cable connection to inclinometer probe as manufactured by Slope Indicator Co. or equal. Quantity: One (1)

Inclinometer Cable: Part No. 50601000 English cable as manufactured by Slope Indicator Co. or equal. Quantity: One Hundred Fifty (150) feet

Dummy Probe: Part No. 50304800 Dummy Inclinometer Probe - English Wheel Base as manufactured by Slope Indicator or equal. Quantity: One (1)

Nylon Line with Reel: Part No. 50304900 Portable Reel with 250 feet of nylon line for dummy probe as manufactured by Slope Indicator or equal. Quantity: One (1)

Inclinometer Sensing System Data Collection Products:

Inclinometer Sensor Readout Device: Part No. 50310900 Digitilt DataMate as manufactured by Slope Indicator Co. or equal. Readout device shall be compatible with Inclinometer sensor probe and shall include protective storage case. Quantity: One (1)

Software: Part No. 50310970 DataMate Manager Software as manufactured by Slope Indicator or equal. Quantity: One (1)

Software: Part No. 50309900 DigiPro Software - Inclinometer Data Reduction Software as manufactured by Slope Indicator or equal. Quantity: One (1)

Inclinometer Casing and Installation Products:

Inclinometer Casing: Part No. 51100300 Telescoping Casing 3.34 inch OD - 10 foot section as manufactured by Slope Indicator or equal.

Couplings: Part No. 51100400 Telescoping casing couplings for 3.34 inch OD casing as manufactured by Slope Indicator or equal.

Protective End Cap: Part No. 51100500 Telescoping casing protective end caps for 3.34 inch OD casing as manufactured by Slope Indicator or equal.

Locking Cap with Padlock: Part No. 51100550 Telescoping casing locking cap for 3.34 inch OD casing as manufactured by Slope Indicator or equal. All

cap lock padlocks shall be keyed alike.

The Contractor shall provide all other materials and products necessary and incidentals to the installation of inclinometer casings as specified including but not limited to couplings, screws, mastic tape, PVC electrical tape, pop rivets, ABS-DWV solvent cement, grout, and grout valves.

PART 3 EXECUTION

3.1 OVERALL SEQUENCE OF WORK

The general sequence of work shall be in the following chronological order:

A. Dike Settlement Monument Installation

B. Piezometers installation

C. Landfill Settlement Plate installation

D. Landfill Settlement Monument Installation

E. Cone Penetrometer Testing

F. Bore holes and sampling

G. Inclinometer

3.2 SETTLEMENT MONUMENT, PLATE AND PIEZOMETER INSTALLATION

3.2.1 General

The Contractor shall install the settlement monuments and plates. The Contractor shall demonstrate to the Contracting Officer that the monuments and plates are securely fixed into place and the pipe survey monuments and plates are installed true to vertical.

3.2.2 Dike Settlement Monuments

The Contractor shall coordinate Work so that the settlement monuments on the dike are installed within 2 weeks after the final dike has been placed to grade at each location. The rock dike shall be brought to the required grade for a distance of 50 feet on each side of where each settlement monument is to be placed. The Contractor shall notify the Contracting Officer at least one week prior to the date on which the dike will be completed and the monument installed.

3.2.3 Landfill Settlement Plates

The Contractor shall commence installation of the settlement plates on the land fill when the fill has reached elevation +13 to +15 feet and is stable enough to permit placement of the plate.

A. The Contractor shall extend all settlement plates in surcharge areas

to new grade as the grade around each instrument is raised. The Contractor shall perform the extension.

B. Locations of landfill plates shall be as shown on the drawings.

3.2.4 Landfill Settlement Monuments

The Contractor shall commence installation of the settlement monuments on the land fill surcharge when the surcharge has been completed and is stable enough to permit placement of the monument. The settlement monuments shall be installed within 2 weeks after the surcharge has been completed for a distance of 50 feet in all directions from where each settlement monument is to be placed. Locations of landfill monuments shall be as shown on Drawings.

3.2.5 Piezometers

The Contractor shall commence installation of piezometers concurrently with wick drain installation using the same equipment used to install wick drains. Piezometers shall be pushed at all locations shown on the Plans and pushed to elevations shown on the Plans. Piezometer units shall be protected within a steel enclosure to prevent damage during installation.

After completion of the installation of the piezometer devices, the Contractor shall maintain the devices and repair any damage to the devices caused by the Contractor's operations at the Contractor's expense.

3.2.6 Tolerances

All monuments, plates and piezometers shall be installed true to the vertical. A tolerance of 1/2 percent inclination, calculated over the length of the monument from bottom of footing to end cap will be permitted. Measurement of true vertical will be checked by the Contracting Officer using a level after the pipe is set and the concrete foundation is hardened. Any instrument installed with an out-of-tolerance inclination will be rejected by the Contracting Officer and removed and replaced by the Contractor at his own costs.

3.3 POST CONSTRUCTION GEOTECHNICAL INVESTIGATION

3.3.1 Sequence of Investigations

The post construction investigations shall not begin in any area prior to the completion of landfilling to the elevation of about +13 to +15 feet and the landfill surface is stable enough to perform the investigations. In any particular area, the investigations shall commence no later than 1 month after the completion of the landfill to the elevation of about +13 to +15 feet and the landfill surface is stable enough to perform the investigations. This may require more than one mobilization to assure commencement of investigations no later than 1 month after the completion of landfilling in a particular area. All CPT's shall be completed and results reported to the Contracting Officer prior to performing geotechnical bore holes. The Contracting Officer shall be given up to one week to review the CPT data in a particular area after which time the

Contractor may begin the geotechnical bore holes.

3.3.2 Equipment

All equipment which the Contractor proposes to use in the work shall be modern equipment in good operational condition.

All plant, equipment, hydraulic push systems, hammers and drop systems, geotechnical samplers, electronic cones and methods to be used by the Contractor shall be subject to the review and approval by the Contracting Officer.

3.3.3 Cone Penetration Testing (CPT)

The diameter of the CPT cone shall be 35.6 mm unless otherwise approved by the Contracting Officer. CPT soundings shall be advanced down to the depth shown on the drawings unless otherwise directed by the Contracting Officer. Every attempt shall be made by the Contractor to advance the CPT true to vertical. If refusal is encountered prior to reaching the specified depth, the location shall be moved 5 to 10 feet and CPT sounding shall be repeated until the depth shown on the plan is reached. CPT soundings shall be performed using an electric friction cone probe in accordance with ASTM D3441 and D5778. The cone shall be equipped with a pore pressure transducer.

A. The field readout for CPT soundings shall indicate continuously during penetration, the depth, cone tip resistance and side friction, friction ratio pore pressure, pore pressure ratio and inclination.

B. Pore water pressure dissipation testing shall be performed when directed by the Contracting Officer. Testing shall be started and stopped as directed by the Contracting Officer. Up to eight (8) pore pressure dissipation tests will be performed. Up to fifteen (15) hours of pore pressure dissipation testing will be performed at each location selected by the Contracting Officer.

C. The CPT holes shall be grouted as directed by the Contracting Officer using a bentonite cement grout.

D. Complete records shall be kept by the Contractor for the CPT testing for submission to the Contracting Officer. The CPT data shall be made available to the Contracting Officer in the field for study. Complete CPT records in report format together with all notes, remarks, pertinent information and data on floppy disk in ASCII Text format shall be submitted by the Contractor to the Contracting Officer within ten (10) calendar days after completion of the CPT Work for a particular area.

E. Locations and termination elevations of CPT's shall be as shown on the drawings.

3.3.4 4 Inch Diameter Bore Holes

The inside diameter of the bore holes shall not be less than 4 inches. The

borings shall be advanced down to the depth shown on the drawings unless otherwise directed by the Contracting Officer. Every attempt shall be made by the Contractor to advance the bore holes true to vertical. The bore holes shall be cased for the full depth of drilling within the hydraulic landfill unless the Contractor can demonstrate that the bore holes will remain stable with the use of drilling mud. Thereafter, the bore holes may be kept open and stable using a bentonite slurry drilling mud for the remainder of the exploration.

A. The bore holes shall be kept full of slurry drilling mud at all times. The hole shall be covered at the end of the working day. Drilling mud shall be Variflo Natural Organic Drilling Fluid as supplied by Colloid Environmental Technologies Company (CETCO) or approved equal.

D. The bore holes shall be grouted as directed by the Contracting Officer using a bentonite cement grout.

C. Location and termination elevations of bore holes shall be as shown on the drawings.

3.3.5 Standard Penetration Test (SPT)

Drive samples shall be taken at 3 foot intervals within the landfill until original ground is encountered and thereafter at five foot intervals in each bore hole. The hole shall be drilled out to the sample elevation prior to sampling.

A. The Contractor shall use a 2 inch (O.D.), 1 3/8 inch (I.D.) Standard Split Spoon sampler to obtain samples. A thin plastic or metal sample retainer shall be used for each sample.

B. The sampler shall always be driven with the same weight of hammer having the same drop in accordance with the ASTM D 1586. The hammer shall be a donut type or safety type hammer or an above ground automatic trip hammer. Manual drop hammers shall be operated with a rope and cathead in accordance with ASTM D1586. The contractor shall submit a certification from a certified testing laboratory or the manufacturer of the hammer that the drop weight of the hammer is 140 pounds ±2 pounds. Downhole hammers will not be permitted. The sampler shall be driven for a full 24" penetration and blows shall be counted for each 6" interval. The sampler shall be seated before blows are counted. The contractor shall take care to assure that the drop height of the hammer is maintained at 30 inches.

C. If a sample is not obtained the first time, the operation shall be repeated. If second driving of the spoon fails to secure a sample, a spoon with a flapper shall be used. Should this second procedure fail to secure a sample, an auger or sand trap shall be used until the required sample is obtained.

D. Representative specimens of each SPT shall be preserved immediately after being recovered, in 16-ounce, wide-mouth, airtight, clear glass jars sealed with a non-shrinking wax, Socony Vacuum Oil Company Product

2300 or equal. The covers of the jars shall be marked with the date, the boring and sample number, the depth or elevation, the blow count and the name of the landfill. A label shall then be affixed to the jars, clearly and legibly showing the information on the cap and a visual identification of the type of material.

3.3.6 Ring Samples

Ring Samples shall be taken when directed by the Contracting Officer. The Contractor shall use a 3-1/4" (O.D.) Modified California Sampler with standard 2-1/2" (I.D.) rings to obtain the samples. The sampler shall be prepared for each sample using 1" wide rings. The rings shall be either new brass or copper.

A. Each sampler shall always be driven with the same weight of hammer having the same drop in accordance with the ASTM D 3350. The sampler shall be driven for a full 18" penetration and blows shall be counted for each 6" interval. The sampler shall be seated before blows are counted.

B. Each ring sample, shall be placed first in a plastic bag and then in a plastic tube having the same inside diameter as the outside diameter of the rings. The top of the plastic bag shall be twisted and folded down and then the plastic caps shall be placed on the ends of the tube. The caps shall be sealed with tape on each end of the tube. The ends will then be sealed with a non-shrinking wax, Socony Vacuum Oil Product 2300 to insure an airtight seal. The tube shall be marked with indelible ink to show, the date, the boring and sample numbers, the depth or elevation, the blow count and the name of the landfill.

3.3.7 Thin Walled Tube Samples

Undisturbed samples shall be obtained when directed by the Contracting Officer. The sampler shall be a standard thin wall tube.

A. The sampling stroke shall be 2 inches shorter than the maximum stroke to prevent possible compression of the top of the sample. A minimum time of 10 minutes shall then elapse before the sampler is rotated at least two (2) full turns to shear the end of the sample. The assembly shall then be slowly withdrawn and a cap placed on the bottom of the tube immediately after removal from the bore hole.

B. The voids at the top and the bottom of the tube shall be filled, but not packed, with either moist sand, or moist sawdust as directed by the Contracting Officer. A metal and rubber packer device approved by the Contracting Officer shall then be inserted into each end of the tube to prevent sample disturbance due to movement. Both ends of the tube shall then be capped and sealed with friction tape and wax. Both ends of the sample will be coated with a non-shrinking wax, Socony Vacuum Oil Product 2300, to insure an airtight seal. The tube shall be marked with indelible ink to show the date, the boring and sample numbers, the depth or elevation, the Recovery Ratio, the maximum hydraulic pressure required to advance the sampler and the name of the landfill.

3.3.8 Drilling Obstructions

It shall be the Contractor's responsibility when obstacles are encountered to carry the drilling through or past such obstacles or redrill the bore hole to the same elevation and continue sampling at no additional cost.

3.4 DISPOSAL OF DRILL CUTTINGS

All drill cuttings resulting from geotechnical bore holes shall become the property of the Contractor. The Contractor shall dispose of all drill cuttings off site in accordance with all local, state and federal authorities having jurisdiction over the disposal of drill cutting.

3.5 GEOTECHNICAL INSTRUMENTATION

Inclinometer Casings: Inclinometer casings shall be installed at the locations shown on the drawings after the landfill has been filled to the design elevations shown on the drawings.

When storing on site, casing shall be properly supported to prevent sagging and twisting. Contractor shall keep casing shaded from heat and sunlight. Prolonged exposure can cause casing to warp. Warped casing shall not be used in the work.

Casings shall be installed in accordance with the recommendations of the manufacturer or supplier and with the approved installation procedure detailed in the Contractor's submittal.

Casings shall be installed in bore holes having a minimum diameter as recommended by the manufacturer or supplier. Bore holes for installation of inclinometer casings shall be true to vertical with a 1/2 percent allowable out of tolerance measured over the entire length of the bore hole.

Casings shall be tremie grouted in place from the bottom up for the full length of the casing using a grout valve installed at the bottom of the casing or by other means approved by the Contracting Officer's Representative using a Type V Portland Cement Grout.

Casing which becomes buoyant during installation shall be counteracted by applying weight to the bottom of the casing only. Downward force shall not be applied to the top of the casing.

The top of the inclinometer casing shall be encased in a concrete block measuring 60 centimeters square or 60 centimeters in diameter and 60 centimeters deep. A bond breaker shall be used between the casing and the concrete to allow independent vertical movement of the concrete encasement and the casing.

Location and depth of inclinometers:

a. Inclinometers shall be located at distances measured perpendicular to the survey control line from the monument towards the interior of the landfill. Depth of inclinometers shall be as shown on the plans.

b. The survey bearings of the casings grooves as shown on the drawings

shall be laid out prior to insertion of the casing into the bore hole. Care shall be taken to maintain the alignment of the grooves during installation. The casing shall be set to the required bearing within one second prior to grouting and held in place during grouting to prevent rotation.

Pneumatic Piezometers: Pneumatic piezometer arrays shall be installed after the applicable areas have been brought to the elevations shown on the drawings.

Piezometers shall be installed in accordance with the recommendations of the manufacturer or supplier and with the approved installation procedure detailed in the Contractor's submittal and approved by the Contracting Officer's Representative.

All piezometers shall be properly saturated in accordance with the manufacturer's directions prior to insertion into the ground.

Piezometers shall be installed in bore holes having a minimum diameter as recommended by the manufacturer or supplier. Each piezometer shall be installed in a separate bore hole. The bore hole shall be advanced to an elevation 1.5 meters above the specified elevation of the piezometer. The piezometer shall then be pushed 1.5 meters into the bottom of the bore hole to its specified elevation. Piezometers shall be pushed into the ground using equipment and procedures as recommended by the manufacturer or supplier and approved by the Contracting Officer's Representative. For specified piezometers, a standard Mandrel (Slope Indicator Part No. 9141730) with an AW rod pin shall be used.

Bore holes shall be tremie grouted or backfilled with an approved bentonite seal for a minimum thickness of 6 meters above the bottom of the bore hole. The remainder of the bore hole shall be tremie grouted or backfilled with an approved bentonite cement grout.

The pneumatic tubing running from the bore hole to the terminal pipe shall be embedded in the ground a depth between 60 and 90 centimeters.

The terminal pipe shall be embedded in concrete. Tubing shall be run through the PVC Pipe encased in the concrete. Pneumatic tubing shall not be directly in contact with the concrete encasement.

Location of piezometer arrays and elevation of pneumatic piezometers are shown on the drawings. Those elevations are estimates within ± 1 meter. The Contracting Officer's Representative will determine the exact elevations upon completion of the CPT and geotechnical bore hole program. The Contractor shall not order instruments until after the Contracting Officer's Representative has reviewed the results of the CPTs.

Installation Records: After each work day for installation of geotechnical instruments, the Contractor shall submit to the Contracting Officer's Representative the installation records for the day.

The format for the records shall be submitted by the Contractor and agreed upon by the Contracting Officer's Representative and the Contractor's

Instrument Specialist. The installation records shall serve as the quality assurance checklist and as a minimum shall include the following information:

a. Project Name

b. Instrument type and number

c. Planned location in plan and elevation

d. Planned lengths, widths, diameters, depths and volumes of materials and backfill

e. Personnel responsible for installation

f. Plant and equipment used, including diameter and depth of drill casings, rods, etc.

g. Date and time of start and completion of installation

h. Weather including temperature at the times of installation and testing

i. Results of necessary measurements or readings required during installation including results of acceptance and function tests

j. Subsurface data information

k. Type of backfill used

l. As-built location in plan and elevation

m. As-built orientation

n. As-built lengths, widths, diameters, depths, and volumes of materials and backfill

o. A space for notes including problems during installation, delays, unusual features of installation, and any events which may have a bearing on instrument behavior.

3.6 PROTECTION OF MONUMENTS, PLATES, INCLINOMETERS, AND PIEZOMETERS

A. The Contractor shall be responsible to protect the settlement monuments, plates and piezometers from damage as a result of his operations on the site.

B. The Contractor shall place or construct barricades, guard posts, or other protective devices, as necessary. The Contractor shall repair or replace, at the Contractor's expense, all damaged settlement monuments, plates and piezometers. The Contracting Officer, after review will determine the extent and type of damage and will determine whether repair or replacement is required.

C. The Contractor shall provide damage protection as previously specified herein, at all times including for the extensions of landfill settlement plates until close out of the contract.

3.7 SURVEY AND MONITORING

3.7.1 Surveyor Qualifications

The survey shall be performed and prepared by a surveyor licensed in the State of California. The final as-built survey drawings shall be stamped by the licensed surveyor.

3.7.2 Periodic Surveys

Contractor shall survey the settlement monuments and settlement plates periodically. The dike and landfill settlement monuments shall be surveyed once every week for the first eight weeks and bi-weekly thereafter. The settlement plates shall be surveyed daily during surcharge placement, weekly for the first eight weeks after completion of surcharge, and once every two weeks thereafter. All survey data shall include Northing and Easting coordinates, in Zone 5 feet, in addition to elevations. Contractor shall submit the survey data within 48 hours of collection.

3.7.3 As-Built Survey

Contractor shall submit an as-built survey showing all pertinent information for the instrumentation and geotechnical investigations as previously specified including as-built coordinates of CPT's, bore holes and all information appearing on settlement monument and settlement plate identification plates. The Contractor shall submit a draft of the complete survey drawings to the Contracting Officer for review, comment and approval.

3.7.4 Accuracy

All elevations and coordinates shall be determined to the nearest 100th of a foot.

3.7.5 Pore Pressure Readings

The Contractor shall monitor piezometers and gather pore pressure data immediately after installation. After installation, pore pressure readings shall be taken at every piezometer once every two days during surcharge placement, and after surcharge placement once every week for the first eight weeks and once every two weeks thereafter. The Contractor shall submit the data obtained from the reading within 48 hours of collection.

3.8 OWNWERSHIP OF DOCUMENTS AND SAMPLES

All samples obtained and documentation prepared become the property of the Port of Los Angeles. Original field logs, sketches and other data used in preparation of documents shall be delivered to the Contracting Officer at the completion of the work. The Port of Los Angeles retains ownership of all samples, test results and documentation.

3.9 ACCEPTANCE OF GEOTECHNICAL INSTRUMENTATION

Function Checks: Function checks shall be performed to verify calibration and proper operation of the inclinometer sensor. All instrumentation shall be tested in the field after delivery using the manufacturer's test procedures. In addition, the following tests shall be performed:

Inclinometer Probe: The inclinometer sensor shall be checked in the field by placing the inclinometer into a casing at a known angle. The reading of inclination shall be within the accuracy of the instrument as stated by the manufacturer's data. This test shall be repeated three with different inclinations. A zero reading check shall also be made and should agree with the readings supplied by the manufacturer.

Pneumatic Piezometers: Each piezometer shall be tested by placing the piezometer into a known depth of water and reading the pore pressure. The piezometer connector to the tubing shall be checked for tightness. The reading of pore pressure shall be within the accuracy of the instrument as stated by the manufacturer's data. This test shall be repeated three times at different times at different water depths for each piezometer.

Inclinometer Casings: After installation of an inclinometer casing is completed, a groove tracking test shall be made. The dummy inclinometer probe shall be inserted into the casing. Unobstructed movement of the probe along each axes up and down the casing shall be verified. The casing will be rejected if proper movement cannot be verified.

Acceptance Tests: After installation, the inclinometer probe and pneumatic piezometers shall be tested to verify proper operation.

The inclinometer probe, along with the data collection and reduction software shall be tested in one of the deepest inclinometer casings. The probe shall be inserted into the casing and readings made on each axes. This shall be repeated three times with data readings made and collected each time. The repeatability of the readings shall be evaluated to assure proper operation. The repeatability shall be examined by the Contracting Officer's Representative and the Contractor's Instrument Specialist and an evaluation made of whether the data are within the expected tolerances. The inclinometer probe will be rejected if it lacks repeatability of the three readings.

After complete installation of an array of pneumatic piezometers, each piezometer in the array shall be tested. Each transducer connector shall be connected to the pneumatic indicator and readings taken. Readings shall be taken once every hour for three hours. The repeatability of the readings shall be evaluated to assure proper operation. The repeatability shall be examined be examined by the Contracting Officer's Representative and the Contractor's Instrument Specialist and an evaluation made of whether the data are within the expected tolerances. Piezometers which lack repeatability of the three readings will be rejected.

Any instrument failing function and acceptance tests will be rejected and returned to the manufacturer by the Contractor and replaced with a properly operating instrument.

Out of tolerance landfill and dike monuments will be rejected by the Contracting Officer's Representative.

-- End of Section --

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04/02

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SECTION 02220A

DEMOLITION AND REMOVAL
04/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN PUBLIC WORKS ASSOCIATION

200-1.5.5	Sand Gradations
201	Concrete, Mortar, and Related Materials
201-1.2.1	Portland Cement
300-1.3.2	Requirements

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

1.2 GENERAL REQUIREMENTS

1.2.1 General

The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed from property daily, unless otherwise directed, to avoid accumulation at the demolition site. Materials that cannot be removed daily shall be stored in areas specified by the Contracting Officer. In the interest of occupational safety and health, the work shall be performed in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections. In the interest of conservation, salvage shall be pursued to the maximum extent possible (in accordance with Section 01572 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT, if applicable); salvaged items and materials shall be disposed of as specified.

1.2.2 Specific Work Included

A. Demolition and Removals work includes furnishing transportation, labor, materials, and equipment to perform demolition work, removals, disposal, salvage, re-use, recycling, and solid resources management including, but is not limited to the following:

1. Clearing and grubbing operations and removal of trees, brush, and vegetation.

2. Demolish, remove and dispose of asphalt concrete and concrete pavement.

3. Demolish, remove and dispose of post guardrail, guard post and associated foundations.

4. Demolish, remove and dispose of telephone power, utility poles and overhead lines, transformers, electrical panels, and the like.

5. Demolish, remove and dispose of building foundations, concrete slabs, and concrete platen structures.

6. Demolish, remove and dispose of remaining waterside portion of ship building way and launch structure.

7. Demolish, remove and dispose of craneway structure and crane tower foundations.

8. Demolish, remove and dispose of crane rails.

9. Demolish, remove and dispose of steel sheet piles.

10. Demolish, remove and dispose of timber wharf structure and piles.

11. Demolish, remove and dispose of remaining portions of the work bay platform and transfer platform as shown on plans.

12. Demolish, remove and dispose of underground utilities including but not limited to, sewer, storm, drains, electric/telephone conduits, water, gas, steam, air and oxygen.

13. Demolish, remove and dispose of timber platforms and dolphin structures.

14. Remove, salvage, and transport items as shown on the plans.

15. Other removal work shown on plans and as needed to construct the improvements shown on plans.

B. Work also includes protection in place of all active utility lines and storm drain systems as shown on the plans, within, adjacent to, or affected by work under this contract.

C. Provide temporary utility piping, wiring, and sanitary connection to meet the needs of this work at no additional cost to the Government.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation;

submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. Submit accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Permits and Certificates

SD-01 Preconstruction Submittals

Work Plan; G

SD-11 Closeout Submittals

As-built Pile Survey; G

1.4 HAZARDOUS MATERIALS

Contractor shall be aware that hazardous materials may be encountered on the site. Contractor shall remove and dispose of hazardous materials in conformance with Section 01355 ENVIRONMENTAL PROTECTION and shall be paid in conformance with the corresponding contingency bid item of the Proposal Schedule.

1.5 DUST CONTROL

The amount of dust resulting from demolition shall be controlled to prevent the spread of dust to occupied portions of the construction site and to avoid creation of a nuisance in the surrounding area. Dust control shall conform with all City of Los Angeles and South Coast Air Quality District Regulations. Use of water will not be permitted when it will result in, or create, hazardous or objectionable conditions.

1.6 PROTECTION

1.6.1 Protection of Personnel

During the demolition work the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the demolition site. No area, section, or component of the structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

1.6.2 Protection of Structures

Structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, shall remain standing without additional bracing, shoring, of lateral support until demolished, unless directed otherwise by the Contracting Officer. The Contractor shall ensure that no elements determined to be unstable are left unsupported and shall be responsible for placing and

securing bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

1.6.3 Protection of Existing Property

Before beginning any demolition work, the Contractor shall survey the site and examine the plans and specifications to determine the extent of the work. The Contractor shall take necessary precautions to avoid damage to existing items to remain or to be protected in place, to be reused, or to remain the property of the Government; any damaged items shall be repaired or replaced as approved by the Contracting Officer. The Contractor shall coordinate the work of this section with all other work and shall construct and maintain shoring, bracing, and supports as required. The Contractor shall ensure that structural elements are not overloaded and shall be responsible for increasing structural supports or adding new supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

1.6.4 Protection From the Weather

Salvageable materials and equipment shall be protected from the weather at all times.

1.6.5 Environmental Protection

The work shall comply with the requirements of Section 01355 ENVIRONMENTAL PROTECTION.

1.7 BURNING

The use of burning at the project site for the disposal of refuse and debris will not be permitted.

1.8 USE OF EXPLOSIVES

Use of explosives will not be permitted.

1.9 HIGH VOLTAGE POWER POLES

Exercise extreme caution while working around power poles and light poles.

1.10 SALVAGE - GENERAL

A. No on-site sale of salvage will be allowed. No removals shall be made from the site by any person other than the Contractor or employees of the Contractor.

B. Contractor shall salvage designated items as noted on plans and deliver items to the salvage site (Harbor Department Supply Yard) located at Berth 161.

C. Exercise care in removing items to be salvaged.

D. Contractor shall be responsible for damage to materials that are identified to be salvaged.

1.11 WARNING - TOXIC MATERIAL

A portion of the existing timber wharf, crane rail and railroad ties, and dolphins to be removed contains cresote preservative, a chemical known to the State of California to cause cancer or reproductive toxicity. The timber wharf deck structure, timber wharf, piles, dolphins, and ties have not been tested. Disposal requirements are outlined in Article 3.2 of the Section.

1.12 ACCESS FOR UTILITY RELOCATION

Permit the utility owners and personnel engaged by them, access to the work site to maintain, relocate or inspect their facilities. Cooperate with them in performed their work.

PART 2 PRODUCTS

2.1 SAND CEMENT SLURRY

A. Sand cement slurry shall conform to Section 201 of the Reference Specification.

B. Mix design shall be sand cement slurry 565-E-200P using sand as specified in Section 200-1.5.5 of the Reference Specification and Portland cement as specified in Section 201-1.2.1 of the Reference Specification. Contractor shall submit complete mix design to Contracting Officer and obtain Contracting Officer's approval prior to use of any sand cement slurry in the work.

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall submit copies of required Permits and Certificates prior to performing work requiring permits and certifications.

The Contractor shall submit a Work Plan, a minimum of 14 days before the start of construction. The work plan shall include procedures proposed for the accomplishment of the work. The procedures shall provide for safe conduct of the work, including procedures and methods to provide necessary supports, lateral bracing and shoring when required, careful removal and disposition of materials specified to be salvaged, protection of property which is to remain undisturbed, coordination with other work in progress, and timely disconnection of utility services. The procedures shall include a detailed description of the methods and equipment to be used for each operation, and the sequence of operations in accordance with EM 385-1-1.

A. Work shall be performed in accordance with applicable Federal, State, County, and City of Los Angeles Codes and Regulations. The work shall meet safety standards and requirements including those of

CAL/OSHA. The Contractor shall have copies of applicable extracts of CAL/OSHA Construction Safety Orders and General Industrial Safety Orders at the work site.

B. Remove existing improvements and facilities indicated on the plans. Removal work shall not exceed limits shown on plans unless instructed by the Contracting Officer. Contractor shall repair Contractor-damaged items, which are not a part of the removal work, at no cost to the Government.

C. Items not shown on plans or mentioned in the Specifications, which are encountered during the Contractor's operations, shall be brought to the attention of the Contracting Officer. The Contracting Officer will determine the disposition of the items.

D. Should the Contractor decide to move any large items intact off the site, arrangements for permits, clearances, and utilities are the Contractor's responsibility.

E. Dumping of debris or materials on the Harbor waters is not permitted.

F. Perform removal work under Contracting Officer's inspection. Work shall meet applicable safety standards and requirements.

G. Remove from site vermin infested materials. Dispose of by safe means in accordance with applicable regulations so as not to endanger the health of workers or the public.

3.2 DISPOSAL

A. Materials removed other than those specified and shown on plans to remain or salvage or as stated in 3.2.b, shall become the property of the Contractor and disposed of off the site as specified in Section 01355 ENVIRONMENTAL PROTECTION.

B. Contractor may stockpile asphalt concrete paving removals, concrete paving and broken concrete (free of wire mesh) within the project limits for processing to produce crushed miscellaneous base (CMB) for reuse on the project. If material is not reused onsite, Contractor shall remove and transport the materials from the site to the Governments crusher site.

C. Contractor shall dispose of the creosoted timbers, piles, crainrail and railroad ties as specified in Section 01355 ENVIRONMENTAL PROTECTION.

3.3 BACKFILL EXCAVATIONS

A. Areas excavated as a result of removals shall be mechanically backfilled and compacted to in accordance with Section 02315N EXCAVATION AND FILL, unless otherwise specified or shown on the plans.

B. The Contractor shall notify the Contracting Officer 24 hours in advance of when the compacted material will be ready for testing by the

Government.

3.4 REMOVAL OF ABANDONED CONDUITS AND SUBSTRUCTURES

A. Abandoned conduits and substructures encountered or called to be abandoned shall be handled in conformance with Subsection 306-5 of the Reference Specification.

B. Capping locations shall be provided to the Contracting Officer in the form of a dimensioned drawing.
C. Where abandoned substructures and utilities are to be removed, the following shall be done before removing or cutting the substructures:

1. Tap the line and determine if the line contains any kind of liquid or gaseous material.

2. If the line is empty, or filled with concrete or mud slurry, it may be cut, capped, or plugged, or removed as directed by the Contracting Officer.

3. If the line is found to contain a liquid or gaseous material, the material shall be identified, removed, and disposed in accordance with applicable regulations. A testing laboratory selected by the Contracting Officer will identify material. Such work will be considered a change of work.

3.5 PAVEMENT REMOVALS

A. Remove asphalt concrete pavement in conformance with Subsection 300-1.3.2 of the Reference Specification, except where the removal line will be a join line the line shall be saw cut to a 2inch minimum depth to provide a butt join.

B. Removal of concrete pavement as shown on the plans shall conform to Subsection 300-1.3.2 (b and c) of the Reference Specification, except the saw cut shall be to a depth or 2 inches.

C. Existing base material below the pavements, if clean, may be used for fill or removed.

3.6 AS-BUILT PILE SURVEY

Contractor shall submit As-built Pile Survey drawings after completion of the demolition in the southwest slip. Prior to removal of any piles, Contractor shall survey all piles, recording pile location (bent and row number), geographical co-ordinates of each pile and pile size. The top elevation of the piles left in place after removal shall also be recorded. An "as-built" pile location plan to scale with survey stations and the records of the piles remaining in place shall be submitted to the Contracting Officer within two weeks after completion of the demolition.

3.7 REMOVAL OF REMAINING WATERSIDE PORTIONS OF THE WORK BAY AND TRANSFER PLATFORM

A. The land side portions of the work bay and transfer platforms were removed under a separate contract. Contractor shall remove remaining waterside portions of work bay and transfer platform as shown on the plans. Refer to plans for reference documents of portions removed under separate contract.

B. Remove all waterside structures per the requirements of the permit.

C. Remove all hazardous material before beginning demolition per Section 1.4 of this Specification.

D. Remove and dispose of all timber, electrical, mechanical, metals, hardware and other miscellaneous materials before demolishing the concrete structure. Do not allow materials to enter waters. Completely demolish, remove and dispose as stated below:

1. All remaining waterside portions of the work bay and transfer platform as shown on the plans.

2. Concrete piles shall be cut at mudline and removed and disposed.

3. Timber and composite fender piles shall completely removed and disposed.

4. All piles shall be surveyed prior to removal per Section 3.7 of this specification.

5. Other obstructions as indicated on the plans.

E. Concrete rubble shall be completely captured and will not be allowed to drop into the water. This shall be accomplished by one or more of the following methods:

1. Saw concrete structure into individual pieces and lift to shore or barge using slings and crane.

2. Place barge or floats underneath deck structure to completely capture all rubble, dust, debris, etc. from the demolition process.

F. Care shall be taken in demolishing structures so as not to cause damage to adjacent structures, pavements, utilities, and other features to remain, including equipment and property of others. The Contractor shall repair or replace at no additional cost to the Government all adjacent structures and features that are intended to remain in place and damaged by the Contractor.

G. The Contractor will be permitted to jet piles during removal. Jetting shall take place per the requirements of the permit.

3.8 REMOVAL OF REMAINING WATERSIDE PORTIONS OF THE TIMBER WHARF STRUCTURE

A. The land side portions of the timber wharf structure where removed under a separate contract. Contractor shall remove remaining waterside

portions of the timber wharf structure as shown on the plans. Refer to plans for reference documents of portions removed under separate contract.

B. Remove all waterside structures per the requirements of the permit.

C. Remove all hazardous material before beginning demolition per Section 1.4 of this Specification.

D. Remove timber piles completely by use of a vibrating extractor. Jetting of piles will be permitted A minimum effort of two pulls or attempts to remove the pile must be made, even if the first attempt results in the pile breaking. Removal attempts may requite the use of a diver if the pile breaks close to the mud line. If after two attempts the pile cannot be removed, the pile may be left in place and cut at the existing ground line. Intentional snapping or breaking of piles will not be permitted.

E. Timber deck structure and timber piles shall be completely captured or removed if dropped in the water.

F. All piles shall be surveyed prior to removal per Section 3.7 of this specification.

3.9 REMOVAL OF REMAINING WATERSIDE PORTIONS OF SHIPBUILDING WAY AND CRANEWAY STRUCTURE

A. The land side portions of the shipbuilding way and crane way structure where removed under a separate contract. Contractor shall remove remaining waterside portions of the shipbuilding way and crane way structure as shown on the plans. Refer to plans for reference documents of portions removed under separate contract.

B. Remove all waterside structures per the requirements of the permit.

C. Remove all hazardous material before beginning demolition per Section 1.4 of this Specification.

D. Portions of shipbuilding way and crane way structure to be removed shall be removed completely. If portions of structure are dropped into water they shall be completely removed.

E. All piles shall be surveyed prior to removal per Section 3.7 of this specification.

3.10 DEBRIS BARRIER AND SILT CURTAIN

Install debris barrier and silt curtain containment per approved plans prior to demolition. Maintain, repair and redeploy during the demolition as necessary to comply with permits and at the direction of the Contracting Officer.

A. All demolition debris, dust, sediments, silt, water runoff and other deleterious substances inadvertently dropped into the waters shall be

completely contained by the barrier and silt curtain during the demolition. Rubbish, garbage, chemical, sanitary, hazardous and oily wastes shall not be permitted to enter any wastes at any time.

B. Breeches in containment shall be repaired immediately. Notify the Contracting Officer by fastest means possible of breeches that spill contaminants into surrounding waters. Contain spills by redeploying curtain, adding additional curtains, booms, vacuums, and other means to minimize consequences.

C. Clear floating debris from water surfaces daily.

D. Do not remove barriers and silt curtains until waters within the containment are free from debris, suspended materials and contaminants and meet the requirements of the permits.

E. Lowering of barriers and silt curtains for the passage of water-born equipment shall only be done when:

1. It is the only means available to allow passage.

2. All floating debris has been removed from the area to be lowered.

3. Suspended material has been minimized.

4. Passage will not constitute a breech in the containment and spillage into adjacent waters.

3.11 EXISTING STRUCTURES CAPACITY

The Government makes no claim or warrantee of the structural capacity or suitability of any existing structures to safely support the Contractor's equipment. Contractor shall make own investigations of the capacity and suitability prior to submission of bid. In the event that any or all of the structures are found not capable or suitable of safely supporting Contractor's equipment, Contractor shall employ safe means and methods for the demolition at no additional cost to the Government.

3.12 COORDINATION WITH WICK DRAIN PLACEMENT

Demolition of waterside structures are to be performed in areas that require wick drains to be installed under this contract. Contractor shall be responsible for any obstructions to wick drain placement that are caused by demolition debris being dropped and left in the water.

3.13 POTHOLING

A. Contractor shall pothole underground utilities shown on plans prior to beginning excavation. The pothole shall expose and verify the horizontal location and depth of each utility crossing an excavation, proposed utilities, or track work.

B. The Contractor shall notify Underground Service Alert and the

Contracting Officer 48 hours prior to the start of pot holing.

C. The Contractor shall prepare an information data sheet for each pothole showing a sketch of the pothole location and giving information on:

1. Date of pot holing.

2. Pothole coordinates or distances to survey monuments or known above ground permanent landmarks.

3. Top and bottom elevations.

4. Size and description of utility.

5. Special conditions encountered during the pot holing.

6. Name of pot holing supervisor.

7. Name of utility representative contacted prior to pot holing.

D. A copy of the data sheet shall be given to the Contracting Officer for the Governments records.

3.14 SOIL CONTAMINATED WITH HYDROCARBONS (IF ANY)

A. Should the Contractor discover soil contaminated with hydrocarbons, notify the Contracting Officer immediately.

B. Soil contaminated with hydrocarbons shall be removed and disposed of per regulations for disposal of such materials and in conformance with REGULATORY REQUIREMENTS Section and shall be paid for in conformance with the corresponding contingency item of the Proposal Schedule.

3.15 DEWATERING

There shall be no dewatering allowed. Work below the ground water including trenching and excavation shall be performed in the wet.

3.16 CLEAN-UP

Upon completion of the project, remove excess materials, equipment, and debris from the site and the adjacent streets, and leave area in broom-clean condition.

3.17 UTILITIES

Existing utilities shall be removed as indicated. When utility lines are encountered that are not indicated on the plans, the Contracting Officer shall be notified prior to further work in that area.

3.18 DISPOSITION OF MATERIAL

Title to material and equipment to be demolished, except Government salvage and historical items, is vested in the Contractor upon receipt of notice to

proceed. The Government will not be responsible for the condition, loss or damage to such property after notice to proceed.

3.18.1 Salvageable Items and Material

3.18.1.1 Material Salvaged for the Contractor

Material salvaged for the Contractor shall be stored as approved by the Contracting Officer and shall be removed from property before completion of the contract. Material salvaged for the Contractor shall not be sold on the site.

3.18.1.2 Items Salvaged for the Government

Salvaged items to remain the property of the Government shall be removed in a manner to prevent damage, and packed or crated to protect the items from damage while in storage or during shipment. Items damaged during removal or storage shall be repaired or replaced to match existing items. Containers shall be properly identified as to contents.

3.18.2 Unsalvageable Material

Concrete, masonry, and other noncombustible material, except concrete permitted to remain in place, shall be legally disposed of offsite.

3.19 CLEAN UP

Debris and rubbish shall be removed from basement and similar excavations. Debris shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

-- End of Section --

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SECTION 02225

PIPELINE AND CABLE REMOVAL

04/02

Utility Removal as part of the Port of Los Angeles Channel Deepening Project

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SECTION 02225

PIPELINE AND CABLE REMOVAL
04/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

American Society for Testing and materials (ASTM)

ASTM A 36	Structural Steel

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

GOVERNMENT REGULATIONS

29 CFR Part 1910.120	Occupational Safety and Health Standards
OSHA 1910.1001	Asbestos

California Health and Safety Code

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Permits and Certificates

Pipeline and Cable Removal Plan

Health and Safety Plan for Pipeline and Cable Removal (HASP)

SD-07 Certificates

Marine Chemist Certificates

SD-11 Closeout Submittals

As-built Pipeline and Cable Location Plan; G

1.3 GENERAL REQUIREMENTS

1.3.1 General

The work includes removal and salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed from Government and Port of Los Angeles property daily, unless otherwise directed, to avoid accumulation at the removal site. Materials that cannot be removed daily shall be stored in areas specified by the Contracting Officer. In the interest of occupational safety and health, the work shall be performed in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections. In the interest of conservation, salvage shall be pursued to the maximum extent possible (in accordance with Section 01572 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT, if applicable); salvaged items and materials shall be disposed of as specified.

1.3.2 Specific Work Included

a. Work required to remove underwater pipelines and cables crossing the Main and East Basin Channels of the Port of Los Angeles includes furnishing transportation, labor, materials, and equipment, disposal, salvage, re-use, recycling, and solid resources management. Details on pipe location, material, depth below MLLW elevation and depth below channel bottom are as shown on the plans. The pipelines and cables to be removed include:

Reference No.	Description
1	10" and 24" Steel oil pipe lines (ExxonMobil Oil).
3	36" steel oil pipe line (ExxonMobil Oil).
5	One Armored telephone cable (Pacific Telephone).
6	24" cast iron pipe waterline (Los Angeles department of Water and Power).
7	20" cast iron pipe waterline (Los Angeles Department of Water and Power).
8	Two 20" cast iron sewer pipe (Los Angeles Department of Public Works).
9	30" ductile iron pipe sewer (Los Angeles Department of Public Works).
10	30" ductile iron pipe sewer (Los Angeles Department of Public Works).
11	Two 6" armored power cables (Los Angeles Department of Water and Power).

b. Pipeline and cable removal work shall be performed in the manner described in SECTION 01200 GENERAL REQUIREMENTS.

1.3.3 Site Restrictions

a. Contractor shall be responsible for obtaining access to tenant holder property for performing work requiring shore access. Harbor property security procedures require the Contractor to coordinate security and access with each tenant prior to entering or using tenant controlled pier area or facilities.

b. Contractor shall coordinate with each tenant holder's representative regarding site access and Contractor work hours while on or using the tenant area or facilities.

c. Contractor shall be responsible for any damage to tenant or Port of Los Angeles property or facilities resulting from Contractor pipeline and cable removal operations. Contractor shall repair all such damages to the satisfaction of the tenant or Port of Los Angeles without additional cost to the tenant, the Government, or the Port of Los Angeles.

1.3.4 Schedule Restrictions

The pipelines and cables shall not be removed until the date indicated below. Contractor shall confirm each of the removal dates with the utility owners on a regular basis throughout the contract duration and relate changes to the Contracting Officer.

Line Available for Removal	Date
1. 10" and 24" Steel oil pipe lines	10/01/03
3. 36" steel oil pipe line	10/01/03
5. One Armored telephone cable	08/01/02
6. 24" cast iron pipe waterline	09/15/03
7. 20" cast iron pipe waterline	09/15/03
8. Two 20" cast iron sewer pipe	03/10/03
9. 30" ductile iron pipe sewer	03/10/03
10. 30" ductile iron pipe sewer	08/01/02
11. Two 6" armored power cables	08/15/03

1.4 Points of Contact

For information regarding the existing pipelines and cables in the project area, the following points of contact are provided:

ExxonMobil
Bill Long
Jacobs Engineering (714)503-3757

Pipeline Ref. No.	Line	Berth
1	Oil-24" and 10"	B176-215
2	Oil-16" and 10"	B176-215
3	Oil-36"	B81-236

Pacific Bell
Juan Sicairos 310-515-4154

Pipeline Ref. No.	Line	Berth
4	Telephone Cable	B84-234
5	Telephone Cable	B92-230

Department of Water and Power
Water
Joe Porras 213-367-1229
Todd Le 213-367-1217

Pipeline Ref. No.	Line	Berth
6	Water-24"	B176-215
7	Water-20"	B84-234
	Reclaim Water-36"	B151-224

Power
Thomas M. Fujiwara 213-367-2664
Dennis Y. Morinaga 213-367-0152

Cable Ref. No.	Line	Berth
11	Power Cables	B173-219

Department of Public Works
Lynn Hnami-Cummings 310-732-4693
Pablo Vasquez 310-732-4694

Pipeline Ref. No.	Line	Berth
8	Sewer-2-20" siphons	B176-215
9	Sewer-30" Force Main	B84-234
10	Sewer-30" Force Main	B170-222

Navy
Joe Trani 310-900-6960 ext.1106

Pipeline Ref. No.	Line	Berth
12	Fuel Lines 3-18"	B96-226

GATX
Donn Quiunn 714-560-4940

Pipeline Ref. No.	Line	Berth
13	oil-36"	173-219

1.5 PROTECTION

1.5.1 Protection of Personnel

The Contractor shall submit, implement, and maintain a Health and Safety Plan for Pipeline and Cable Removal(HASP)operations. The plan shall contain but not limited to the following:

a. The HASP shall cover all measures to be taken to protect on and off site populations from exposures to hazardous wastes/materials during activities under the workplan. The HASP shall include but not limited to: key personnel, responsibilities and qualifications, job hazard analysis, risk assessment summary, exposure monitoring plan, protective equipment, work zones, and security measures, decontamination procedures, general safe work practices, standard operation procedures, hospital locations and maps, contingency plans, training requirements, and documentation of the medical surveillance program.

b. The HASP shall comply with 29 CFR Part 1910.120.

c. Contractor shall cease operation and Notify the Contracting Officer immediately if the work appears to endanger life, facilities or property. Operations shall not be resumed until safe conditions have been restored.

1.5.2 Environmental Protection

a. Provide on-site standby oil booms for containment of hydrocarbon for immediate deployment for possible containment of hydrocarbon and debris during the course of oil pipe line removal operations. Oil boom shall be stockpiled adjacent to one end of the pipe line being removed and shall be used only if necessary.

b. Asbestos fiber material may be contained in pipe line coatings. The handling and disposal of hazardous materials shall be in accordance with applicable regulatory requirements including but not limited to Hazardous Waste Control laws and California Health and Safety Code. Any asbestos encountered shall be handled and disposed of in accordance with OSHA 1910.1001.

c. Oil pipeline No. 3 - 36" Steel Oil Pipeline is expected to contain asbestos material.

PART 2 PRODUCTS

2.1 OIL BOOM

Oil boom to contain hydrocarbon and debris shall be ACME Products CO. "O.K. Corral" distributed by PENCO (310) 547-0919 or American Marine Inc. Simplex (305) 636-5783.

2.2 PIPE END CAPS

Pipe end caps shall be 1/2" ASTM A 36 steel.

PART 3 EXECUTION

3.1 GENERAL

3.1.1 Permits and Certificates

The Contractor shall obtain all necessary permits and certificates required for the performance of the pipeline and cable removal work. Submit copies of the required Permits and Certificates prior to performing work requiring permits and certifications.

3.1.2 Marine Chemist Certificates

Submit Marine Chemist Certificates showing that the oil pipelines are cleared to accommodate torch cutting work and removal. Submit 7 days prior to initiating torch cutting or removal of oil pipelines.

3.1.3 As-built Pipeline and Cable Location

Submit a As-built Pipeline and Cable Location Plan, 7 days before completion of construction. The as-built plan shall show pipelines and cables designated for removal which have been determined to be abandoned in place by the Contracting Officer.

3.2 OWNERSHIP AND DISPOSAL

Materials removed other than those indicated on the plans to remain or salvage, shall become the property of the Contractor and be legally disposed of off Government and Port of Los Angeles Property.

3.3 PIPELINE AND CABLE MARKERS

Some of the pipelines and cables are identified with a marker sign where the pipeline or cable exits at the pierhead line, on both sides of the channel. Generally the pipeline or cable location will lie in a straight line between two exit signs. Contractor shall be responsible for establishing the actual line of crossing and depth.

3.4 REMOVAL

3.4.1 General

a. Submit the Pipeline and Cable Removal Plan 14 days prior to any pipeline and cable removal work. The plan shall detail procedures for safe conduct of work. The plan shall include but not be limited to, the careful removal and disposition of materials specified to be salvaged, protection of property which is to remain undisturbed, and coordination with other work in progress. The procedures shall include a detailed description of the methods and equipment to be used for each

operation, and the sequence of operations in accordance with EM 385-1-1.

b. Contractor work schedule shall not interfer with any ship traffic. Contractor shall contact Port of Los Angeles Port Pilot for ship traffic schedule and to advise the Port Pilot of planned Contractor operations.

c. Contractor may be required to demobilize and mobilize to accommodate ship traffic during removal operations. This demobilization and mobilization shall be at no additional cost to the Government or Port of Los Angeles.

d. Contractor shall provide a radio linkage between the Port Pilot and himself during pipeline and cable removal operations. The communications source shall be on all Contractor barges, boats and vessels that are participating in the pipeline and cable removal operations. Contractor shall inform the Port Pilot at the time that vessels leave berth(s) to perform work in the Channel or Turning Basin and at the time they leave the Channel or Turning Basin to return to berth(s).

e. Pipelines and Cables shall not be removed by dredging.

f. Quarry run, rip rap and other existing bottom material in areas outside channel deepening dredging operations shall be restored and/or replaced in kind to its original location and as shown on the plans.

g. Prior to bid, Contractor shall review the project site to determine access requirements.

3.4.2 Oil Pipe Lines

a. By the removal dates indicated in paragraph: Schedule Restrictions, the oil pipe line interiors will have been cleaned and purged of hydrocarbon residue. In addition, all oil lines will have been grouted with sand-cement slurry.

b. The Contractor shall provide stand-by oil booms ready for use near the pipeline removal areas and shall be used should the hydrocarbon or debris rise to the surface during oil pipeline removal. Oil shall be removed per the Environmental Protection Plan.

3.4.3 Grout

All pipelines (oil, water, and sewer) to be removed will have been grouted with sand-cement slurry by the owners prior to removal.

3.4.4 End Capping

Portions of pipe lines left in place shall have their ends capped as indicated on the plans with with 1/2" ASTM A 36 steel plate welded to the pipe with a 1/4" continuous fillet weld.

3.4.5 Excavation

If the pipeline and cable work requires trenching, the Contractor shall side cast trench material, remove pipeline or cable, then replace trenched material back into trench. The Contractor shall minimize transporting material through the water column, and shall be monitored in accordance with SECTION 01355 ENVIRONMENTAL PROTECTION.

3.5 INSPECTION

The Contracting Officer will inspect the bottom of the channel at each pipeline and cable removal site for any hazardous condition or deficiency in performance of the work. Contractor shall correct any hazardous condition or deficiency in work that is found.

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SECTION 02315N

EXCAVATION AND FILL

05/02

earthwork requirements for buildings, roads, and utilities for normal, routine construction

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SECTION 02315N

EXCAVATION AND FILL
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PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 33	(1999; Rev. A) Concrete Aggregates
ASTM C 136	(1996; Rev. A) Sieve Analysis of Fine and Coarse Aggregates
ASTM D 698	(1991; R 1998) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft (600 kN-m/m))
ASTM D 1140	(1997) Amount of Material in Soils Finer Than the No. 200 (75-Micrometer) Sieve
ASTM D 1556	(1990; R 1996) Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 1557	(1991; R 1998) Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft (2,700 kN-m/m))
ASTM D 2487	(1998) Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D 2922	(1996) Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D 3017	(1996) Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
ASTM D 4318	(1998) Liquid Limit, Plastic Limit, and Plasticity Index of Soils

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

1.2 DEFINITIONS

1.2.1 Rock

Solid homogeneous interlocking crystalline material with firmly cemented, laminated, or foliated masses or conglomerate deposits, neither of which can be removed without systematic drilling and blasting, drilling and the use of expansion jacks or feather wedges, or the use of backhoe-mounted pneumatic hole punchers or rock breakers; also large boulders, buried masonry, or concrete other than pavement exceeding 1/2 cubic yard in volume Removal of hard material will not be considered rock excavation because of intermittent drilling and blasting that is performed merely to increase production.

1.2.2 Cohesive Materials

Materials ASTM D 2487 classified as GC, SC, ML, CL, MH, and CH. Materials classified as GM and SM will be identified as cohesive only when the fines have a plasticity index greater than zero.

1.2.3 Cohesionless Materials

Materials ASTM D 2487 classified as GW, GP, SW, and SP. Materials classified as GM and SM will be identified as cohesionless only when the fines have a plasticity index of zero.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-06 Test Reports

Fill and backfill test

Select material test

Density tests

Porous fill

1.4 DELIVERY, STORAGE, AND HANDLING

Perform in a manner to prevent contamination or segregation of materials.

1.5 PIER 400 SURCHARGE REMOVAL

This item includes, but not limited to, the removal of the Pier 400 surcharge material in the northwesterly corner. Remove all of the unsuitable material below final grade and replace with compacted coarse grained material. Contractor shall remove surcharge material from the Pier 400 surcharge material site and transport this to Pier 400 submerged

material storage site as indicated on the plans. In addition, during the removal process, the soils below the final grade will be monitored for their suitability as a future subgrade by the Contracting Officer. Soft areas with a high percentage of fine grained soils will be replaced at the direction of the Contracting Officer. Contractor shall replace fine grained soils with on-site coarse grained soils from the Pier 400 surcharge material.

Contractor shall maintain at all times all course grained material on site for soil replacement below final grade. Contractor shall not remove coarse grained material the site until all unsuitable material is replaced with coarse grain. Contractor may remove fine grained materials off site at any time.

The Contractor shall include in the bid price for the Pier 400 surcharge removal, transportation and placement based on the following criteria:

a) Surface elevations shown on the plans may change slightly. The Contractor shall perform topographic surveys to establish existing elevations before work is started.

c) The report "Subsurface Conditions Underlying Pier 400 Phase 2 Terminal Surcharges", February 28, 2002, Port of Los Angeles, California by Fugro West Inc. provides information on the soils conditions to be expected at the northwesterly corner of Pier 400.

This report has been used for developing an estimate for replacement of fine grained materials up to 10' below final grade, with coarse grained materials. This report is a .pdf file attached to this specification package

d) The quantities for removal of surcharge material to Pier 400 Submerged Material Storage Site and for replacement of fine grained material by coarse grained material are for bid purposes. Actual quantities may differ, but will not be a reason for adjustment of the contract unit rates.

e) Excavations for replacement of fine grained with coarse grained material shall not extend deeper than 10 ft below final grade.

f) Maintaining coarse grained material on site until unsuitable is replaced will require rehandling.

g) Transportation between Pier 400 surcharge material and Pier 400 Submerged Material Storage site shall be by marine equipment.

1.6 SOUTHWEST SLIP AREAS 1 AND 2 TRANSFER AND REMOVAL AND PIER 300

This item includes, but is not limited to, clearing and transferring the Southwest Slip Fill Areas 1 and 2 surcharge materials. Final grade shall be as shown on the plans after the clearing of materials from both fill areas. The remaining surcharge material and leave surcharge material shall be transported to Pier 300 Expansion Site, where it will be used as surcharge material for the construction of the Pier 300 Expansion.

The Contractor shall include in the bid pricing for the removal of surcharge material from the Southwest Slip Areas 1 and 2, transportation and placement based on the following:

a) The finished elevation of the final grades is +14.0 ft MLLW for Areas 1 and 2.

b) Any remaining material above the finished final grade levels is considered as excess surcharge material.

c) Surcharge material will initially be placed on Area 2, to fit in the overall construction schedule.

d) After completion of the surcharge period for Area 2, excess surcharge material will be transported by truck, earth moving equipment, or other suitable transportation means to Area 1 to be used in conjunction with additional material for surcharge on this area, in accordance with the Dredge and Disposal Plan.

e) Transportation of excess surcharge material from Area 2 to Area 1 shall not be over the adjacent terminal area.

f) Contractor shall not interfere with ongoing terminal operations in adjacent terminal areas.

g) After completion of the Area 1 surcharge, excess surcharge material will be transported by barge to the Pier 300 Expansion site. This material will be used for construction of the Pier 300 expansion fill and/or surcharge material.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 EXCAVATION

Excavate to contours, elevation, and dimensions indicated on the plans and as directed by the Contracting Officer, where necessary. Reuse excavated materials that meet the specified requirements for the material type required at the intended location. Keep excavations free from water. Excavate soil weakened by Contractor's operations, soils softened or made unsuitable for subsequent construction due to exposure to weather. Backfill with Pier 400 surcharge material and compact to 90 percent of ASTM D 698 maximum density. Unless specified otherwise, backfill excavations cut below indicated depth with Pier 400 excess surcharge material and compact to 90 percent of ASTM D 698 maximum density.

3.2 FILLING AND BACKFILLING

Fill and backfill to contours, elevations, and dimensions indicated on the plans and as directed by the Contracting Officer, where necessary. Compact

each lift before placing overlaying lift.

Place in 12 inch lifts. Compact areas not accessible to rollers or compactors with mechanical hand tampers. Aerate material excessively moistened by rain to a satisfactory moisture content. Finish to a smooth surface by blading, rolling with a smooth roller, or both.

3.3 COMPACTION

Expressed as a percentage of maximum density. Determine in-place density of existing subgrade; if required density exists, no compaction of existing subgrade will be required.

Compact top 12 inches of subgrades to 90 percent of ASTM D 698. Compact fill and backfill materials to 90 percent of ASTM D 698.

3.4 FINISH OPERATIONS

3.4.1 Grading

Final grades shall be as indicated on plans within +/- 3 inches. Grade areas to drain water away from structures. For existing grades that will remain but which were disturbed by Contractor's operations, grade as directed or return to existing condition.

3.4.2 Protection of Surfaces

Protect newly graded areas from traffic, erosion, and settlements that may occur. Repair or reestablish damaged grades, elevations, or slopes.

3.5 FIELD QUALITY CONTROL

3.5.1 Sampling

Take the number and size of samples required to perform the following tests.

3.5.2 Testing

Perform one of each of the following tests for each material used. Provide additional tests for each source change.

3.5.2.1 Material Testing

Submit Fill and backfill test.

Test fill and backfill material in accordance with ASTM C 136 for conformance to ASTM D 2487 gradation limits; ASTM D 1140 for material finer than the No. 200 sieve; ASTM D 4318 for liquid limit and for plastic limit; ASTM D 698 or ASTM D 1557 for moisture density relations, as applicable.

3.5.2.2 Testing

Submit Select material test.

Test select material in accordance with ASTM C 136 for conformance to ASTM

D 2487 gradation limits; ASTM D 1140 for material finer than the No. 200 sieve; ASTM D 698 or ASTM D 1557 for moisture density relations, as applicable. Submit 2 copies of the test results to the Contracting Officer.

3.5.2.3 Porous Fill Testing

Submit Porous fill.
Test porous fill in accordance with ASTM C 136 for conformance to gradation specified in ASTM C 33. Submit 2 copies of the test results to the Contracting Officer.

3.5.2.4 Density Tests

Submit Density tests.
Test density in accordance with ASTM D 1556, or ASTM D 2922 and ASTM D 3017. When ASTM D 2922 and ASTM D 3017 density tests are used, verify density test results by performing an ASTM D 1556 density test at a location already ASTM D 2922 and ASTM D 3017 tested as specified herein. Perform an ASTM D 1556 density test at the start of the job, and for every 10 ASTM D 2922 and ASTM D 3017 density tests thereafter. Test each lift at randomly selected locations every 8,000 square feet of existing grade in fills. Submit 2 copies of the test results to the Contracting Officer.

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SECTION 02373

GEOTEXTILE

04/02

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SECTION 02373

GEOTEXTILE
04/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D123	(1993) standard Terminology of Terms Related to Textiles
ASTM D1683	(1990) Failure in Sewn Seams of Woven Fabrics
ASTM D 3786	(1999) (1987) Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics-Diaphragm Bursting Strength Tester Method
ASTM D 4354	(1999) Sampling of Geosynthetics for Testing
ASTM D 4355	(1999) Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon-Arc Type Apparatus)
ASTM D 4491	(1999a) Water Permeability of Geotextiles by Permittivity
ASTM D 4533	(1991; R 1996) Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	(1991; R 1997) Grab Breaking Load and Elongation of Geotextiles
ASTM D 4751	(1999a) Determining Apparent Opening Size of a Geotextile
ASTM D 4759	Practice for Determining the Specification Conformance of Geosynthetics
ASTM D 4833	(2000) Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products

ASTM D 4873	(2001) Identification, Storage, and Handling of Geosynthetic Rolls and Samples
ASTM D 4884	(1990) Seam Strength of Sewn Geotextiles

1.2 MEASUREMENT

Measurement shall be made of the as-built surface area in square yards covered by a double layer of geotextile as required by the drawings and specifications. Allowance will be made for geotextile in anchor and/or drainage trenches but no allowance will be made for waste, overlaps on each individual layer, damaged materials, repairs, or materials used for the convenience of the Contractor.

1.3 PAYMENT

Geotextile installed and accepted will be paid for at the respective contract unit price in the bidding schedule. This unit price shall include the cost of materials, equipment, installation, testing, and other costs associated with placement of the geotextile.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. Submit in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Geotextile Installation Plan and Schedule; G

The contractor shall submit a plan and schedule for installation of geotextile which describes equipment, storage, installation, sequence of placement, and relationship to other work elements. This plan and schedule shall be provided for review by the Contracting Officer prior to placement of geotextile.

SD-06 Test Reports

Tests for Geotextile

Upon request, the contractor shall supply quality control and quality assurance tests for the geotextile. All samples provided shall be from the same production lot as will be supplied for the contract, and shall be the full manufactured width of the geotextile by at least 3.1 meters (10 feet) long, except that samples for seam strength may be a full width sample folded over and the edges stitched for a length of at least 1.5 meters (5 feet) . Samples submitted for testing shall be identified by manufacturers lot designation. For needle punched geotextile, the manufacturer shall certify that the geotextile has been inspected using permanent on-line metal detectors and does not contain any needles. Reports shall provided a minimum of 7 days prior to

scheduled use.

SD-07 Certificates

Geotextile Mill Certificates or Affidavit

All brands of geotextile and all seams to be used shall be accepted on the basis of mill certificates or affidavits. The Contractor shall furnish the Contracting Officer, in duplicate, a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the geotextile. The mill certificate or affidavit shall attest that the geotextile meets the chemical, physical and manufacturing requirements stated in this specification.

SD-03 Product Data

Thread

A minimum of 7 days prior to scheduled use, proposed thread type for sewn seams along with data sheets showing the physical properties of the thread.

Manufacturing Quality Control Sampling and Testing

A minimum of 7 days prior to scheduled use, manufacturer's quality control manual.

SD-04 Samples

Quality Assurance Samples and Tests

Samples for quality assurance testing; 7 days shall be allotted in the schedule to allow for testing.

1.5 DELIVERY, STORAGE AND HANDLING

Delivery, storage, and handling of geotextile shall be in accordance with ASTM D 4873.

1.5.1 Delivery

The Contracting Officer shall be notified a minimum of 24 hours prior to delivery and unloading of geotextile rolls. Only approved geotextile shall be delivered to the project site. All geotextile shall be labeled, shipped, stored, and handled in accordance with ASTM D 4873 and as specified herein.Rolls shall be packaged in an opaque, waterproof, protective plastic wrapping. The plastic wrapping shall not be removed until deployment. If quality assurance samples are collected, rolls shall be immediately rewrapped with the plastic wrapping. Geotextile or plastic wrapping damaged during storage or handling shall be repaired or replaced, as directed. Each roll shall be labeled with the manufacturer's name, geotextile type, roll number, roll dimensions (length, width, gross weight), and date manufactured. Geotextile wrapping damaged as a result cf

delivery, storage, or handling shall be repaired or replaced, as directed at no additional cost to the Government.

1.5.2 Handling

No hooks, tongs, or other sharp instruments shall be used for handling geotextile. Geotextile shall not be dragged along tile ground. Any geotextile determine to be damaged as a result of poor handling shall be removed from the site and replaced, at no additional cost to the Government, by additional geotextile meeting requirements of this specification.

1.5.3 Storage

During all periods of shipment and storage, the geotextile shall be protected from direct sunlight, ultra-violet rays, temperatures greater than 140 degrees F or less if recommended by the manufacturer, mud, dirt, dust and debris. Geotextile shall be stored in areas where water cannot accumulate, elevated off the ground, and protected from conditions that will affect the properties or performance of the geotextile.

PART 2 PRODUCTS

2.1 RAW MATERIALS

2.1.1 Geotextile

Submit Geotextile Mill Certificates or Affidavit

Submit Tests for Geotextile

2.1.1.1 General

The geotextile shall be a woven pervious sheet of plastic yarn as defined by ASTM D123. The geotextile shall equal or exceed the minimum average roll values listed in TABLE 1, MINIMUM PHYSICAL REQUIREMENTS FOR GEOTEXTILE. Strength values indicated in the table are for the weaker principal direction.

TABLE 1
MINIMUM PHYSICAL REQUIREMENTS FOR GEOTEXTILE

PROPERTY	UNITS	ACCEPTABLE VALUES	TEST METHOD
GRAB STRENGTH	N (lb)	1110 (250)	ASTM D 4632
BURST STRENGTH	kPa (psi)	3300 (480)	ASTM D 3786
PUNCTURE	N (lb)	580 (130)	ASTM D 4833
TRAPEZOID TEAR	N (lb)	260 (60)	ASTM D 4533
APPARENT OPENING			

TABLE 1
MINIMUM PHYSICAL REQUIREMENTS FOR GEOTEXTILE

SIZE	U.S. SIEVE	70 - 100	ASTM D 4751
PERMITTIVITY	SEC -1	0.10 - 0.30	ASTM D 4491
ULTRAVIOLET DEGRADATION	PERCENT	70 AT 500 HRS	ASTM D 4355

2.1.1.2 Geotextile Fiber

Fibers used in the manufacturing of the geotextile shall consist of along-chain synthetic polymer composed of at least 85 percent by weight of polyolefins, polyesters, or polamides. Stabilizers and/or inhibitors shall be added to the base polymer if necessary to make the filaments resistant to deterioration caused by ultraviolet light and heat exposure. Reclaimed or recycled fibers or polymer shall not be added to the formulation. Geotextile shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including the edges. The edges of the geotextile shall be finished to prevent the outer fiber from pulling away from the geotextile

2.1.2 Thread

Submit Thread.

The seams of the geotextile shall be sewn with thread of a material meeting the chemical requirements given above for geotextile yarn or shall be bonded by cementing or by heat. The sheets of geotextile shall be attached at the factory or another approved location. Seams shall be tested in accordance with method ASTM D1683. The strength of the seam shall be not less than 90 percent of the required grab tensile strength of the unaged geotextile in any principal direction.

2.1.3 Securing Pins

Securing pins or other approved means of anchoring shall be used to hold the geotextile in place until subsequent material is placed on the geotextile. Other appropriate means to prevent movement such as staples, sand bags, and stone could also be used. The number of pins used shall be sufficient to maintain the geotextile in place prior to and during placement of subsequent fill material.

2.2 QUALITY CONTROL SAMPLING AND TESTING

2.2.1 QUALITY ASSURANCE SAMPLES AND TESTS

Submit Quality Assurance Samples and Tests.
Submit Manufacturing Quality Control Sampling and Testing.
The Manufacturer shall be responsible for establishing and maintaining a quality control program to assure compliance with the requirements of the specification. Documentation describing the quality control program shall

be made available upon request. Manufacturing quality control sampling and testing shall be performed in accordance with the manufacturer's approved quality control manual. As a minimum, geotextiles shall be randomly sampled for testing in accordance with ASTM D 4354, Procedure A. Acceptance of geotextile shall be in accordance with ASTM D 4759. Tests not meeting the specified requirements shall result in the rejection of applicable rolls.

2.2.2 Site Inspections, Verifications and Testing

If requested by the Contracting Officer, geotextiles shall be randomly sampled in accordance with ASTM D 4354 (Procedure Method A) and factory seams shall be sampled at the frequency specified in ASTM D 4884. Samples shall be collected at approved locations upon delivery to the site at the request of the Contracting Officer. Samples shall be tested to verify that the geotextile meets the requirements specified in TABLE 1, MINIMUM PHYSICAL REQUIREMENTS FOR GEOTEXTILE. Samples shall be identified by manufacturers name, type of geotextile, lot number, roll number, and machine direction. Testing shall be performed at an approved laboratory. Test results from the lot under review shall be submitted and approved prior to deployment of that lot of geotextile. Rolls which are sampled shall be immediately rewrapped in their protective covering.

PART 3 EXECUTION

3.1 QUALITY ASSURANCE SAMPLES AND TESTS

3.1.1 Quality Assurance Samples

The Contractor shall provide assistance to the Contracting Officer in the collection of quality assurance samples. Samples shall be collected upon delivery to the site for quality assurance testing in accordance with ASTM D 4354, Procedure B. Lot size for quality assurance sampling shall be considered to be the shipment quantity of the product or a truckload of the product, whichever is smaller. The unit size shall be considered one roll of geotextile at a frequency of one per 100,000 square feet. Samples shall be identified with a waterproof marker by manufacturer's name, product identification, lot number, roll number, and machine direction. The date and a unique sample number shall also be noted on the sample. The outer layer of the geotextile roll shall be discarded prior to sampling a roll. Samples shall then be collected by cutting the full-width of the geotextile sheet a minimum of 3 feet long in the machine direction. Rolls which are sampled shall be immediately resealed in their protective covering.

3.1.2 Quality Assurance Tests

The Contractor shall provide quality assurance samples to an Independent Laboratory. Samples will be tested to verify that geotextile meets the requirements specified in Table 1. Test method ASTM D 4355 shall not be performed on the collected samples. Geotextile product acceptance shall be based on ASTM D 4759. Tests not meeting the specified requirements shall result in the rejection of applicable rolls.

3.2 INSTALLATION

3.2.1 Subgrade Preparation

Surface on which the geotextile will be placed shall be prepared, to a relatively smooth surface condition, in accordance with the applicable portion of this specification and shall be free from obstruction, debris, depressions, erosion feature, or vegetation Any irregularities will be removed so as to insure continuous, intimate contact of the geotextile with all the surface. Any loose material, soft or low density pockets of material, will be removed; erosion features such as rills, gullies etc. must be graded out of the surface before geotextile placement. Subgrade materials and compaction requirements shall be in accordance with Section 02315N EXCAVATION AND FILL.

3.2.2 Installation

3.2.2 General

The Contractor shall notify the Contracting Officer a minimum of 24 hours prior to installation of geotextile. Geotextile rolls which are damaged or contain imperfections shall be repaired or replaced as directed.

The geotextile shall be placed in the manner and at the locations shown on the drawings. At the time of installation, the geotextile shall be rejected if it has detects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation or storage.

The geotextile shall be laid flat and smooth so that it is in direct contact with the subgrade. The geotextile shall also be free of tensile stresses, folds, and wrinkles. On slopes steeper than 10 horizontal on 1 vertical, the geotextile shall be laid with the machine direction of the fabric parallel to the slope direction.

3.2.3 Placement

Submit Geotextile Installation Plan and Schedule.
The geotextile shall be placed in two layers as noted on the drawings with the long dimension perpendicular to the centerline of the dike and laid smooth and free of tension, stress, folds, wrinkles, or creases. The geotextile fabric shall be placed to provide no gap between adjacent pieces of geotextile fabric. Joints in the top fabric layer shall be staggered a minimum of 1 meter from joints in the bottom layer. Temporary pinning of the geotextile to help hold it in place until subsequent material is placed shall be allowed. The temporary pins shall be removed as the subsequent material is placed to relieve high tensile stress which may occur during placement of material on the geotextile. Trimming shall be performed in such a manner that the geotextile shall not be damaged in any way. The double layer shall extend 1 meter beyond the ends of new work areas.

3.3 SEAMS

3.3.1 Overlap Seams

Geotextile panels shall be continuously overlapped a minimum of 12 inches at all longitudinal and transverse joints. Where seams must be oriented across the slope, the upper panel shall be lapped over the lower panel. If approved, sewn seams may be used instead of overlapped seams.

3.3.2 Sewn Seams

Factory and field seams shall be continuously sewn on all slopes steeper than 1 vertical on 4 horizontal or at the locations shown on the drawings. The stitch type used shall be a 401 locking chain stitch or as recommended by the manufacturer. For field and factory seams which are sewn, the Contractor shall provide at least a 6 foot sample of sewn seam before the geotextile is installed. For seams that are field sewn, the seams shall be sewn using the same equipment and procedures as will be used for the production seams. If seams are sewn in both the machine and cross machine direction, samples of seams from both directions shall be provided. Quality Assurance seam samples shall be provided to the Government at the request of the Contracting Officer. Seam strength shall meet the minimum requirements specified in Table 1. The thread at the end of each seam run shall be tied off to prevent unraveling. Skipped stitches or discontinuities shall be sewn with an extra line of stitching with a minimum of 18 inches of overlap.

High strength thread should be used such that seam test should conform to ASTM D1683. The thread shall meet the chemical, ultraviolet, and physical requirements of the geotextile, and the color shall be different from that of the geotextile. The seam strength shall be equal to the strength required for the fabric in the direction across the seam. Overlapping J-type seams are preferable over prayer-type seams as the overlapping fabric reduces the chance of openings to occur at the seam. Double sewing shall be used specially for field seams to provide a safety factor against undetected missed stitches.

3.4 PROTECTION

Any damage to the geotextile during its installation or during placement of subsequent materials shall be replaced by the Contractor at no cost to the Government. The work shall be scheduled so that the covering of the geotextile with a layer of the specified material is accomplished within 7 calendar days after placement of the geotextile. Failure to comply shall require replacement of geotextile. The geotextile shall be protected from damage prior to and during the placement of other materials. Before placement of riprap or other materials, the Contractor shall demonstrate that the placement technique will not cause damage to the geotextile. In no case shall any type of equipment be allowed on the unprotected geotextile.

3.5 REPAIRS

Torn or damaged geotextile shall be repaired. Clogged areas of geotextile shall be removed. Repairs shall be performed by placing a patch of the same type of geotextile over the damaged area. The patch shall extend a minimum of 12 inches beyond the edge of the damaged area. Patches shall be continuously fastened using approved methods. The machine direction of the

patch shall be aligned with the machine direction of the geotextile being repaired. Geotextile rolls which cannot be repaired shall be removed and replaced. Repairs shall be performed at no additional cost to the Government

3.6 PENETRATIONS

Engineered penetrations of the geotextile shall be constructed by methods recommended by the geotextile manufacturer.

3.7 COVERING

Geotextile shall not be covered prior to inspection and approval by the Contracting Officer. Cover soil shall be placed in a manner that prevents soil from entering the geotextile overlap zone, prevents tensile stress from being mobilized in the geotextile, and prevents wrinkles from folding over onto themselves. On side slopes, soil backfill shall be placed from the bottom of the slope upward. Cover soil shall not be dropped onto the geotextile from a height greater than 3 feet. No equipment shall be operated directly on top of the geotextile without approval of the Contracting Officer. Equipment with ground pressures less than 7 psi shall be used to place the first lift over the geotextile. A minimum of 12 inches of soil shall be maintained between full-scale construction equipment and the geotextile. Cover soil material type, compaction, and testing requirements are described in Section 02315N EXCAVATION AND FILL. Equipment placing cover soil shall not stop abruptly, make sharp turns, spin their wheels, or travel at speeds exceeding 5 mph.

-- End of Section --

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SECTION 02600

STONEWORK

03/01

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SECTION 02600

STONEWORK
03/01

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 88	Test for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate.
ASTM C 127	Test Method for Specific Gravity and Absorption of Coarse Aggregate
ASTM C 131	(1989) Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C 136	Method for Sieve Analysis of Fine and Coarse Aggregate
ASTM C 295	Recommended Practice for Petrographic Examination of Aggregates for Concrete
ASTM C 1141	Substitute Ocean Water
ASTM D 3740	(1996) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E 548	(1994) General Criteria Used for Evaluating Laboratory Competence

U.S. ARMY CORPS OF ENGINEERS (USACE)

COE CRD-C 148	(1994) Method of Testing Stone for Expansive Breakdown on Soaking in Ethylene Glycol
COE CRD-C 169	(1997) Standard Test Method for Resistance of Rock to Wetting and Drying

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government: EDG represents the Engineering Division Geotechnical Branch. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Stone Source

Non-listed Quarry Quality Test Data; G

Testing Laboratory; G EDG

Equipment List

Stonework Plan and Schedule; G

Special Procedures; G

Daily Report of Operations

SD-04 Samples

Stone Samples

SD-06 Test Reports

Gradation Tests

Specific Gravity Tests

Rock Test Data

1.3 WORK INCLUDED

The work of this section consists of furnishing all transportation, labor, materials, equipment, and incidentals necessary to construct all project features comprising rock (stone), in whole or in part, in accordance with plans and specifications. Principal rock work items include the following:

1. Cabrillo Shallow Water Habitat Expansion Disposal Site

2. Pier 300 Expansion Disposal Site

3. Southwest Slip Disposal Sites

4. Pier 400 Submerged Material Storage Site

5. Eelgrass Restoration Area

1.4 ARRANGEMENTS, ROYALTIES AND PERMITS

Contractor shall make all arrangements, and secure all permits for the procurement, furnishing and transporting of rock.

1.5 QUALITY ASSURANCE

Contractor shall vary quarrying, processing, loading and placing operations to produce sizes and quality of stone specified. If stone being furnished by Contractor does not fully meet all requirements of these specifications, Contractor shall furnish, at no additional cost to the Government, other stone meeting requirements of these specifications and remove unacceptable rock from the site and dispose in accordance with federal, state and local regulations.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Definitions

Angular Stone. Stone which is obtained from bedrock deposits and is angular in shape.

The words "rock" and "stone" used in this section are interchangeable and shall mean one and the same material.

2.2 SOURCES

Stone shall be furnished from any of the sources listed in paragraph: List of Sources, or at the option of the Contractor may be furnished from any other source proposed by the Contractor and accepted by the Contracting Officer, subject to the conditions herein stated. If the Contractor proposes to furnish stone from a source not currently listed in paragraph: List of Sources, the Government will conduct a quarry investigation and evaluate the Non-listed Quarry Quality Test Data provided by the contractor to determine whether acceptable stone can be produced from the proposed source. Satisfactory service records on other work may be acceptable. In order for stone to be acceptable on the basis of service records, stone of a similar size must have been placed in a similar thickness and exposed to weathering under similar conditions as are anticipated for this contract, and must have satisfactorily withstood such weathering for a minimum of 10 years. If no such records are available, the Government will require the Contractor to conduct tests at the Contractor's expense to assure the acceptability of the stone. In addition to an acceptable 10 year service record, the Contracting Officer has the option to elect to have representative samples taken and tested at the Contractor's expense.

2.2.1 List of Sources

On the basis of information and data available to the Contracting Officer,

stone meeting the quality requirements of these specifications has been produced from the sources listed below:

- Connolly-Pacific's Pebbly Beach Quarry, located near Avalon on Santa Catalina Island
- Corona-Pacific Quarry, located in or near Corona
- 3M Quarry, located in or near Corona
- Hansen-Eagle Valley Quarry, located in or near Corona
- Harlow Quarry, located in or near Corona
- Ortega Quarry, located in San Juan Capistrano
- Twin Oaks North and South Quarries, located near Vista, near Oceanside
- Pyrite Street Quarry, located in Riverside
- Atkinson Quarry, located in Riverside

2.2.2 Selection of Source

The Contractor shall designate in writing the Stone Source or the combination of sources from which the Contractor proposes to furnish stone. It is the Contractor's responsibility to determine that the stone source or combination of sources selected is capable of providing the quality, quantities and gradation needed and at the rate needed to maintain the scheduled progress of the work. Samples for acceptance testing shall be provided in accordance with paragraph QUALITY COMPLIANCE below. If a source for stone so designated by the Contractor is not accepted for use by the Contracting Officer, the Contractor may propose other sources at no additional cost to the Government.

2.2.3 Source Authorization

Before any stone is produced from a source for completion of the work under this contract, the source of stone must be authorized by the Contracting Officer's Representative. Authorization of a stone source shall not be construed as a waiver of the right of the Government to require the Contractor to furnish stone which complies with these specifications.

2.2.4 Acceptance of Materials

Acceptance of a source of stone is not to be construed as acceptance of all material from that source. The right is reserved to reject materials from certain localized areas, zones, strata, or channels, when such materials are unsuitable for stone as determined by the Contracting Officer. The Contracting Officer also reserves the right to reject individual units of produced specified materials in stockpiles at the quarry, all transfer points, and at the project construction site when such materials are determined to be unsuitable. During the course of the work, the stone may be tested by the Government, if the Contracting Officer determines that testing is necessary. If such tests are determined necessary, the testing will be done in a commercial laboratory selected by the Contractor and approved by the Government. Any and all materials produced from a listed or unlisted source shall meet all the requirements herein. The cost of testing will be at the Contractor's expense. During the contract period, both prior to and after materials are delivered to the job site, visual inspections and measurements of the stone materials may be performed by the Contracting Officer. If the Contracting Officer, during the inspections,

finds that the stone quality, gradation or weights of stone being furnished are not as specified or are questionable, re-sampling and re-testing by the Contractor shall be required. Sampling of the delivered stone for testing and the manner in which the testing is to be performed shall be as directed by the Contracting Officer. This additional sampling and testing shall be performed at the Contractor's expense when test results indicate that the materials do not meet specified requirements. When test results indicate that materials meet specified requirements, an equitable adjustment in the contract price will be made for the sampling and testing. Any material rejected shall be removed or disposed of as specified and at the Contractor's expense.

2.3 QUALITY COMPLIANCE TESTING

If the Contractor proposes to furnish stone from an unlisted source, or a listed source which has not been tested in 10 years, the Contractor shall have rock tests performed on stone samples collected from the proposed source as described in paragraph: STONE QUALITY. Submit suitable Stone Samples 30 days prior to delivery of material to the worksite from any stone source. Contractor shall submit for review by the Contracting Officer Rock Test Data to demonstrate stone materials to be provided for work complies with Specifications. The quarry investigation shall be performed by the Contracting Officer's Representative and an engineering geologist from the Geotechnical Branch of the Los Angeles District. The tests to which the stone shall be subjected include petrographic examination (ASTM C 295), bulk specific gravity (SSD), unit weight, absorption (ASTM C 127), wetting and drying (COE CRD-C 169), Abrasion (L.A. Rattler-ASTM C 131) and sulfate soundness (ASTM C 88).

2.4 STONE QUALITY

The Testing Laboratory to perform the required testing shall be approved based on compliance with ASTM E 548 and relevant paragraphs of ASTM D 3740, and no work requiring testing shall be permitted until the laboratory has been inspected and approved.

2.4.1 Bulk Specific Gravity

All stone shall have a minimum bulk specific gravity, saturated surface dry (SSD) of:

Quarry Run	2.50 (minimum)
Rock Revetment	2.60 (minimum)
Gravel Drainage Blanket	2.50 (minimum)

The method of test for bulk specific gravity (SSD) shall be ASTM C 127.

2.4.2 Unit Weight and Absorption

All stone shall have an absorption less than 2 percent unless other tests and service records show that the stone is satisfactory. The method of test for unit weight and absorption shall be ASTM C 127, except the unit weight shall be calculated in accordance with Note No. 3 below using bulk specific gravity, saturated surface dry.

2.4.3 Petrographic Examination

Stone shall be evaluated in accordance with ASTM C 295. COE CRD-C 148 shall be used to perform Ethylene Glycol tests required on rocks containing smectite and on samples identified to contain swelling clays. See note 5 below.

2.4.4 Wetting and Drying

All stone shall pass the required 15 cycles of wetting and drying in order to be placed on the job. This test does not need to be done if the quarry has been used in the last five years and has a suitable service record. The test must be run on any and all new sources of stone. See COE CRD-C 169. The laboratory shall furnish color photographs of the slab samples prior to and after the wetting and drying tests have been completed. (See Notes 1 and 2 below).

2.4.5 Sulfate Soundness

In accordance with ASTM C 88; 10% maximum loss (see Notes 3 and 4 below).

2.4.6 Abrasion - L.A. Rattler

In accordance with ASTM C 131: 50% maximum loss after 1,000 revolutions. See Note 4 below.

2.4.7 X-Ray Diffraction Analysis

In addition to the above tests, the stone shall be subjected to X-Ray diffraction analysis in accordance with ASTM C 295. The stone must not contain any expansive clays.

2.4.8 Samples

Samples of stone from a proposed source shall be taken at the quarry by the Contracting Officer's Representative, the Superintendent of the quarry, the Contractor and a geologist from the Geotechnical Branch of the Los Angeles District. The samples shall consist of at least 300 pounds(135 Kg.) of stone. The quarry faces and the stockpiles to be used shall be examined and sampled. The Contractor will then ship the samples at the Contractor's expense to a licensed testing Laboratory which has been approved by the Contracting Officer's Representative. The laboratory will be under the direct supervision of a state licensed Civil Engineer, Geotechnical Engineer, Geologist or Engineering Geologist. The results of the tests shall be delivered to the Contracting Officer's Representative as soon as they are received from the laboratory.

2.4.9 Tests

The tests shall be conducted by the Contractor in accordance with applicable ASTM and Corps of Engineers methods of tests shall be performed at a laboratory approved by the Contracting Officer's Representative. All cost of testing shall be borne by the Contractor.

2.4.10 Notes

NOTE: (1) Test Procedures for the Wetting and Drying Test: The entire sample should be large enough to produce two cut slabs, 25 millimeters thick (± 5 millimeters) with a minimum surface area of 20,000 square millimeters on one side. Two chunks approximately 75 by 100 millimeters are also chosen. The slabs and chunks are carefully examined under a low power microscope and all visible surface features are noted and recorded. The specimens are then over dried at 60 degrees Celsius for eight hours, cooled and weighed to the nearest tenth of a gram. The test specimens are photographed to show all surface features before the test. The test specimens are then subjected to fifteen cycles of wetting and drying. One slab and one chunk are soaked in fresh tap water, the other slab and chunk are soaked in salt water prepared in accordance with ASTM C 1141. Each cycle consists of soaking for sixteen hours at room temperature and then drying in an oven for eight hours at 60 degrees Celsius. After each cycle the specimens are examined with the low power microscope to check for opening of movement of fractures, flaking along edges, swelling of clays, softening of rock surfaces, heaving of micaceous minerals, breakdown of matrix material and any other evidence of weakness developing in the rock. The cycle in which any of these actions occur is recorded. After fifteen cycles, the slabs and chunks are again carefully examined and all charges in the rocks are noted and recorded. The test specimens together with all particles broken off during the test are oven dried, weighed and photographed.

NOTE: (2): Weakening and loss of individual surface particles is permissible unless bonding of the surface grains softens and causes general disintegration of the surface material.

NOTE: (3): The test shall be made on 50 particles each weighing 100 Grams, ± 5 grams, in lieu of the gradation given in ASTM C 88.

NOTE: (4): Stone which has a loss greater than the specified limit will be accepted if the Contractor demonstrates that the stone has a satisfactory service record.

NOTE: (5): The test procedure for the Petrographic and X-Ray Diffraction is performed according to ASTM C 295, except for the following:

(a) A colored microscopic photograph shall be made of each stone type (whether igneous, sedimentary or metamorphic) and the individual minerals within the stone type shall be identified by labels and arrows upon the photograph.

(b) A very detailed macroscopic and microscopic description shall be made of the stone, to include the entire mineral constituents, individual sizes, their approximate percentages and mineralogical histories. A description of the stone hardness, texture, weathering and durability factors shall also be discussed.

(c) A written summary of the suitability of the stone for use as stone protection based upon the Petrographic and X-Ray tests and the abrasion

loss (L. A. Rattler) shall be presented in the final laboratory report on stone quality.

2.5 SHAPE

All quarry run and rock revetment shall be angular quarried material (not rounded or subrounded river run) with a shape which assures interlocking with adjacent stone. All rock revetment shall have the greatest dimension not greater than three times the least dimension.

2.6 STONE ACCEPTANCE

Prior to placement, all stone shall be subject to acceptance by the Contracting Officer's Representative. Acceptance of any stone shall not constitute acceptance of all stone from a source. Deliveries which in the judgement of the Contracting Officer do not meet specifications shall be held for testing before their acceptance will be granted. All accepted stone shall be:

a. of the same lithology as the original stone from which test results or service records were taken as a basis for authorization of the source;

b. sound, durable and hard, and free from laminations, weak cleavages,undesirable weathering, or blasting or handling-induced fractures (or fracture zones which subtend more than 1/3 of the total circumference of the stone along the plane of fracturing);

c. of such character that it will not disintegrate from the action of air, water or the conditions of handling and placing;

d. clean and free from earth, clay, refuse, or adherent coatings.

2.7 REJECTED STONE

Stone of unsuitable quality and/or size distribution as required by these specifications will be rejected and shall be promptly removed from the project at no expense to the Government. Any portions of the work covered by these Specifications containing rejected stone will be considered incomplete.

2.8 PERIODIC TESTING

Rock revetment and quarry run taken from a particular source shall be tested and certified in terms of gradation and specific gravity for each 120,000 tons of quarry run, 45,000 tons of rock revetment, and 45,000 tons of gravel drainage blanket material shipped. Submit the Gradation Tests using the GRADATION TEST DATA SHEET for rock revetment, quarry run and graded gravel. Gradation testing shall be in general accordance with ASTM C 136. Specific Gravity Tests shall be in accordance with procedures described in the paragraph: Stone Quality. Testing shall commence prior to shipment of any material and each successive 120,000 tons of quarry run, 45,000 tons of rock revetment, and 45,000 tons of gravel drainage blanket

material delivered, shall be retested in the same manner. Tests shall be performed by an approved testing laboratory on samples selected by the Contracting Officer. The Government reserves the right to perform check tests and to use the Contractor's sampling and testing facilities to make the tests. All sampling and gradation tests performed by the Contractor shall be under the supervision of the Contracting Officer. Upon completion of each test, test results shall be submitted to the Contracting Officer. Additional sampling and testing of any load of material delivered to the project site shall be at the Contracting Officer's discretion, randomly chosen up to a maximum of five tests. Costs for sampling and testing shall be at the Contractor's expense and included in unit prices for rock revetment and quarry run.

2.9 GRADATION

2.9.1 QUARRY RUN

2.9.1.1 Uniform Grading

Each load of quarry run shall have uniform grading from fine to coarse particles to achieve the lines and grades shown on plans. Intent of design is to use well-graded quarry run stone to retain fine-grained dredged materials placed behind dikes. Tests shall be in accordance with ASTM C 136.

2.9.1.2 Fines

Quarry run shall have a minimum of 5 percent and a maximum of 15 percent by weight passing a No. 4 sieve in any one load.

2.9.1.3 Maximum Size

The maximum size of individual pieces of rock shall not exceed 1,500 lb., and 85 to 95 percent shall be less than 400 lb. Material between No. 4 sieve and 400 lb. shall be well graded with a d50 of 5 inches. The d50 defined as the median stone diameter at which 50 percent of material is smaller.

2.9.2 ROCK REVETMENT

Two gradations of rock revetment are required as listed in the following table ROCK GRADATIONS. Rock revetment shall be select, quarried rock which is reasonably well-graded between the minimum and maximum sizes shown on the table.

ROCK REVETMENT GRADATIONS

Designation		A-250	A-500
Nomination		Rock Revetment	Rock Revetment
Side Slope		1.75	1.75 and 1.625
Layer Thickness	(inch)	36	36
Under layer		Quarry Run	Quarry Run
Nominal Size	(lbs.)	250	500

ROCK REVETMENT GRADATIONS

95% of stone larger	(lbs.)	125	200
Maximum Stone Weight	(lbs.)	500	1,000
50% of No. of Stone Weigh more than	(lbs.)	250	500

2.9.3 GRAVEL DRAINAGE BLANKET

The gravel drainage blanket shall be graded within the following limits:

GRAVEL DRAINAGE BLANKET GRADATION

Specified Particle Size (Inches)	Allowable Percentage Smaller By Weight
3.0	100
1.5	0-50
0.25	0-10

2.10 QUARRY OPERATIONS

Quarry operations shall be conducted by the Contractor in a manner that shall produce stone conforming to the requirements specified and may involve selective quarrying, handling, processing, blending, and loading as necessary, all of which shall be as specified in Section 01451A CONTRACTOR QUALITY CONTROL.

PART 3 EXECUTION

3.1 CONSTRUCTION

3.1.1 Equipment List

Contractor shall prepare an Equipment List, listing all major pieces of equipment which are to be used for performing the rock work shall be submitted for Contracting Officer's review. The list shall include, but not be limited to, all vessels, barges, anchors, buoys, and ancillary equipment.

Contractor shall provide for review, sketches of all floating equipment showing access locations and sizes, and the locations and quantities of materials which could be hazardous to the environment or persons in the event of collision or upset.

3.1.2 Stonework Plan and Schedule

Contractor shall submit a Stonework Plan and Schedule which describes the proposed source of stone, equipment, quarry operation, loading/unloading, transportation and placement methods, site access routes, site preparation requirements and sequences planned to be used in rock placement. This plan and schedule shall be provided for review by the Contracting Officer prior to shipment of rock. Schedule shall be updated monthly to reflect work completed and schedule for work yet remaining.

Contractor shall not commence rock work until plan and schedule have been reviewed by the Contracting Officer and incorporated into overall construction and progress schedule.

3.1.3 Special Procedures

Contractor shall develop Special Procedures for the following specific conditions, and submit them to Contracting Officer for review prior to starting work at these locations.

Construction of containment dikes with particular reference to coordination between rock work and dredging. State how each lift of dike shall be raised so that dikes have attained minimum clearance grades before placing dredged material. Scheduling of subsequent rock dike lifts shall be discussed in reference to uninterrupted placement of dredged material.

3.1.4 Daily Report of Operations

The Contractor shall prepare and maintain a Daily Report of Operations and furnish copies thereof to the Contracting Officer. The daily reports shall document all construction related stonework operations for all shifts in a 24-hour period.

3.2 PLACEMENT

3.2.1 General

Except as otherwise specified, the limits of the stone in place shall follow the indicated lines and slopes without continuous under or over building. Templates shall be placed at adequate intervals, as determined by the Contracting Officer, to accurately delineate the surfaces of the dike. The stone work shall be finished smooth to a surface even with the existing work. For all stone work, the Contractor shall submit the method of placement to the Contracting Officer for approval before commencement of placing operations.

3.2.2 Coordination with Dredging

Stone work and dredging must be fully coordinated to achieve project design criteria and purpose while adhering to requirements specified in Section 01355 ENVIRONMENTAL PROTECTION. Requirements for approval of the Contractor's Stone Work Plan are specified in paragraph 1.2, SUBMITTALS. Contractor shall select excavation, placement and earthwork methods, and construction schedule, appropriate to achieve lines and grades shown on Plans. See Section 02020 DREDGING and Section 02373 GEOTEXTILE. For stone work which involves construction of containment dikes for dredged material, Contractor shall exercise care to avoid placing dredging material to elevations above the top of dikes such that dredge material can be lost over or through the dikes.

3.2.3 Construction Load on Containment Dike

Contractor shall exercise extreme care if heavy construction loads are placed near edge of dike. Contractor shall repair any damage caused by his

activities.

3.2.4 Tolerances

Rock work shall be carried to the lines and grades shown on Plans, and tolerances as specified in this Section, and as directed by the Contracting Officer. Final surface of each finished course shall follow with reasonable variation the indicated lines and grades without continuous under or overbuilding. Deviations in layer thickness, and position and elevation of final surfaces shall be no greater than the values given in Table ALLOWABLE TOLERANCES FOR STONE CONSTRUCTION WITH RESPECT TO NEAT LINES. Listed tolerances on slopes are measured normal to the design slope with respect to indicated neat lines. Either extreme of the tolerances listed in the table shall not be continuous over an area greater than 200 square feet. The Contracting Officer may change lines and grades shown on Plans. If changes increase or decrease the quantity of rock to be placed, revised quantities shall be used as basis of payment under unit price for rock work involved.

ALLOWABLE TOLERANCES FOR STONE CONSTRUCTION WITH RESPECT TO NEAT LINES
(Dimensions in Feet Measured Normal to Surface)

Designation	Layer(2) Thickness (feet)		Final Exposed Sloped Surfaces				Final Exposed Horizontal Surfaces (Crest and Berm Elev.)			
			Below 0.0 MLLW		Above 0.0 MLLW		Below 0.0 MLLW		Above 0.0 MLLW	
	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)
Quarry Run(1)	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5
A-500	1.0	1.5	1.0	1.5	1.0	1.0	N.A.	N.A.	0.5	0.5
A-250	0.5	0.5	0.5	0.5	0.5	0.5	N.A.	N.A	0.5	0.5

(1) Layer thickness for quarry run refers to places where quarry run is used as bedding or underlayer for larger destination stone.

(2) Cumulative layer thicknesses should not exceed the tolerances for the final exposed surfaces.

3.2.5 Misplaced Material

Any material that escapes or is lost at any time while loading, transporting or placing rock, or which is deposited other than in area designated on the plans, or change approved in writing by Contracting Officer, shall be removed and redeposited where directed by the Contracting Officer, at Contractor's expense.

3.2.6 Misplaced Equipment

Should Contractor (during progress of work) lose, dump, throw overboard, sink, or misplace any material, plant, machinery or appliance that may be dangerous to, or interfere with uses of waterway, or cause pollution of waters, Contractor shall give immediate notice to Contracting Officer, with description and location of such obstructions until they are removed. Should Contractor refuse, neglect or delay compliance with above requirements, such obstructions may be removed by the City, and cost of

such removal may be deducted from any money due or to become due to Contractor.

3.2.7 Maintenance of Quarry Run Slopes

Portions of the quarry run dikes require rock revetment for stability. Exposed quarry run surfaces are vulnerable to damage until all quarry run lifts have been placed, rock revetment is in place and stone work has been accepted. Contractor shall be responsible for care and maintenance of quarry run slopes until final acceptance by Contracting Officer. Damage to quarry slopes due to any cause prior to acceptance shall be repaired, at Contractor's expense.

3.1.8 Displaced Material

Any cut slope which is displaced by the stone placement operation and is outside the lines and grades shown on the plans, shall be removed and the area restored to its design cross section, at Contractor's expense.

3.3 ROCK REVETMENT PLACEMENT

3.3.1 Placement

The rock revetment shall be placed so that a reasonably well graded mass is produced with a minimum practicable percentage of voids. Rock revetment layers shall be constructed to lines and grades indicated on Plans. Rock revetment shall be placed to its full course thickness in one operation and in a manner which will avoid displacing underlying quarry run or underlayer stone. Stone shall be allowed to fall no more than 3 feet from bottom of clam or other bucket and top surface of stone work for work within 3 feet of water level. For underwater work, where work surface is more than 5 feet below water level, maximum drop shall be 5 feet. Not withstanding, an otherwise allowable height using Contractor's approved placement method will not be permitted if it is shown to cause segregation of stone sizes, or breakage of individual stones. In those cases, allowable drop heights will be developed on-site, between Contracting Officer and Contractor, based on actual performance. Contractor shall maintain rock revetment layer until accepted and any material displaced, or with damage to surface by any cause, shall be replaced to indicated lines and grades, at Contractor's expense. Self propelled equipment shall not be used on slopes. Placing rock revetment by dumping into chutes or similar methods will not be permitted.

3.3.2 Excavation

Excavation of sediments may be required during placement of the rock revetment. Excavation shall be conducted to remove the accumulated materials from the existing dike surface in order to properly achieve the interlocking of rock revetment. The excavated materials shall be deposited in the area shown on the plans. Objectionable materials and debris from the excavated materials shall be removed, become the property of the Contractor, and disposed of in a suitable location. Excavation of sediments, as necessary for interlocking of the rock revetment, will be considered as part of the work to place new stone.

3.4 QUARRY RUN

3.4.1 General

Quarry run stone shall be placed by any method desired by Contractor subject to limitations given below and with review and approval by Contracting Officer.

3.4.2 Unprotected Slopes

Quarry run shall be placed on slopes of underlying surfaces where required on Plans as soon as possible after dredging, so that slopes do not deteriorate before quarry run material has been placed.

3.4.3 Handling

Quarry run materials shall be placed uniformly on bottom, to neat lines indicated on plans. Placing quarry run material by methods which would tend to cause segregation by particle sizes will not be permitted.

3.4.4 Minimum Lift

Dike lifts shall be greater than 4 feet in thickness. The lift above shall be extended down to meet existing bathymetry when thickness of lower lift is less than 4 feet.

3.5 ROCK PLACEMENT AREAS

3.5.1 Rock Placement At Southwest Slip Area 1

3.5.1.1 Purpose

Construct containment dike in the Southwest Slip Area 1 to contain dredged material, from the perimeter of the Confined Disposal Facility, and the revetment for the LACFCD Channel.

3.5.1.2 Extent and Location of Work

Perimeter of Southwest Slip Area 1 fill containment dikes as indicated on the plans.

3.5.1.3 Materials

Quarry run rock, rock revetment, and gravel drainage blanket.

3.5.1.4 Sequence of Work

Dike shall be placed after dredging required for dike, placement of gravel drainage blanket and placement of dike wick drains. Revetment for the LACFCD Channel shall be placed after the dredging and excavation required for the channel. The placement level of the dike shall be above the placement level of the sand berm, dredge element D201 and D205, fine grain fill and surface cover layer. Effective confinement of dredged material

shall be maintained at all times.

3.5.2 Rock Placement at Southwest Slip Area 2

3.5.2.1 Purpose

Construct containment dike in the Southwest Slip Area 2 to contain dredged material.

3.5.2.2 Extent and Location of Work

Perimeter of Southwest Slip Area 2 fill containment dikes as indicated on the plans.

3.5.2.3 Materials

Quarry run rock, Rock Revetment, and gravel drainage blanket.

3.5.2.4 Sequence of Work

After dredging required for dike, placement of gravel drainage blanket and placement of dike wick drains. The placement level of the dike shall be above the placement level of the sand berm and fill. Effective confinement of dredged material shall be maintained at all times.

3.5.3 Rock Placement At Southwest Slip Area 3

3.5.3.1 Purpose

Construct containment dike in the Southwest Slip Area 3 to contain dredged material.

3.5.3.2 Extent and Location of Work

Perimeter of Southwest Slip Area 3 fill containment dikes as indicated on the plans.

3.5.3.3 Materials

Quarry run rock, Rock Revetment, and gravel drainage blanket.

3.5.3.4 Sequence of Work

After dredging required for dike, sequentially place the gravel drainage blanket, then dike wick drains, and then quarry run.

3.5.4 Rock Placement At Pier 300 Expansion

3.5.4.1 Purpose

Construct containment dike for the Pier 300 Expansion to contain dredged material.

3.5.4.2 Extent and Location of Work

Perimeter of Pier 300 Expansion fill containment dikes as indicated on the plans.

3.5.4.3 Materials

Quarry run rock and Rock Revetment.

3.5.4.4 Sequence of Work

After dredging required for dike. The placement level of the dike shall be above the placement level of the fill. Effective confinement of dredged material shall be maintained at all times.

3.5.5 Rock Placement At Cabrillo Shallow Water Habitat Expansion

3.5.5.1 Purpose

Construct containment dike for the Cabrillo Shallow Water Habitat Expansion to contain dredged material.

3.5.5.2 Extent and Location of Work

Perimeter of Cabrillo Shallow Water Habitat Expansion fill containment dikes as indicated on the plans.

3.5.5.3 Materials

Quarry run rock.

3.5.5.4 Sequence of Work.

The placement level of the dike shall be above the placement level of the fill and surface cover layer. Effective confinement of dredged material shall be maintained at all times.

3.5.6 Rock Placement At The Pier 400 Submerged Material Storage Site

3.5.6.1 Purpose

Construct containment dike for the Pier 400 Submerged Material Storage Site to contain dredged material and surcharge materials.

3.5.6.2 Extent and Location of Work

Perimeter of Pier 400 Submerged Material Storage Site fill containment dikes as indicated on the plans. Toe of rock dike shall be a minimum of 500 feet from the TITP sewer outfall.

3.5.6.3 Materials.

Quarry run rock.

3.5.6.4 Sequence of Work

The placement level of the dike shall be above the placement level of the fill and surface cover layer. Effective confinement of dredged material shall be maintained at all times.

3.5.7 Rock Placement At The Eel Grass Restoration Area

3.5.7.1 Purpose

Construct containment dike for the Eel Grass Restoration Area to contain dredged material.

3.5.7.2 Extent and Location of Work

Perimeter of Eel Grass Restoration Area containment dikes as indicated on the plans.

3.5.7.3 Materials

Quarry run rock.

3.5.7.4 Sequence of Work

The placement level of the dike shall be above the placement level of the fill. Effective confinement of dredged material shall be maintained at all times.

3.6 SURVEYS

Surveys will be conducted by Contractor and Contracting Officer before and after placing stone. Surveys of previous fill sections shall be the basis of proceeding to the subsequent rock element. Surveyed segments will be taken from multi-beam surveys looking down the slope while moving parallel to the face of the rock, and the above water surveys will be collected on 50-foot cross-sections, or denser in irregular, areas with an accuracy of one foot horizontally and 0.2 feet vertically. Cross-sections will be cut through the digital terrain model (DTM) of the surface created by the multi-beam and above water surveys. Cross-section spacings will be adjusted to fit the conditions at the time, and used for analysis only. Delta surfaces (the difference between the planned DTM surface and the measured DTM surface - usually contoured) will be used to determine rock placed out of tolerance. Each section will define sufficient points to accurately represent stone in place, binning of data (average of data in a mathematical grid given the coordinates of the center of the grid) will be used to create the DTM. The bin size (the length of each side of the grid cell) will be 3.28 feet by 3.28 feet or as determined by the Contracting Officer. Deductions to measured quantity of stone will be made for stone occurring outside tolerances. Deductions will be from disallowed delta area surface plots and converted to tonnage using surface subtraction and a value of thirty percent (30%) voids for placed stone and bulk Specific Gravity as determined by paragraphs: STONE QUALITY and PERIODIC TESTING.

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SECTION 02630

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04/02

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SECTION 02630

STORM DRAIN SYSTEM
04/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN PUBLIC WORKS ASSOCIATION

207-2	Reinforced concrete pipe
208-3	Gaskets for concrete pipe
300-3	Structure excavation and backfill
300-3.6	Payment
306-1	Underground Conduit Construction
306-1.2.1	Bedding
306-1.6	Basis of Payment for Open Trench Installations

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

CITY OF LOS ANGELES

Standard Plan S-251-1	Pipe Laying Trenches

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

RC Pipes Certificates

SD-02 Shop Drawings

Layout of Storm Drain Extensions; G

Details for Concrete Pipe Joints; G

Temporary 42" Storm Drain design; G

Drawings and Design Calculations; G

Summerland Avenue Storm Drain/Headwall Design; G

1.3 WORK INCLUDED

Storm drainage system consists of furnishing transportation, labor, materials, and equipment for the installation of extensions to existing storm drain systems. The work includes, but is not limited to:

A. Construction of storm drain line extensions.

B. Construction of headwall structures.

C. Construction of temporary 42" storm drain.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Concrete

Concrete materials shall be in conformance with Section 03300, CAST-IN-PLACE CONCRETE and as specified in this Section. Cement shall be Type II.

2.1.2 Bedding

Bedding shall be Case II or as indicated on the Plans and shall be in accordance with the City of Los Angeles Standard Plan S-251-1.

2.1.3 Reinforced Concrete Pipe

Reinforced concrete pipe shall be in conformance with American Public Works Association 207-2, except reinforcement cover shall be as indicated on Plans. Submit RC Pipes Certificates showing material manufacturer's certificate of compliance for RC pipes.

2.1.4 Gaskets

Gasket shall be in conformance with American Public Works Association 208-3.

PART 3 EXECUTION

3.1 DESIGN AND LAYOUT

3.1.1 Layout of Storm Drain Extensions

The Contractor shall submit three (3) copies of the Layout of Storm Drain Extensions for Contracting Officer approval fourteen (14) days prior to execution of the work. The layout shall include details of each storm drain extension.

3.1.2 Concrete Pipe Joints

The Contractor shall submit three (3) copies of the Details for Concrete Pipe Joints for Contracting Officer approval fourteen (14) days prior to exectuion of the work.

3.1.3 Temporary 42" Storm Drain Design

The Contractor shall submit three (3) copies of the Temporary 42" Storm Drain Design for Contracting officer's approval fourteen (14) days prior to execution of the work.

3.1.4 LACFCD Summerland Avenue Storm Drain/Headwall

The Contractor shall submit three (3) copies of the Los Angeles County Flood Control District (LACFCD) Summerland Avenue Storm Drain/Headwall Design for the Contracting Officer's approval fourteen (14) days prior to execution of the work.

3.2 TEMPORARY INSTALLATION

3.2.1 Temporary 42" Storm Drain Pit

Temporary 42" storm drain pit shall be constructed of concrete and shall be adequate for a HS 20-44 Highway Loading and contractors construction equipment loading. The Contractor shall design the temporary pit such that it can undergo 2 feet of settlement.

3.2.2 Temporary 42" Storm Drain Pipe

Temporary 42" storm drain pipe shall be constructed at the Contractor's option of concrete, steel, or HDPE new or used pipe. Pipe shall be adequate for the imposed dead load and a live load of HS 20-44 Highway Loading and the Contractor's construction equipment loading. The Contractor shall design the pipe for a total settlement of 2 feet, and a differential settlement of 1 foot over 25 feet length.

3.2.3 Temporary Trench for Extension of LACFCD Summerland Avenue Storm Drain

The Contractor shall construct a temporary trench to provide drainage between existing headwall and the new Los Angeles County Flood Control Channel (LACFCD). Contractor shall be responsible for maintaining this channel throughout the construction period. The temporary trench shall be constructed with stabilized side slopes, which will allow the surcharge to be in close proximity of the trench.

3.2.4 Temporary 42" and LACFCD Summerland Avenue Storm Drain

Contractor shall construct temporary storm drain systems at the locations and to the requirements shown on the plans. Contractor shall maintain the temporary storm drains for the duration of the project or until temporary storm drains are replaced by permanent drains. For the storm drain systems as described on the plans, the Contractor shall submit Drawings and Design Calculations that are signed and sealed by a Civil Engineer Registered in the State of California.

3.3 INSTALLATION

3.3.1 Underground Construction

Install underground construction in conformance with the requirements of American Public Works Association 306-1 except for subsection 306-1.6, unless otherwise specified herein.

3.3.2 Excavation and Backfill for Drainage Structures

Excavation and backfill for drainage structures shall be in conformance with the requirements of American Public Works Association 300-3 except for subsection 300-3.6, unless otherwise specified herein.

3.3.3 Trench Excavation

Perform trench excavation to the elevations shown on the Plans or as necessary for installation. Groundwater can be anticipated at or near tidal elevation adjacent to the rock dikes. Dewatering of storm drain excavations will not be permitted, except as noted herein.

3.3.4 Bedding Material and Drainage Structure Bases

1. Bedding shall be in conformance with American Public Works Association 306-1.2.1 and Standard Plan S-251-11.

2. Compaction: Compact bedding material to 95 percent relative density.

3.3.5 Structures

Place and cure cast-in-place concrete structures as specified in Section 03300 CAST-IN-PLACE CONCRETE Section.

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DIVISION 03 - CONCRETE

SECTION 03300

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03/02

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SECTION 03300

FORMWORK, REINFORCING STEEL AND CAST-IN-PLACE CONCRETE
03/02

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

PUBLIC WORKS STANDARDS, INC (SSPWC) (GREENBOOK)

SSPWC 303-1.3	Forms
SSPWC 201-1	Portland Cement Concrete
SSPWC 201-2	Reinforcement for Concrete
SSPWC 201-4	Concrete Curing Materials
SSPWC 303-1	Concrete Structures
SSPWC 303-1.9.1	General Curing Finishing Requirements
SSPWC 303-1.9.2	Ordinary Surface Finish

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office, that will review the submittal for the Government: EDG represents the Engineering Division Geotechnical Branch. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Mix Design; G EDG

Product Data

Reinforcing Steel

SD-07 Certificates

Delivery Tickets for concrete

PART 2 PRODUCTS

2.1 FORM MATERIALS

Form materials shall comply with SSPWC 303-1.3, Forms.

2.2 CONCRETE MATERIALS

Submit Product Data.
Product data for cement, aggregates, admixtures, curing materials, joint devices and attachment accessories.

Submit Mix Design.
Concrete design documentation showing that the mix design is in accordance with the Contract Documents

Submit Delivery Tickets for concrete.
Provide copies of delivery tickets for each load of concrete delivered to the site. Delivery tickets shall show date, time of loading, time of delivery, class, strength of concrete, contract number, mix design, slump ordered, type of cement, admixtures, name of purchasing contractor, batch weights of all materials, number of the revolution counter when the truck left the plant, any water added at the site and the authorizing person
Materials for concrete shall comply with SSPWC 201-1, Portland Cement Concrete. Cement shall be Type II.

Concrete shall be minimum Class 560-C-3250.
The recommended maximum slump shall be 5 inches. No water shall be added to concrete at the jobsite withour prior approval of the Contracting Officer. If approved, in no case shall the added water exceed the approved mix design submitted by the Contractor.

The nominal maximum-size coarse aggregate shall be 3/4-inch.

2.3 REINFORCING STEEL

Submit Reinforcing Steel.
Provide information indicating source of reinforcing steel and mill certificates for the reinforcing steel to be used on the project
Reinforcing steel shall comply with SSPWC 201-2; Reinforcement for Concrete. Unless otherwise indicated reinforcing steel shall be Grade 60.

2.4 CURING MATERIALS

Curing Materials shall comply with SSPWC 201-4, Concrete Curing Materials. Unless otherwise indicated Type 1-D shall be used. Beginning immediately after placement, concrete shall be cured with membrane curing compound and protected from premature drying.

PART 3 EXECUTION

3.1 CONCRETE WORK

Forms, reinforcing steel and cast-in-place concrete shall be in accordance with SSPWC 303-1; Concrete Structures. Finishes unless otherwise indicated shall be in accordance with SSPWC 303-1.9.1, General and SSPWC 303-1.9.2, Ordinary Surface Finish.

3.2 FIELD QUALITY CONTROL

3.2.1 Contractor

The Contractor is responsible to assure that:

a. Form location, dimensions and adequacy meet the indicated standards

b. That quality and placement of reinforcing steel meet the indicated standards.

c. Concrete materials, delivery, placement, curing and finishing meet the indicated standards.

3.2.2 Contracting Officer

The Contracting Officer shall periodically perform oversight reviews and testing to confirm that the indicated level of quality is being achieved.

-- End of Section --