State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NATURAL & HISTORIC RESOURCES
Office of Engineering & Construction

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

September 3, 2014

Honorable Michael Becker
Mayor
City of Margate
9001 Winchester Avenue
Margate, NJ 08402

RE: Brigantine Inlet to Great Egg Harbor Inlet
Absecon Island Beachfill
Bureau of Coastal Engineering Project Number 6057

Dear Mayor Becker:

Enclosed are the revised project plans, dated August 25, 2014, for the, "Beachfill – Completion of Initial Construction, Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island, Atlantic County, New Jersey" for your review.

If you have any comments or requested revisions they must be submitted by close of business on September 12, 2014. Please forward comments to Kelley Staffieri, of my office, at Kelley.staffieri@dep.nj.gov. You may also reach her at 732-255-0879.

We appreciate your cooperation in review and comment of the plans. Please do not hesitate to contact Kelley if you have any questions.

Sincerely,

Bill Dixon, Acting Manager
Bureau of Coastal Engineering

CC

Richard Deaney, Business Administrator, City of Margate
Ed Walberg, Municipal Engineer, City of Margate
Kelley Staffieri, Environmental Specialist, Bureau of Coastal Engineering

IFB W912BU-14-B-0002

US Army Corps
of Engineers
Philadelphia District

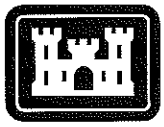
Beachfill
Completion of Initial Construction

Brigantine Inlet to Great Egg Harbor Inlet
Absecon Island
Atlantic County, New Jersey

Construction Solicitation and Specifications

RTA Backcheck
25 August 2014

IFB W912BU-14-B-0002



US Army Corps
of Engineers
Philadelphia District

Beachfill
Completion of Initial Construction

Brigantine Inlet to Great Egg Harbor Inlet
Absecon Island
Atlantic County, New Jersey

Construction Solicitation and Specifications

RTA Backcheck
25 August 2014

This page was intentionally left blank for duplex printing.

SOLICITATION NO. W912BU-14-B-0002

PHILADELPHIA DISTRICT
CORPS OF ENGINEERS

INVITATION FOR BIDS
FOR

BEACHFILL

COMPLETION OF INITIAL CONSTRUCTION

BRIGANTINE INLET TO GREAT EGG HARBOR INLET
ABSECON ISLAND
ATLANTIC COUNTY, NEW JERSEY

I. NOTE THE AFFIRMATIVE ACTION REQUIREMENT OF THE EQUAL OPPORTUNITY CLAUSE WHICH MAY APPLY TO THE CONTRACT RESULTING FROM THIS SOLICITATION.

II. BIDDERS ARE REQUIRED TO COMPLETE THE REPRESENTATION AND CERTIFICATIONS PORTION OF SECTION 00 45 00 OF THIS SOLICITATION AND SUBMIT THIS WITH THEIR BID.

III. THERE WILL NOT BE A GOVERNMENT CONDUCTED SITE VISIT FOR THIS PROJECT. THE PROSPECTIVE BIDDERS ARE ENCOURAGED TO VISIT THE SITE OF THE WORK AT THEIR CONVENIENCE IN ORDER TO ACQUAINT THEMSELVES WITH THE SITE CONDITIONS AND ANY PROBLEMS INCIDENT TO THE PROSECUTION OF THE WORK.

25 AUGUST 2014

This page was intentionally left blank for duplex printing.

MAIN TABLE OF CONTENTS
SOLICITATION, OFFER, AND AWARD (SF 1442)

SECTION	TITLE	PAGE NOS.
00 10 00	SF 1442 AND BIDDING SCHEDULE	00 10 00-1 to 00 10 00-5
00 21 00	INSTRUCTIONS TO BIDDERS	00 21 00-1 to 00 21 00-8
00 45 00	REPRESENTATIONS AND CERTIFICATIONS	00 45 00-1 to 00 45 00-18
00 45 05	SMALL BUSINESS SUBCONTRACTING PLAN	00 45 05-1 to 00 45 05-6
00 70 00	CONTRACT CLAUSES	00 70 00-1 to 00 70 00-129
00 73 00	SPECIAL CLAUSES	00 73 00-1 to 00 73 00-11
00 73 05	CONTRACT ADMINISTRATION DATA	00 73 05-1
	SPECIFICATIONS	

THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

TABLE OF CONTENTS
SECTION 00 10 00

TITLE	PAGE NOS.
SOLICITATION, OFFER & AWARD (SF 1442)	00 10 00-1 to 00 10 00-2
BIDDING SCHEDULE	00 10 00-3 to 00 10 00-5

THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

BIDDING SCHEDULE

(To be attached to SF 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
BASE BID:					
1.	Mobilization and Demobilization	1	JOB	LS	$_____
	MARGATE CITY				
2.	Structures Monitoring	1	JOB	LS	$_____
3.	Beachfill	1,000,000	CY	$_____	$_____
4.	Pedestrian Dune Crossover	33	EA	$_____	$_____
5.	Vehicle Dune Crossover	3	EA	$_____	$_____
6.	Handicap Dune Crossover	4	EA	$_____	$_____
7.	Sand Fence	20,317	LF	$_____	$_____
8.	Split Rail Fence	8,900	LF	$_____	$_____
9.	Post and Rail Fence	870	LF	$_____	$_____
10.	Dune Grass Planting	72,140	SY	$_____	$_____
11.	Name the State of New Jersey and Margate City as "Additional Insured" under General Liability Insurance	1	JOB	LS	$_____
	Stormwater Outfall Pipe Extension: Station 350+64				
12.	12-Inch Ductile Iron Pipe	378	LF	$	$_____
13.	Type "A" Pipe Support Unit	39	EA	$	$_____
14.	Type "B" Pipe Support Unit	3	EA	$	$_____
	LONGPORT BOROUGH				
15.	Structures Monitoring	1	JOB	LS	$_____
16.	Beachfill	1,000,000	CY	$_____	$_____
17.	Pedestrian Dune Crossover	26	EA	$_____	$_____
18.	Vehicle Dune Crossover	3	EA	$_____	$_____
19.	Handicap Dune Crossover	3	EA	$_____	$_____
20.	Sand Fence	17,534	LF	$_____	$_____
21.	Split Rail Fence	6,861	LF	$_____	$_____
22.	Post and Rail Fence	650	LF	$_____	$_____
23.	Dune Grass Planting	63,560	SY	$_____	$_____
24.	Name the State of New Jersey and Longport Borough as "Additional Insured" under General Liability Insurance	1	JOB	LS	$_____

Stormwater Outfall Pipe Extension: Station 362+51				
25. 10-Inch Ductile Iron Pipe	108	LF	$	$_____
26. Type "A" Pipe Support Unit	9	EA	$	$_____
27. Type "B" Pipe Support Unit	3	EA	$	$_____
Stormwater Outfall Pipe Extension: Station 374+99				
28. 16-Inch Ductile Iron Pipe	180	LF	$	$_____
29. Type "A" Pipe Support Unit	17	EA	$	$_____
30. Type "B" Pipe Support Unit	3	EA	$	$_____
VENTNOR CITY				
31. Structures Monitoring	1	JOB	LS	$_____
32. Beachfill	22,000	CY	$_____	$_____
33. Pedestrian Dune Crossover	11	EA	$_____	$_____
34. Sand Fence	2,725	LF	$_____	$_____
35. Split Rail Fence	2,310	LF	$_____	$_____
36. Dune Grass Planting	19,028	SY	$_____	$_____
37. Name the State of New Jersey and Ventnor City as "Additional Insured" under General Liability Insurance	1	JOB	LS	$_____

TOTAL ESTIMATED BASE BID AMOUNT $_____

OPTIONS

MARGATE CITY/VENTNOR CITY:				
38. Option 1 - Beachfill	25,000	CY	$_____	$_____
39. Option 2 - Beachfill	50,000	CY	$_____	$_____
40. Option 3 - Beachfill	75,000	CY	$_____	$_____
41. Option 4 - Beachfill	250,000	CY	$_____	$_____
LONGPORT BOROUGH:				
42. Option 5 - Beachfill	25,000	CY	$_____	$_____
43. Option 6 - Beachfill	50,000	CY	$_____	$_____
44. Option 7 - Beachfill	75,000	CY	$_____	$_____
45. Option 8 - Beachfill	250,000	CY	$_____	$_____

TOTAL ESTIMATED BASE BID AND ALL OPTIONS AMOUNT $_____

NOTES:

1. Bidders must bid on all items.

2. Bidders shall list the cost of additional premium, if any, to name the State of New Jersey and the Cities of Margate City, Ventnor City, and Longport Borough as "Additional Insured" under General Liability Insurance as noted in Section 00 73 00, Special Clause entitled "INSURANCE REQUIREMENTS".

This page was intentionally left blank for duplex printing.

52.204-6	Data Universal Numbering System Number	JUL 2013
52.214-3	Amendments To Invitations For Bids	DEC 1989
52.214-4	False Statements In Bids	APR 1984
52.214-5	Submission Of Bids	MAR 1997
52.214-6	Explanation To Prospective Bidders	APR 1984
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids	NOV 1999
52.214-18	Preparation of Bids-Construction	APR 1984
52.214-19	Contract Award-Sealed Bidding-Construction	AUG 1996
52.214-34	Submission Of Offers In The English Language	APR 1991
52.214-35	Submission Of Offers In U.S. Currency	APR 1991
52.214-5000	Apparent Clerical Mistakes	MAR 2000
52.216-1	Type Of Contract	APR 1984
52.217-5	Evaluation Of Options	JUL 1990
52.222-5	Construction Wage Rate Requirements--Secondary Site of the Work	MAY 2014
52.222-23	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction	FEB 1999
52.225-12	Notice of Buy American Requirement - Construction Materials Under Trade Agreements	MAY 2014
52.232-38	Submission of Electronic Funds Transfer Information with Offer	JUL 2013
52.233-2	Service Of Protest	SEP 2006
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991

This page was intentionally left blank for duplex printing.

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM NUMBER (JULY 2013)

(a) Definition. Data Universal Numbering System (DUNS) number, as used in this provision, means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities, which is used as the identification number for Federal Contractors.

(b)The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional System for Award Management records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same concern.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number--

(i) Via the Internet at http://fedgov.dnb.com/webform or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(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.

(End of provision)

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)

52.214-18 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.

(End of provision)

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.

(End of provison)

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)

52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995)--EFARS

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

(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 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)

52.216-1 TYPE OF CONTRACT (APR 1984)

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

(End of provision)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

52.222-5 CONSTRUCTION WAGE RATE REQUIREMENTS--SECONDARY SITE OF THE WORK (MAY 2014)

(a)(1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, of this solicitation.

(2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.

(b)(1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.

(2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of provision)

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
18.2%	**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

SMSA 0560, Atlantic, NJ

(End of provision)

52.225-12 NOTICE OF BUY AMERICAN REQUIREMENT-- CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (MAY 2014)

(a) Definitions. "Commercially available off-the-shelf (COTS) item," "construction material," "designated country construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American -- 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 statute 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 statute 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 statute, 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 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 or designated 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 or designated country construction material, and the offeror shall be required to furnish such domestic or designated 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)

52.232-38 SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER (JULY 2013)

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 System for Award Management.

(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 (SEP 2006)

(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 Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

US Army Engineer District, Philadelphia
ATTN: Edward A. Boddie, Chief, Contracts Branch
Wanamaker Building
100 Penn Square East
Philadelphia, Pennsylvania 19107

(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)

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.

52.203-2	Certificate Of Independent Price Determination	APR 1985
52.203-11	Certification And Disclosure Regarding Payments To Influence Certain Federal Transactions	SEP 2007
52.204-3	Taxpayer Identification	OCT 1998
52.204-5	Women-Owned Business (Other Than Small Business)	MAY 1999
52.204-8	Annual Representations and Certifications	MAY 2014
52.209-5	Certification Regarding Responsibility Matters	APR 2010
52.209-7	Information Regarding Responsibility Matters	JUL 2013
52.219-1 Alt I	Small Business Program Representations (Apr 2012) Alternate I	MAY 2014
52.219-28	Post-Award Small Business Program Rerepresentation	JUL 2013
52.222-22	Previous Contracts And Compliance Reports	FEB 1999
52.222-38	Compliance With Veterans' Employment Reporting Requirements	SEP 2010
52.225-20	Prohibition on Conducting Restricted Business Operations in Sudan--Certification	AUG 2009
52.225-25	Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-- Representation and Certifications.	DEC 2012
252.203-7005	Representation Relating to Compensation of Former DoD Officials	NOV 2011
252.209-7001	Disclosure of Ownership or Control by the Government of a Terrorist Country	JAN 2009
252.225-7031	Secondary Arab Boycott Of Israel	JUN 2005
252.247-7022	Representation Of Extent Of Transportation Of Supplies By Sea	AUG 1992

Section 00 45 05- SMALL, VETERAN-OWNED SMALL, SERVICE-DISABLED VETERAN-OWNED SMALL, HUBZONE SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN

This page was intentionally left blank for duplex printing.

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 contrary to subparagraphs (a)(1) through (a)(3) of this provision; or

(2) (i) Has been authorized, in writing, to act as 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) of this provison _____ (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) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, 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 (SEP 2007)

(a) Definitions. As used in this provision--``Lobbying contact'' has the meaning provided at 2 U.S.C. 1602(8). The terms ``agency,'' ``influencing or attempting to influence,'' ``officer or employee of an agency,'' ``person,'' ``reasonable compensation,'' and ``regularly employed'' are defined in the FAR clause of this solicitation entitled ``Limitation on Payments to Influence Certain Federal Transactions'' (52.203-12).

(b) Prohibition. The prohibition and exceptions contained in the FAR clause of this solicitation entitled ``Limitation on Payments to Influence Certain Federal Transactions" (52.203-12) are hereby incorporated by reference in this provision.

(c) Certification. The offeror, by signing its offer, hereby certifies to the best of its knowledge and belief that 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 its behalf in connection with the awarding of this contract.

(d) Disclosure. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(e) Penalty. Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by 31 U.S.C. 1352. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure required to be filed or amended by 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)

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAY 2014)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is **237990.**

(2) The small business size standard is **$27,500,000.00.**

(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)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

( ) Paragraph (d) applies.

( ) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless--

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $150,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business).This provision applies to solicitations that--

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations--Representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, 2010, or 2012.

(vi) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vii) 52.214-14, Place of Performance – Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(viii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(ix) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xi) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xiii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA-designated items.

(xvi) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvii) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $79,507, the provision with its Alternate II applies.

(D) If the acquisition value is $79,507 or more but is less than $100,000, the provision with its Alternate III applies.

(xviii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran--Representation and Certifications. This provision applies to all solicitations.

(xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to--

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

(Contracting Officer check as appropriate.)

(i) 52.219-22, Small Disadvantaged Business Status.

(A) Basic.

(B) Alternate I.

(ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

(iii) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

(iv) 52.222-52, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

(v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA–Designated Products (Alternate I only).

(vi) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through https://www.acquisition.gov. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change
---	---	---	---

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

52.209-5 CERTIFICATION REGARDING RESPONSIBILITY MATTERS (APR 2010)

(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, violating Federal criminal tax laws, or receiving stolen property (if offeror checks "have", the offeror shall also see 52.209-7, if included in this solicitation); 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 paragraph (a)(1)(i)(B) of this provision.; and

(D) Have , have not , within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied.

(1) Federal taxes are considered delinquent if both of the following criteria apply:

(i) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(ii) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(2) Examples. (i) The taxpayer has received a statutory notice of deficiency, under I.R.C. Sec. 6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(ii) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. Sec. 6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(iii) The taxpayer has entered into an installment agreement pursuant to I.R.C. Sec. 6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(iv) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. 362 (the Bankruptcy Code).

(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.

(2) Principal, for the purposes of this certification, means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(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)

52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (JULY 2013)

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

Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

Federal contracts and grants with total value greater than $10,000,000 means--

(1) The total value of all current, active contracts and grants, including all priced options; and

(2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror ( ) has ( ) does not have current active Federal contracts and grants with total value greater than $10,000,000.

(c) If the offeror checked "has" in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in--

(A) The payment of a monetary fine or penalty of $5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of $100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the System for Award Management database via https://www.acquisition.gov (see 52.204-7).

(End of provision)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2012) - ALTERNATE I (MAY 2014)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is **237990**.

(2) The small business size standard is **$27,500,000.00**.

(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) Women-owned small business (WOSB) concern eligible under the WOSB Program. [Complete only if the offeror represented itself as a women-owned small business concern in paragraph (b)(3) of this provision.] The offeror represents as part of its offer that--

(i) It (___) is, (___) is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [___] is, [___] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (b)(4)(i) of this provision is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture. [The offeror shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture: ---- ___ ------.] Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(5) Economically disadvantaged women-owned small business (EDWOSB) concern. [Complete only if the offeror represented itself as a women-owned small business concern eligible under the WOSB Program in (b)(4) of this provision.] The offeror represents as part of its offer that--

(i) It (___) is, (___) is not an EDWOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [___] is, [___] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (b)(5)(i) of this provision is accurate for each EDWOSB concern participating in the joint venture. [The offeror shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture: ----- ___ -----.] Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

(6) (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.

(7) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(6) of this provision.) The offeror represents as part of its offer that it (___) is, (___) is not a service-disabled veteran-owned small business concern.

(8) [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--

(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)(8)(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.

(9) (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, 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).

___ Individual/concern, other than one of the preceding.

(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 service-disabled 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 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; or

(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)

52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (JULY 2013)

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

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

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 (c) of this clause. Such a concern is ``not dominant in its field of operation'' when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts--

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at http://www.sba.gov/content/table-small-business-size-standards.

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The
Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

The Contractor represents that it ( ) is, ( ) is not a small business concern under NAICS Code **237990** - assigned to contract number .

(Contractor to sign and date and insert authorized signer's name and title).

(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)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (SEP 2010)

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

(End of provision)

52.225-20 PROHIBITION ON CONDUCTING RESTRICTED BUSINESS OPERATIONS IN SUDAN--CERTIFICATION (AUG 2009)

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

Business operations means engaging in commerce in any form, including by acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other apparatus of business or commerce.

Marginalized populations of Sudan means--

(1) Adversely affected groups in regions authorized to receive assistance under section 8(c) of the Darfur Peace and Accountability Act (Pub. L. 109-344) (50 U.S.C. 1701 note); and

(2) Marginalized areas in Northern Sudan described in section 4(9) of such Act.

Restricted business operations means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate--

(1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;

(2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;

(3) Consist of providing goods or services to marginalized populations of Sudan;

(4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;

(5) Consist of providing goods or services that are used only to promote health or education; or

(6) Have been voluntarily suspended.

(b) Certification. By submission of its offer, the offeror certifies that the offeror does not conduct any restricted business operations in Sudan.

(End of provision)

52.225-25 Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran--Representation and Certifications. (DEC 2012)

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

Person--

(1) Means--

(i) A natural person;

(ii) A corporation, business association, partnership, society, trust, financial institution, insurer, underwriter, guarantor, and any other business organization, any other nongovernmental entity, organization, or group, and any governmental entity operating as a business enterprise; and

(iii) Any successor to any entity described in paragraph (1)(ii) of this definition; and

(2) Does not include a government or governmental entity that is not operating as a business enterprise.

Sensitive technology--

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically--

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

(b) The offeror shall email questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(c) Except as provided in paragraph (d) of this provision or if a waiver has been granted in accordance with 25.703-4, by submission of its offer, the offeror—

(1) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(2) Certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act. These sanctioned activities are in the areas of development of the petroleum resources of Iran, production of refined petroleum products in Iran, sale and provision of refined petroleum products to Iran, and contributing to Iran's ability to acquire or develop certain weapons or technologies; and

(3) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds $3,000 with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at http://www.treasury.gov/ofac/downloads/t11sdn.pdf).

(d) Exception for trade agreements. The representation requirement of paragraph (c)(1) and the certification requirements of paragraphs (c)(2) and (c)(3) of this provision do not apply if—

(1) This solicitation includes a trade agreements notice or certification (e.g., 52.225-4, 52.225-6, 52.225-12, 52.225-24, or comparable agency provision); and

(2) The offeror has certified that all the offered products to be supplied are designated country end products or designated country construction material.

(End of provision)

252.203-7005 REPRESENTATION RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (NOV 2011)

(a) Definition. Covered DoD official is defined in the clause at 252.203-7000, Requirements Relating to Compensation of Former DoD Officials.

(b) By submission of this offer, the offeror represents, to the best of its knowledge and belief, that all covered DoD officials employed by or otherwise receiving compensation from the offeror, and who are expected to undertake activities on behalf of the offeror for any resulting contract, are presently in compliance with all post-employment restrictions covered by 18 U.S.C. 207, 41 U.S.C. 2101-2107, and 5 CFR parts 2637 and 2641, including Federal Acquisition Regulation 3.104-2.

(End of provision)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (JAN 2009)

(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 subject to this provision include: Cuba, Iran, 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)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

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

(1) Foreign person means any person (including any individual, partnership, corporation, or other form of association) other than a United States person.

(2) United States means the 50 States, the District of Columbia, outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.

(3) United States person is defined in 50 U.S.C. App. 2415(2) and means--

(i) Any United States resident or national (other than an individual resident outside the United States who is employed by other than a United States person);

(ii) Any domestic concern (including any permanent domestic establishment of any foreign concern); and

(iii) Any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern that is controlled in fact by such domestic concern.

(b) Certification. If the offeror is a foreign person, the offeror certifies, by submission of an offer, 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. 2407(a) prohibits a United States person from taking.

(End of provision)

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)

SMALL, VETERAN-OWNED SMALL, SERVICE-DISABLED VETERAN-OWNED SMALL, HUBZONE SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN

DATE: _____

CONTRACTOR: _____
ADDRESS: _____
SOLICITATION OR CONTRACT NUMBER: W912BU-14-B-0002
ITEM/SERVICE: Absecon Island Beachfill Completion of Initial Construction, Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island, Atlantic County, New Jersey

The following, together with any attachments, is hereby submitted as a Subcontracting Plan to satisfy the applicable requirements of Public Law 95-507 as implemented by OFPP Policy Letter 80-2. NOTE: To assist you in preparing your subcontracting plan, the U.S. Army Corps of Engineers considers the following goals reasonable and achievable for fiscal year 2014:

(a) Small Business: 50.0% of total planned subcontracting dollars

(b) Small Disadvantaged Businesses (SDB), including Historically Black Colleges and Universities or Minority Institutions: 17% of total planned subcontracting dollars*

(c) Women-owned small businesses (WOSB), 18.0% of total planned subcontracting dollars*

(d) Hubzone Small Business (HubSB), 10% of total planned subcontracting dollars *

(e) Service-Disabled Veteran-Owned 4% of total planned subcontracting dollars *

*small business concerns owned and controlled by.

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

(i) Small Business Concerns: _____% of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns.

(ii) Service-Disabled Veteran-Owned Small Business Concerns: _____% of total planned subcontracting dollars under this contract will go to subcontractors who are service-disabled veteran-owned small business concerns.

(iii) HUBZone Small Business Concerns: _____ % of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns located in a historically underutilized business zone which is an area located within one or more qualified census tracts, qualified nonmetropolitan counties, or lands within the external boundaries of an Indian reservation and appear on the List of Qualified HUBZone Small Business Concerns maintained by the SBA. (http://www.sba.gov/hubzone/).

(iv) Small Disadvantaged Business Concerns: _____% of total planned subcontracting dollars under this contract will go to subcontractors who are small concerns owned and controlled by socially and economically disadvantaged individuals. This percentage is included in the percentage shown under 1.(a)(i) above, as a subset.

(v) Women-Owned Small Business Concerns: _____% of total planned subcontracting dollars under this contract will go to subcontractors who are women-owned small business concerns. This percentage is included in the percentage shown under 1.(a)(i) above, as a subset.

(vi) Veteran-Owned Small Business Concerns: _____ % of total planned subcontracting dollars under this contract will go to subcontractors who are veteran-owned small business concerns. This percentage is included in the percentage shown under 1 (a)(i) above, as a subset.

(b) The following dollar values correspond to the percentage goals shown in (a) above.

(i) Total dollars planned to be subcontracted to small business concerns:
$_____.

(ii) Total dollars planned to be subcontracted to service-disabled veteran-owned small business concerns:
$_____.

(iii) Total dollars planned to be subcontracted to HUBZone small business concerns:
$_____.

(iv) Total dollars planned to be subcontracted to small disadvantaged business concerns: $_____-_____. This dollar amount is included in the amount shown under 1.(b)(i) above, as a subset.

(v) Total dollars planned to be subcontracted to women-owned small business concerns:
$_____. This dollar amount is included in the amount shown under 1.(b)(i) above, as a subset.

(vi) Total dollars planned to be subcontracted to veteran-owned small business concerns:
$_____. This dollar amount is included in the amount shown under 1 (b)(i) above, as a subset.

(c) The total estimated dollar value of all planned subcontracting (to all types of business concerns) under this contract is
$_____.

(d) The following principal products and/or services will be subcontracted under this contract, and the distribution among small, service-disabled veteran-owned small, HUBZone small business, small disadvantaged, women-owned, and veteran-owned small business concerns is as follows:

(Products/services planned to be subcontracted to small business concerns are identified by *, service disabled veteran-owned small business concerns by **, HUBZone small business concerns by ***, small disadvantaged business concerns by **** and women-owned small business concerns by *****, veteran-owned small business concerns******)

_____

_____

_____

_____

_____

(Attachment may be used if additional space is required)

(e) The following method was used in developing subcontract goals (i.e., statement explaining how the product and service areas to be subcontracted were established, how the areas to be subcontracted to small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns were determined, and how small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns capabilities were determined, to include identification of source lists utilized in making those determination).

(f) Indirect and over head costs [_____] have [_____] have not been included in the goals specified in 1(a) and 1(b).

(g) If "have" is checked, explain the method used in determining the proportionate share of indirect and overhead cost to be allocated as subcontracts to small business concerns, service-disabled veteran-owned small, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business concerns, and veteran-owned small business concerns.

_____

_____

_____

_____

_____

2. The following individual will administer the subcontracting program:

Name: _____
Address & Telephone: _____
Telephone: _____

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

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

(a) Developing and maintaining bidders lists of small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns from all possible sources.

(b) Ensuring that procurement packages are structured to permit small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns to participate to the maximum extent possible.

(c) Assuring inclusion of small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns in all solicitations for products or services which they are capable of providing.

(d) Reviewing solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns participation.

(e) Ensuring periodic rotation of potential subcontractors on bidders lists.

(f) Ensuring that the bid proposal review board documents its reasons for rejecting low bids submitted by small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns.

(g) Ensuring the establishment and maintenance of records of solicitations and subcontract award activity.

(h) Attending or arranging for attendance of company counselors at Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, etc.

(i) Conducting or arranging for conduct of motivational training for purchasing personnel pursuant to the intent of P.O. 95-507.

(j) Monitoring attainment of proposed goals.

(k) Preparing and submitting periodic subcontracting reports required.

(l) Coordinating contractor's activities during the conduct of compliance reviews by Federal Agencies.

(m) Coordinating the conduct of contractor's activities involving its small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business subcontracting program.

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

3. The following efforts will be taken to assure that small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns will have an equitable opportunity to compete for subcontracts:

(a) Outreach efforts will be made as follows:

(i) Contacts with minority and small business trade associations

(ii) Contacts with business development organizations

(iii) Attendance at small and minority business procurement conferences

(iv) Sources will be requested from SBA's PASS system.

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

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

(ii) Activities will be monitored to evaluate compliance with this subcontracting plan.

(c) Small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns source lists, guides and other data identifying small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns will be maintained and utilized by buyers in soliciting subcontracts.

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

4. The bidder (contractor) agrees that the clause entitled Utilization of Small Business Concerns (FAR 52.219-8) will be included in all subcontracts which offer further subcontracting opportunities, and all subcontractors except small business

concerns who receive subcontracts in excess of $500,000 will be required to adopt and comply with a subcontracting plan similar to this one. Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business concerns subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors facilities to review applicable records and subcontracting program progress.

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

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

(a) Small, service-disabled veteran-owned small, HUBZone Small, Small Disadvantaged, women-owned small, and veteran-owned small business concerns source lists, guides and other data identifying SB/HZSB/SDB/WO/VO vendors.

(b) Organizations contacted for small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned small, and veteran-owned small business sources.

(c) On a contract-by-contract basis, records on all subcontract solicitations over $100,000, indicating on each solicitation (1) whether small business concerns were solicited, and if not, why not; (2) whether service-disabled veteran-owned small business concerns were solicited, and if not, why not; (3) whether HUBZone small business concerns were solicited, and if not, why not; (4) whether small disadvantaged business concerns were solicited, and if not, why not; (5) whether women-owned business concerns were solicited and if not, why not; (6) whether veteran-owned business concerns were solicited and if not, why not; and (7) reasons for the failure of solicited small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, women-owned, or veteran-owned small business concerns to receive the subcontract award.

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

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

(f) On a contract-by-contract basis, records to support subcontract award data to include name and address or subcontractor .

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

_____

_____

_____

_____

Signed: _____
Typed Name: _____
Title: _____
Date: _____

Plan Accepted By: _____

Contracting Officer

Date: _____

NOTE TO CONTRACTING OFFICER: Upon incorporation of a plan into the contract, indicate herein the estimated dollar value of the contract:

$ _____.

52.202-1	Definitions	NOV 2013
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	MAY 2014
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	MAY 2014
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	MAY 2014
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	OCT 2010
52.203-13	Contractor Code of Business Ethics and Conduct	APR 2010
52.203-17	Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights	APR 2014
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-7	System for Award Management	JUL 2013
52.204-9	Personal Identity Verification of Contractor Personnel	JAN 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	JUL 2013
52.204-14	Service Contract Reporting Requirements	JAN 2014
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	AUG 2013
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	JUL 2013
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	MAY 2012
52.211-13	Time Extensions	SEP 2000
52.211-18	Variation in Estimated Quantity	APR 1984
52.214-26	Audit and Records--Sealed Bidding	OCT 2010
52.214-27	Price Reduction for Defective Certified Cost or Pricing Data - Modifications - Sealed Bidding	AUG 2011
52.214-28	Subcontracting Certified Cost Or Pricing Data--Modifications--Sealed Bidding	OCT 2010
52.217-7	Option For Increased Quantity-Separately Priced Line Item	MAR 1989
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns	JAN 2011
52.219-8	Utilization of Small Business Concerns	MAY 2014
52.219-9 Alt I	Small Business Subcontracting Plan (JULY 2013) Alternate I	OCT 2001
52.219-16	Liquidated Damages-Subcontracting Plan	JAN 1999
52.222-1	Notice To The Government Of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	MAY 2014
52.222-6	Construction Wage Rate Requirements	MAY 2014
52.222-7	Withholding of Funds	MAY 2014
52.222-8	Payrolls and Basic Records	MAY 2014
52.222-9	Apprentices and Trainees	JUL 2005
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	MAY 2014
52.222-12	Contract Termination-Debarment	MAY 2014

52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	MAY 2014
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	MAY 2014
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	MAR 2007
52.222-27	Affirmative Action Compliance Requirements for Construction	FEB 1999
52.222-35	Equal Opportunity for Veterans	SEP 2010
52.222-36	Affirmative Action For Workers With Disabilities	OCT 2010
52.222-37	Employment Reports on Veterans	SEP 2010
52.222-50	Combating Trafficking in Persons	FEB 2009
52.222-54	Employment Eligibility Verification	AUG 2013
52.222-99	Establishing a Minimum Wage for Contractors	JUN 2014
52.223-6	Drug-Free Workplace	MAY 2001
52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
52.225-11	Buy American--Construction Materials Under Trade Agreements	MAY 2014
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.227-1	Authorization and Consent	DEC 2007
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	DEC 2007
52.227-4	Patent Indemnity-Construction Contracts	DEC 2007
52.228-1	Bid Guarantee	SEP 1996
52.228-2	Additional Bond Security	OCT 1997
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.228-11	Pledges Of Assets	JAN 2012
52.228-12	Prospective Subcontractor Requests for Bonds	MAY 2014
52.228-14	Irrevocable Letter of Credit	MAY 2014
52.228-15	Performance and Payment Bonds--Construction	OCT 2010
52.229-3	Federal, State And Local Taxes	FEB 2013
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 2014
52.232-17	Interest	MAY 2014
52.232-23	Assignment Of Claims	MAY 2014
52.232-27	Prompt Payment for Construction Contracts	MAY 2014
52.232-33	Payment by Electronic Funds Transfer--System for Award Management	JUL 2013
52.232-39	Unenforceability of Unauthorized Obligations	JUN 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	DEC 2013
52.233-1 Alt I	Disputes (May 2014) - Alternate I	DEC 1991
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13 Alt I	Accident Prevention (Nov 1991) - Alternate I	NOV 1991

52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21	Specifications and Drawings for Construction	FEB 1997
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	JUN 2007
52.244-6	Subcontracts for Commercial Items	MAY 2014
52.246-12	Inspection of Construction	AUG 1996
52.246-21	Warranty of Construction	MAR 1994
52.248-3	Value Engineering-Construction	OCT 2010
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (Apr 2012) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.249-5000	Basis for Settlement of Proposals	APR 2000
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.203-7003	Agency Office of the Inspector General	DEC 2012
252.203-7005	Representation Relating to Compensation of Former DoD Officials	NOV 2011
252.204-7000	Disclosure Of Information	AUG 2013
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	System for Award Management Alternate A	MAR 2014
252.204-7006	Billing Instructions	OCT 2005
252.204-7012	Safeguarding of unclassified controlled technical information	NOV 2013
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7001	Disclosure of Ownership or Control by the Government of a Terrorist Country	JAN 2009
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	MAR 2014
252.219-7003	Small Business Subcontracting Plan (DOD Contracts)	AUG 2012
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7012	Preference For Certain Domestic Commodities	FEB 2013
252.227-7033	Rights in Shop Drawings	APR 1966
252.232-7010	Levies on Contract Payments	DEC 2006
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7001	Contract Drawings, and Specifications	AUG 2000
252.236-7002	Obstruction of Navigable Waterways	DEC 1991
252.236-7004	Payment for Mobilization and Demobilization	DEC 1991
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	DEC 2012
252.244-7000	Subcontracts for Commercial Items	JUN 2013
252.247-7023	Transportation of Supplies by Sea	APR 2014
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000

This page was intentionally left blank for duplex printing.

52.202-1 DEFINITIONS (NOV 2013)

When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--

(a) The solicitation, or amended solicitation, provides a different definition;

(b) The contracting parties agree to a different definition;

(c) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or

(d) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

(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 (SEP 2006)

(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 the simplified acquisition threshold.

52.203-7 ANTI-KICKBACK PROCEDURES. (MAY 2014)

(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 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) 41 U.S.C. chapter 87, Kickbacks, 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 Attorney General.

(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 $150,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (MAY 2014)

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C. 2102-2104, Restrictions on Obtaining and Disclosing Certain Information, 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 violates 41 U.S.C. 2102 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 punishable under 41 U.S.C. 2105(a).

(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.

(End of clause)

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (MAY 2014)

(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 41 U.S.C. 2102 or 2103, 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 statute 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 (OCT 2010)

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

Agency means executive agency as defined in Federal Acquisition Regulation (FAR) 2.101.

Covered Federal action means any of the following actions:

(1) Awarding any Federal contract.

(2) Making any Federal grant.

(3) Making any Federal loan.

(4) Entering into any cooperative agreement.

(5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

Indian tribe and tribal organization 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 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 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 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 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 eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Reasonable compensation 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 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 includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Regularly employed 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 means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibition. 31 U.S.C. 1352 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 covered Federal actions. In accordance with 31 U.S.C. 1352, the Contractor shall not use 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 the award of this contractor the extension, continuation, renewal, amendment, or modification of this contract.

(1) The term appropriated funds does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that these other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(c) Exceptions. The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) Agency and legislative liaison by Contractor employees.

(i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern--

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action 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.

(2) Professional and technical services. (i) 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.

(ii) 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.

(iii) As used in paragraph (c)(2) of this clause, ``professional and technical services" are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).

(iv) 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.

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.

(d) Disclosure. (1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL.

(e) Penalties. (1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) 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.

(g) Subcontracts. (1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract exceeding $150,000 under this contract. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in any subcontract exceeding $150,000.

(End of clause)

52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (APR 2010)

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

Agent means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

Full cooperation—

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors' and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require-
-

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from--

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Code of business ethics and conduct. (1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall--

(i) Have a written code of business ethics and conduct;

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall--

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)(i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed--

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial item as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals and employees, and as appropriate, the Contractor's agents and subcontractors.

(2) An internal control system.

(i) The Contractor's internal control system shall--

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including--

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontractor thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument

intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that have a value in excess of $5,000,000 and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(End of clause)

52.203-17 CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (APR 2014)

(a) This contract and employees working on this contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and FAR 3.908.

(b) The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts over the simplified acquisition threshold.

(End of clause)

52.204-4 Printed or Copied Double-Sided on Postconsumer Fiber Content Paper (May 2011)

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

Postconsumer fiber means—

(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.

(b) The Contractor is required to submit paper documents, such as offers, letters, or reports that are printed or copied double-sided on paper containing at least 30 percent postconsumer fiber, whenever practicable, when not using electronic commerce methods to submit information or data to the Government.

(End of clause)

52.204-7 SYSTEM FOR AWARD MANAGEMENT (JULY 2013)

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

Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional System for Award Management records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same parent concern.

Registered in the System for Award Management SAM database means that--

(1) The offeror has entered all mandatory information, including the DUNS number or the DUNS+4 number, the Contractor and Government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see Subpart 4.14) into the SAM database;

(2) The offeror has completed the Core, Assertions, and Representations and Certifications, and Points of Contact sections of the registration in the SAM database;

(3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The offeror will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and

(4) The Government has marked the record ``Active".

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the SAM database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the offeror's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the SAM database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number--

(i) Via the Internet at http://fedgov.dnb.com/webform or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company Physical Street Address, City, State, and Zip Code.

(iv) Company Mailing Address, City, State and Zip Code (if separate from physical).

(v) Company Telephone Number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the SAM database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) Offerors may obtain information on registration at https://www.acquisition.gov.

(End of clause)

52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

(1) When no longer needed for contract performance.

(2) Upon completion of the Contractor employee's employment.

(3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts when the subcontractor`s employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to

return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

(End of Clause)

52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JULY 2013)

(a) Definitions. As used in this clause:

Executive means officers, managing partners, or any other employees in management positions.

First-tier subcontract means a subcontract awarded directly by the Contractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect costs.

Month of award means the month in which a contract is signed by the Contracting Officer or the month in which a first-tier subcontract is signed by the Contractor.

Total compensation means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

(1) Salary and bonus.

(2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Financial Accounting Standards Board's Accounting Standards Codification (FASB ASC) 718, Compensation-Stock Compensation.

(3) Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

(4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

(5) Above-market earnings on deferred compensation which is not tax-qualified.

(6) Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

(b) Section 2(d)(2) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

(c) Nothing in this clause requires the disclosure of classified information.

(d)(1) Executive compensation of the prime contractor. As a part of its annual registration

requirement in the System for Award Management (SAM) database (FAR provision 52.204-7), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for its preceding completed fiscal year, if—

(i) In the Contractor's preceding fiscal year, the Contractor received—

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

(2) First-tier subcontract information. Unless otherwise directed by the contracting officer, or as provided in paragraph (g) of this clause, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, the Contractor shall report the following information at http://www.fsrs.gov for that first-tier subcontract. (The Contractor shall follow the instructions at http://www.fsrs.gov to report the data.)

(i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.

(ii) Name of the subcontractor.

(iii) Amount of the subcontract award.

(iv) Date of the subcontract award.

(v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(vi) Subcontract number (the subcontract number assigned by the Contractor).

(vii) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(viii) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(ix) The prime contract number, and order number if applicable.

(x) Awarding agency name and code.

(xi) Funding agency name and code.

(xii) Government contracting office code.

(xiii) Treasury account symbol (TAS) as reported in FPDS.

(xiv) The applicable North American Industry Classification System code (NAICS).

(3) Executive compensation of the first-tier subcontractor.
Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, and annually thereafter (calculated from the prime contract award date), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for that first-tier subcontractor for the first-tier subcontractor's preceding completed fiscal year at http://www.fsrs.gov, if—

(i) In the subcontractor's preceding fiscal year, the subcontractor received—

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

(e) The Contractor shall not split or break down first-tier subcontract awards to a value less than $25,000 to avoid the reporting requirements in paragraph (d).

(f) The Contractor is required to report information on a first-tier subcontract covered by paragraph (d) when the subcontract is awarded. Continued reporting on the same subcontract is not required unless one of the reported data elements changes during the performance of the subcontract. The Contractor is not required to make further reports after the first-tier subcontract expires.

(g)(1) If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards for that subcontractor.

(h) The FSRS database at http://www.fsrs.gov will be prepopulated with some information from SAM and FPDS databases. If FPDS information is incorrect, the contractor should notify the contracting officer. If the SAM database information is incorrect, the contractor is responsible for correcting this information.

(End of clause)

52.204-14 SERVICE CONTRACT REPORTING REQUIREMENTS (JAN 2014)

(a) Definition. First-tier subcontract means a subcontract awarded directly by the Contractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for

materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect costs.

(b) The Contractor shall report, in accordance with paragraphs (c) and (d) of this clause, annually by October 31, for services performed under this contract during the preceding Government fiscal year (October 1-September 30).

(c) The Contractor shall report the following information:

(1) Contract number and, as applicable, order number.

(2) The total dollar amount invoiced for services performed during the previous Government fiscal year under the contract.

(3) The number of Contractor direct labor hours expended on the services performed during the previous Government fiscal year.

(4) Data reported by subcontractors under paragraph (f) of this clause.

(d) The information required in paragraph (c) of this clause shall be submitted via the internet at www.sam.gov. (See SAM User Guide). If the Contractor fails to submit the report in a timely manner, the contracting officer will exercise appropriate contractual remedies. In addition, the Contracting Officer will make the Contractor's failure to comply with the reporting requirements a part of the Contractor's performance information under FAR subpart 42.15.

(e) Agencies will review Contractor reported information for reasonableness and consistency with available contract information. In the event the agency believes that revisions to the Contractor reported information are warranted, the agency will notify the Contractor no later than November 15. By November 30, the Contractor shall revise the report, or document its rationale for the agency.

(f)(1) The Contractor shall require each first-tier subcontractor providing services under this contract, with subcontract(s) each valued at or above the thresholds set forth in 4.1703(a)(2), to provide the following detailed information to the Contractor in sufficient time to submit the report:

(i) Subcontract number (including subcontractor name and DUNS number); and

(ii) The number of first-tier subcontractor direct-labor hours expended on the services performed during the previous Government fiscal year.

(2) The Contractor shall advise the subcontractor that the information will be made available to the public as required by section 743 of Division C of the Consolidated Appropriations Act, 2010.

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (AUG 2013)

(a) Definition. Commercially available off-the-shelf (COTS) item, as used in this clause--

(1) Means any item of supply (including construction material) that is--

(i) A commercial item (as defined in paragraph (1) of the definition in FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

(b) The Government suspends or debars Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract, in excess of $30,000 with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless there is a compelling reason to do so.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed $30,000, other than a subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM.

(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.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial items, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each subcontract that--

(1) Exceeds $30,000 in value; and

(2) Is not a subcontract for commercially available off-the-shelf items.

(End of clause)

52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (JULY 2013)
(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management database via https://www.acquisition.gov.

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consists of two segments--

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by--

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for--

(i) Past performance reviews required by subpart 42.15;

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

(End of clause)

52.209-10 Prohibition on Contracting With Inverted Domestic Corporations. (MAY 2012)

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

Inverted domestic corporation means a foreign incorporated entity which is treated as an inverted domestic corporation under 6 U.S.C. 395(b), i.e., a corporation that used to be incorporated in the United States, or used to be a partnership in the United States, but now is incorporated in a foreign country, or is a subsidiary whose parent corporation is incorporated in a foreign country, that meets the criteria specified in 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c). An inverted domestic corporation as herein defined does not meet the definition of an inverted domestic corporation as defined by the Internal Revenue Code at 26 U.S.C. 7874.

Subsidiary means an entity in which more than 50 percent of the entity is owned--

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) If the contractor reorganizes as an inverted domestic corporation or becomes a subsidiary of an inverted domestic corporation at any time during the period of performance of this contract, the Government may be prohibited from paying for Contractor activities performed after the date when it becomes an inverted domestic corporation or subsidiary. The Government may seek any available remedies in the event the Contractor fails to perform in accordance with the terms and conditions of the contract as a result of Government action under this clause.

(c) Exceptions to this prohibition are located at 9.108-2.

(End of clause)

52.211-13 TIME EXTENSIONS (SEP 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(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 judgement of the Contracting Officer, is justified.

52.214-26 AUDIT AND RECORDS--SEALED BIDDING (OCT 2010)

(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) Certified cost or pricing data. If the Contractor has been required to submit certified 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 certified 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 and also the right to interview any current employee regarding such transactions.

(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 certified cost or pricing data.

(End of clause)

52.214-27 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (AUG 2011)

(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 certified 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.

(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 certified 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 certified 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) of this clause 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 certified 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 certified cost or pricing data had been submitted;

(ii) The Contracting Officer should have known that the certified 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 certified 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) Interest compounded daily, as required by 26 U.S.C. 6622, 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 certified cost or pricing data which were incomplete, inaccurate, or noncurrent.

(End of clause)

52.214-28 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 2010)

(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 certified cost or pricing data at FAR 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 certified 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 certified cost or pricing data at FAR 15.403-4(a)(1), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), as part of the subcontractor's proposal in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-1(b) applies.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR subsection 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause 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 certified cost or pricing data at FAR 15.403-4(a)(1).

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within **(See Spec Section 00 73 00, SC-1).** Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 2011)

(a) Definitions. See 13 CFR 125.6(e) for definitions of terms used in paragraph (d).

(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; and

(ii) Otherwise successful offers from small business concerns.

(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.

(4) When the two highest rated offerors are a HUBZone small business concern and a large business, and the evaluated offer of the HUBZone small business concern is equal to the evaluated offer of the large business after considering the price evaluation preference, award will be made to the HUBZone small business concern.

(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 paragraphs (d) and (e) 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. (i) At least 15 percent of the cost of contract performance to be incurred for personnel will be spent on the prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the prime contractor's employees or on a combination of the prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to
concerns that are not HUBZone small business concerns; or

(4) Construction by special trade contractors. (i) At least 25 percent of the cost of contract performance to be incurred for personnel will be spent on the prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the prime contractor's employees or on a combination of the prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to
concerns that are not HUBZone small business concerns.

(e) A HUBZone joint venture agrees that the aggregate of the HUBZone small business concerns to the joint venture, not each concern separately, will perform the applicable percentage of work requirements.

(f)(1) When the total value of the contract exceeds $25,000, a HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business concern manufacturers.

(2) When the total value of the contract is equal to or less than $25,000, a HUBZone small business concern nonmanufacturer may provide end items manufactured by other than a HUBZone small business concern manufacturer provided the end items are produced or manufactured in the United States.

(3) Paragraphs (f)(1) and (f)(2) of this section do not apply in connection with construction or service contracts.

(g) Notice. The HUBZone small business offeror acknowledges that a prospective HUBZone awardee must be a HUBZone small business concern at the time of award of this contract. The HUBZone offeror shall provide the Contracting Officer a copy of the notice required by 13 CFR 126.501 if material changes occur before contract award
that could affect its HUBZone eligibility. If the apparently successful HUBZone offeror is not a HUBZone small business concern at the time of award of this contract, the Contracting Officer will proceed to award to the next otherwise successful HUBZone small business concern or other offeror.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2014)

(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 awarded 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.

(c) 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 service-disabled 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)(i) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

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

(iii) 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

(iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the SAM Dynamic Small Business Search database maintained by the Small Business Administration, or

(2) It represents in writing that it qualifies as a small disadvantaged business (SDB) for any Federal subcontracting program, and believes in good faith that it is owned and controlled by one or more socially and economically disadvantaged individuals and meets the SDB eligibility criteria of 13 CFR 124.1002.

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)(1) 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 small disadvantaged business concern, or a women-owned small business concern.

(2) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management database or by contacting the SBA. Options for contacting the SBA include--

(i) HUBZone small business database search application Web page at http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm; or http://www.sba.gov/hubzone;

(ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington DC 20416; or

(iii) The SBA HUBZone Help Desk at hubzone@sba.gov.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JULY 2013)--ALTERNATE I (OCT 2001).

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

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

"Alaska Native Corporation (ANC)" means any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the State of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended (43 U.S.C. 1601, et seq.) and which is considered a minority and economically disadvantaged concern under the criteria at 43 U.S.C. 1626(e)(1). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of 43 U.S.C. 1626(e)(2).

"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).

"Electronic Subcontracting Reporting System (eSRS)" means the Governmentwide, electronic, web-based system for small business subcontracting program reporting. The eSRS is located at http://www.esrs.gov.

"Indian tribe" means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act (43 U.S.C.A. 1601 et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e).

"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 apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a eparate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with 43 U.S.C. 1626:

(i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantaged business (SDB) concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe.

(ii) Where one or more subcontractors are in the subcontract tier between the prime contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

(A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.

(B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.

(C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the prime Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award.

(D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(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 (including ANC and Indian tribes);

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

(iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;

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

(vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and

(vii) 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) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns, and

(vi) 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 System for Award Management (SAM), 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 SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of SAM 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 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 (including ANC and Indian tribes);

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns (including ANC and Indian tribes); and

(vi) 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, service-disabled 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 $650,000 ($1,500,000 for

construction of any public facility with further subcontracting possibilities) to adopt a plan similar to the 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 the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with paragraph (l) of this clause using the Electronic Subcontracting Reporting System (eSRS) at http://www.esrs.gov. The reports shall provide information on subcontract awards to small business concerns (including ANCs and Indian tribes that are not small businesses), veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns (including ANCs and Indian tribes that have not been certified by the Small Business Administration as small disadvantaged businesses), women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;

(iv) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;

(v) Provide its prime contract number, its DUNS number, and the e-mail address of the offeror's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs; and

(vi) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

(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, service-disabled 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., SAM), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned 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, service-disabled 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 $150,000, 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 service-disabled veteran-owned small business concerns were solicited and, if not, why not;

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

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

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

(G) 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 organizaions.

(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-owned small business, service-disabled veteran-owned 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-owned small business, service-disabled veteran-owned 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-owned small business, service-disabled veteran-owned 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-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Confirm that a subcontractor representing itself as a HUBZone small business concern is identified as a certified HUBZone small business concern by accessing the SAM) database or by contacting SBA.

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned 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.

(6) For all competitive subcontracts over the simplified acquisition threshold in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, the Contractor must

inform each unsuccessful small business subcontract offeror in writing of the name and location of the apparent successful offeror prior to award of the contract.

(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. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial item. A Contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.

(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) A contract may have no more than one plan. When a modification meets the criteria in 19.702 for a plan, or an option is exercised, the goals associated with the modification or option shall be added to those in the existing subcontract plan.

(j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at 52.212-5, Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items, or when the subcontractor provides a commercial item subject to the clause at 52.244-6, Subcontracts for Commercial Items, under a prime contract.

(k) 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.

(l) The Contractor shall submit ISRs and SSRs using the web-based eSRS at http://www.esrs.gov. Purchases from a corporation, company, or subdivision that is an affiliate of the prime Contractor or subcontractor are not included in these reports. Subcontract award data reported by prime Contractors and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors, unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe. Only subcontracts involving performance in the United States or its outlying areas should be included in these reports with the exception of subcontracts under a contract awarded by the State Department or any other agency that has statutory or regulatory authority to require subcontracting plans for subcontracts performed outside the United States and its outlying areas

(1) ISR. This report is not required for commercial plans. The report is required for each contract containing an individual subcontract plan.

(i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period.

(ii) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR 19.704(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.

(iii) The authority to acknowledge receipt or reject the ISR resides--

(A) In the case of the prime Contractor, with the Contracting Officer; and

(B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) SSR.

(i) Reports submitted under individual contract plans--

(A) This report encompasses all subcontracting under prime contracts and subcontracts with the awarding agency, regardless of the dollar value of the subcontracts.

(B) The report may be submitted on a corporate, company or subdivision (e.g. plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.

(C) If a prime Contractor and/or subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over $650,000 (over $1,500,000 for construction of a public facility) and contains a subcontracting plan. For DoD, a consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime Contractors. However, for construction and related maintenance and repair, a separate report shall be submitted for each DoD component.

(D) For DoD and NASA, the report shall be submitted semi-annually for the six months ending March 31 and the twelve months ending September 30. For civilian agencies, except NASA, it shall be submitted annually for the twelve month period ending September 30. Reports are due 30 days after the close of each reporting period.

(E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.

(F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with subcontracting plans, resides with the Government agency awarding the prime contracts unless stated otherwise in the contract.

(ii) Reports submitted under a commercial plan--

(A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year.

(B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.

(C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency from which contracts for commercial items were received.

(D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

(iii) All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a Year-End Supplementary Report for Small Disadvantaged Businesses. The report shall include subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. If the data are not available when the year-end SSR is submitted, the prime Contractor and/or subcontractor shall submit the Year-End Supplementary Report for Small Disadvantaged Businesses within 90 days of submitting the year-end SSR. 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)

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely

performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

(End of clause)

52.222-3 CONVICT LABOR (JUN 2003)

(a) Except as provided in paragraph (b) of this clause, the Contractor shall not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons--

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

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

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

(iii) 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;

(iv) 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

(v) 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. (MAY 2014)

(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 statute (found at 40 U.S.C. chapter 37).

(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 statute.

(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 Construction Wage Rate Requirements statute.

(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 that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such 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 CONSTRUCTION WAGE RATE REQUIREMENTS (MAY 2014)

(a) Definition.—"Site of the work"—

(1) Means—

(i) *The primary site of the work.* The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) *The secondary site of the work, if any.* Any other site where a significant portion of the building or work is constructed, provided that such site is—

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided—

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the "primary site of the work" as defined in paragraph (a)(1)(i), or the "secondary site of the work" as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of bids and not on the Project site, are not included in the "site of the work." Such permanent, previously established facilities are not a part of the "site of the work" even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b)(1) 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, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work shall be effective from the first day on which work under the contract was performed at that site and shall be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work shall be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Construction Wage Rate Requirements statute on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) 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.

(3) 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.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Construction Wage Rate Requirements statute poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the primary site of the work and the secondary site of the work, if any, in a prominent and accessible place where it can be easily seen by the workers.

(c)(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 paragraphs (c)(2) and (c)(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.

(d) 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.

(e) 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 Construction Wage Rate Requirements statute have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

52.222-7 WITHHOLDING OF FUNDS (MAY 2014)

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 Construction Wage Rate Requirements statute prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.222-8 PAYROLLS AND BASIC RECORDS (MAY 2014)

(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 40 U.S.C. 3141(2)(B) (Construction Wage Rate Requirement statute)), 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 Construction Wage Rate Requirements, 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 40 U.S.C. 3141(2)(B), 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, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be obtained from the U.S. Department of Labor Wage and Hour Division website at http://www.dol.gov/whd/forms/wh347.pdf. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Contracting Officer, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a Prime Contractor to require a subcontractor to provide addresses and social security numbers to the Prime Contractor for its own records, without weekly submission to the Contracting Officer.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

52.222-9 APPRENTICES AND TRAINEES (JUL 2005)

(a) Apprentices. (1) An apprentice will be permitted to work at less than the predetermined rate for the work performed when employed--

(i) Pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS) or with a State Apprenticeship Agency recognized by the OATELS; or

(ii) In the first 90 days of probationary employment as an apprentice in such an apprenticeship program, even though not individually registered in the program, if certified by the OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) 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.

(3) Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(1) of this clause, 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.

(4) 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.

(5) 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.

(6) In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, 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.

(1) 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, Office of Apprenticeship Training, Employer, and Labor Services (OATELS). The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by OATELS.

(2) 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 OATELS 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.

(3) In the event OATELS withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(End of clause)

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.

(End of clause)

52.222-11 SUBCONTRACTS (LABOR STANDARDS) (MAY 2014)

(a) Definition. Construction, alteration or repair, as used in this clause, means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation--

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the ``site of work'' as defined in the FAR clause at 52.222-6, Construction Wage Rate Requirements of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the ``site of work'' definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the ``site of work'' definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the ``site of the work'' definition).

(b) The Contractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled--

(1) Construction Wage Rate Requirements;

(2) Contract Work Hours and Safety Standards--Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements;

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination--Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Construction Wage Rate Requirements and Related Regulations; and

(11) Certification of Eligibility.

(c) The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (b) 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.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

(End of clause)

52.222-12 CONTRACT TERMINATION--DEBARMENT (MAY 2014)

A breach of the contract clauses entitled Construction Wage Rate Requirements, Contract Work Hours and Safety Standards--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Construction Wage Rate Requirements and Related Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13 COMPLIANCE WITH CONSTRUCTION WAGE RATE REQUIREMENTS AND RELATED REGULATIONS (MAY 2014)

All rulings and interpretations of the Construction Wage Rate Requirements and related statutes contained in 29 CFR parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

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.

(End of clause)

52.222-15 CERTIFICATION OF ELIGIBILITY (MAY 2014)

(a) By entering into this contract, the Contractor certifies that neither it 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 40 U.S.C. 3144(b)(2) 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 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

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)

52.222-26 EQUAL OPPORTUNITY (MAR 2007)

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b)(1) 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 this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(2) If the Contractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Contractor's activities (41 CFR 60-1.5).

(c) (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 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.

(d) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

(End of clause)

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.

(o) Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(End of clause)

52.222-35 EQUAL OPPORTUNITY FOR VETERANS (SEP 2010)

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

All employment openings means all positions except executive and senior 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.

Armed Forces service medal veteran means any veteran who, while serving on active duty in the U.S. military, ground, naval, or air service, participated in a United States military operation for which an Armed Forces service medal was awarded pursuant to Executive Order 12985 (61 FR 1209).

Disabled veteran means--

(1) A veteran of the U.S. military, ground, naval, or air service, who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Secretary of Veterans Affairs; or

(2) A person who was discharged or released from active duty because of a service-connected disability.

Executive and senior management means—

(1) Any employee--

(i) Compensated on a salary basis at a rate of not less than $455 per week (or $380 per week, if employed in American Samoa by employers other than the Federal Government), exclusive of board, lodging or other facilities;

(ii) Whose primary duty consists of the management of the enterprise in which the individual is employed or of a customarily recognized department or subdivision thereof;

(iii) Who customarily and regularly directs the work of two or more other employees; and

(iv) Who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring or firing and as to the advancement and promotion or any other change of status of other employees will be given particular weight; or

(2) Any employee who owns at least a bona fide 20-percent equity interest in the enterprise in which the employee is employed, regardless of whether the business is a corporate or other type of organization, and who is actively engaged in its management.

Other protected veteran means a veteran who served on active duty in the U.S. military, ground, naval, or air service, during a war or in a campaign or expedition for which a campaign badge has been authorized under the laws administered by the Department of Defense.

Positions that will be filled from within the Contractor's organization means employment openings for which the Contractor will give no consideration to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings 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.

Qualified disabled veteran means a disabled veteran who has the ability to perform the essential functions of the employment positions with or without reasonable accommodation.

Recently separated veteran means any veteran during the three-year period beginning on the date of such veteran's discharge or release from active duty in the U.S. military, ground, naval or air service.

(b) General.

(1) The Contractor shall not discriminate against any employee or applicant for employment because the individual is a disabled veteran, recently separated veteran, other protected veterans, or Armed Forces service medal veteran, regarding any position for which the employee or applicant for employment is qualified. The Contractor shall take affirmative action to employ, advance in employment, and otherwise treat qualified individuals, including qualified disabled veterans, without discrimination based upon their status as a disabled veteran, recently separated veteran, Armed Forces service medal veteran, and other protected veteran in all employment practices including the following:

(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) Rate 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 apprenticeship, and on-the-job training under 38 U.S.C. 3687, 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.

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

(2) The Contractor shall comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended (38 U.S.C. 4211 and 4212).

(3) The Department of Labor's regulations require contractors with 50 or more employees and a contract of $100,000 or more to have an affirmative action program for veterans. See 41 CFR part 60-300, subpart C.

(c) Listing openings.

(1) The Contractor shall immediately list all employment openings that exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract, and including those occurring at an establishment of the Contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, at an appropriate employment service delivery system where the opening occurs. Listing employment openings with the State workforce agency job bank or with the local employment service delivery system where the opening occurs shall satisfy the requirement to list jobs with the appropriate employment service delivery system.

(2) The Contractor shall make the listing of employment openings with the appropriate employment service delivery system at least concurrently with using any other recruitment source or effort and shall involve the normal obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing of employment openings 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.

(3) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State workforce agency 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 agency, it need not advise the State agency of subsequent contracts. The Contractor may advise the State agency 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 Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(e) Postings.

(1) The Contractor shall post employment notices in conspicuous places that are available to employees and applicants for employment.

(2) The employment notices shall--

(i) State the rights of applicants and employees as well as the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are disabled veterans, recently separated veterans, Armed Forces service medal veterans, and other protected veterans; and

(ii) Be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, and provided by or through the Contracting Officer.

(3) The Contractor shall ensure that applicants or employees who are disabled veterans are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled veteran, or may lower the posted notice so that it can be read by a person in a wheelchair).

(4) 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, recently separated veterans, other protected veterans, and Armed Forces service medal veterans.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, the Government may take appropriate actions under the rules, regulations, and relevant orders of the Secretary of Labor. This includes implementing any sanctions imposed on a contractor by the Department of Labor for violations of this clause (52.222-35, Equal Opportunity for Veterans). These sanctions (see 41 CFR 60-300.66) may include--

(1) Withholding progress payments;

(2) Termination or suspension of the contract; or

(3) Debarment of the contractor.

(g) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of $100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance.

(End of clause)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (OCT 2010)

(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 $15,000 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 VETERANS (SEP 2010)

(a) Definitions. As used in this clause, ``Armed Forces service medal veteran,'' ``disabled veteran,'' ``other protected veteran,'' and ``recently separated veteran,'' have the meanings given in the Equal Opportunity for Veterans clause 52.222-35.

(b) 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 total number of employees in the contractor's workforce, by job category and hiring location, who are disabled veterans, other protected veterans, Armed Forces service medal veterans, and recently separated veterans.

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of disabled veterans, other protected veterans, Armed Forces service medal veterans, and recently separated veterans; and

(3) The maximum number and minimum number of employees of the Contractor or subcontractor at each hiring location during the period covered by the report.

(c) The Contractor shall report the above items by completing the Form VETS-100A,entitled ``Federal Contractor Veterans' Employment Report (VETS-100A Report)."

(d) The Contractor shall submit VETS-100A Reports no later than September 30 of each year.

(e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause shall reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report. Contractors may select an ending date--

(1) As of the end of any pay period between July 1 and August 31 of the year the report is due; or

(2) As of December 31, if the Contractor has prior written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(f) The number of veterans reported must be based on data known to the contractor when completing the VETS-100A. The contractor's knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self-identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the contractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C. 4212.

(g) The Contractor shall insert the terms of this clause in subcontracts of $100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

(End of clause)

52.222-50 COMBATING TRAFFICKING IN PERSONS (FEB 2009)

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

Coercion means--

(1) Threats of serious harm to or physical restraint against any person;

(2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

(3) The abuse or threatened abuse of the legal process.

Commercial sex act means any sex act on account of which anything of value is given to or received by any person.

Debt bondage means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

Employee means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

Forced Labor means knowingly providing or obtaining the labor or services of a person--

(1) By threats of serious harm to, or physical restraint against, that person or another person;

(2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or

(3) By means of the abuse or threatened abuse of law or the legal process.

Involuntary servitude includes a condition of servitude induced by means of--

(1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or

(2) The abuse or threatened abuse of the legal process.

Severe forms of trafficking in persons means--

(1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

(2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

Sex trafficking means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

(b) Policy. The United States Government has adopted a zero tolerance policy regarding trafficking in persons. Contractors and contractor employees shall not--

(1) Engage in severe forms of trafficking in persons during the period of performance of the contract;

(2) Procure commercial sex acts during the period of performance of the contract; or

(3) Use forced labor in the performance of the contract.

(c) Contractor requirements. The Contractor shall--

(1) Notify its employees of--

(i) The United States Government's zero tolerance policy described in paragraph (b) of this clause; and

(ii) The actions that will be taken against employees for violations of this policy. Such actions may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

(2) Take appropriate action, up to and including termination, against employees or subcontractors that violate the policy in paragraph (b) of this clause.

(d) Notification. The Contractor shall inform the Contracting Officer immediately of--

(1) Any information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, or subcontractor employee has engaged in conduct that violates this policy; and

(2) Any actions taken against Contractor employees, subcontractors, or subcontractor employees pursuant to this clause.

(e) Remedies. In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), or (f) of this clause may result in --

(1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;

(2) Requiring the Contractor to terminate a subcontract;

(3) Suspension of contract payments;

(4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;

(5) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or

(6) Suspension or debarment.

(f) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (f), in all subcontracts.

(g) Mitigating Factor. The Contracting Officer may consider whether the Contractor had a Trafficking in Persons awareness program at the time of the violation as a mitigating factor when determining remedies. Additional information about Trafficking in Persons and examples of awareness programs can be found at the website for the Department of State's Office to Monitor and Combat Trafficking in Persons at http://www.state.gov/g/tip.

(End of clause)

52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION (AUG 2013)

(a) Definitions. As used in this clause--Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply that is--

(i) A commercial item (as defined in paragraph (1) of the definition at 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products. Per 46 CFR 525.1(c)(2), ``bulk cargo'' means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

Employee assigned to the contract means an employee who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee--

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

Subcontract means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

United States, as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

(b) Enrollment and verification requirements.

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall--

(i) Enroll. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) Verify all new employees. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) Verify employees assigned to the contract. For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of--

(i) All new employees. (A) Enrolled 90 calendar days or more. The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) Enrolled less than 90 calendar days. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) Employees assigned to the contract. For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2), respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) Option to verify employment eligibility of all employees. The Contractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of--

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor shall comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.

(ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.

(c) Web site. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: http://www.dhs.gov/E-Verify.

(d) Individuals previously verified. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee--

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD)-12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) Subcontracts. The Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that--

(1) Is for--(i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than $3,000; and

(3) Includes work performed in the United States.

(End of clause)

52.222-99 - ESTABLISHING A MINIMUM WAGE FOR CONTRACTORS (DEVIATION 2014-O0017) (JUNE 2014)

This clause implements Executive Order 13658, Establishing a Minimum Wage for Contractors, dated February 12, 2014, and OMB Policy Memorandum M-14-09, dated June 12, 2014.

(a) Each service employee, laborer, or mechanic employed in the United States (the 50 States and the District of Columbia) in the performance of this contract by the prime Contractor or any subcontractor, regardless of any contractual relationship which may be alleged to exist between the Contractor and service employee, laborer, or mechanic, shall be paid not less than the applicable minimum wage under Executive Order 13658. The minimum wage required to be paid to each service employee, laborer, or mechanic performing work on this contract between January 1, 2015, and December 31, 2015, shall be $10.10 per hour.

(b) The Contractor shall adjust the minimum wage paid under this contract each time the Secretary of Labor's annual determination of the applicable minimum wage under section 2(a)(ii) of Executive Order 13658 results in a

higher minimum wage. Adjustments to the Executive Order minimum wage under section 2(a)(ii) of Executive Order 13658 will be effective for all service employees, laborers, or mechanics subject to the Executive Order beginning January 1 of the following year. The Secretary of Labor will publish annual determinations in the Federal Register no later than 90 days before such new wage is to take effect. The Secretary will also publish the applicable minimum wage on www.wdol.gov (or any successor website). The applicable published minimum wage is incorporated by reference into this contract.

(c) The Contracting Officer will adjust the contract price or contract unit price under this clause only for the increase in labor costs resulting from the annual inflation increases in the Executive Order 13658 minimum wage beginning on January 1, 2016. The Contracting Officer shall consider documentation as to the specific costs and workers impacted in determining the amount of the adjustment.

(d) The Contracting Officer will not adjust the contract price under this clause for any costs other than those identified in paragraph (c) of this clause, and will not provide price adjustments under this clause that result in duplicate price adjustments with the respective clause of this contract implementing the Service Contract Labor Standards statute (formerly known as the Service Contract Act) or the Wage Rate Requirements (Construction) statute (formerly known as the Davis Bacon Act).

(e) The Contractor shall include the substance of this clause, including this paragraph (e) in all subcontracts.

(End of clause)

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 at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 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)

52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)

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

Driving—

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

Text messaging means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving, dated October 1, 2009.

(c) The Contractor is encouraged to--

(1) Adopt and enforce policies that ban text messaging while driving--

(i) Company-owned or -rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as--

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

(End of clause)

52.225-11 BUY AMERICAN--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (MAY 2014)

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

Caribbean Basin country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a Caribbean Basin 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 Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is--

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products.

Component means an article, material, or supply incorporated directly into a construction material.

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 construction material (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 construction material.

Designated country means any of the following countries:

(1) A World Trade Organization Government Procurement Agreement country (Armenia, Aruba, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan or United Kingdom);

(2) A Free Trade Agreement country (Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Korea (Republic of), Mexico, Morocco, Nicaragua, Oman, Panama, Peru, or Singapore);

(3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or

(4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bonaire, British Virgin Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saba, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sint Eustatius, Sint Maarten, or Trinidad and Tobago).

Designated country construction material means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

Domestic construction material means--

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if--

(i) 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; or

(ii) The construction material is a COTS item.

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

Least developed country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a least developed 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 least developed country into a new and different construction material distinct from the materials from which it was transformed.

"Free Trade Agreement country construction material" means a construction material that—

(1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) 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 FTA country into a new and different construction material distinct from the materials from which it was transformed.

"Least developed country construction material" means a construction material that—

(1) Is wholly the growth, product, or manufacture of a least developed 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 least developed country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States, the District of Columbia, and outlying areas.

WTO GPA country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a WTO GPA 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 WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

(b) Construction materials.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American

statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American restrictions are waived for designated country construction materials.

(2) The Contractor shall use only domestic or designated 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 information technology that is a commercial item or 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 statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American statute 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 statute.

(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 statute 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 statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(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 (JUN 2008)

(a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at TerList1.html. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR chapter V and/or on OFAC's Web site at http://www.treas.gov/offices/enforcement/ofac/.

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

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (DEC 2007)

(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 United States patent 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 shall include the substance of this clause, including this paragraph (b), in allsubcontracts that are 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 athorization and consent.

(End of clause)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)

(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 the Contractor's possession pertaining to such claim or suit. 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 shall include the substance of this clause, including this paragraph (c), in all subcontracts that are expected to exceed the simplified acquisition threshold.

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (DEC 2007)

Except as otherwise provided, the Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

(End of clause)

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.

(End of provision)

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.

(End of clause)

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until

30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (JAN 2012)

(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) A mortgagee title insurance policy, in an insurance amount equal to the amount of the lien, or other evidence of title that is consistent with the requirements of Section 2 of the United States Department of Justice Title Standards at http://www.justice.gov/enrd/ENRD_Assets/Title_Standards_2001.pdf. 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)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (MAY 2014)

In accordance with section 806(a)(3) of Pub. L. 102-190, as amended by sections 2091 and 8105 of Pub. L. 103-355 (10 U.S.C. 2302 note), 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 40 U.S.C. chapter 31, subchapter III, Bonds, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (MAY 2014)

(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 40 U.S.C. chapter 31, subchapter III, Bonds, 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:

SIGHT 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: _____

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (OCT 2010)

(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 $150,000 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 the Treasury, Financial Management Service, Surety Bond Branch, 3700 East West Highway, Room 6F01, Hyattsville, MD 20782. Or via the internet at http://www.fms.treas.gov/c570/.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 3133(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)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (FEB 2013)

(a) As used in this clause—

"After-imposed Federal tax" 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" 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.

"All applicable Federal, State, and local taxes and duties" 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.

"Contract date" 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.

"Local taxes" includes taxes imposed by a possession or territory of the United States, Puerto Rico, or the Northern Mariana Islands, if the contract is performed wholly or partly in any of those areas.

(b)(1) The contract price includes all applicable Federal, State, and local taxes and duties, except as provided in subparagraph (b)(2)(i) of this clause.

(2) Taxes imposed under 26 U.S.C. 5000C may not be—

(i) Included in the contract price; nor

(ii) Reimbursed.

(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)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 2014)

(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) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, 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. 6305).

(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.

(End of clause)

52.232-17 INTEREST (MAY 2014)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Certified 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 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 41 U.S.C. 7109, which is applicable to the period in which the amount becomes due, as provided in paragraph (e) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(c) Final Decisions. The Contracting Officer will issue a final decision as required by 33.211 if--

(1) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

(2) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(3) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(d) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(e) 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, including any demand for payment resulting from a default termination.

(f) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on--

(1) The date on which the designated office receives payment from the Contractor;

(2) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(3) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(g) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

52.232-23 ASSIGNMENT OF CLAIMS (MAY 2014)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 6305 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (MAY 2014)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment 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, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (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 is 30 days after the designated billing office receives a proper payment request. 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 is the 30th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request 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, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.

(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 is the later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the Contractor.

(2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.

(B) 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 is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(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 paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should 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., discount for prompt payment 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 notify in the event of a defective invoice.

(viii) For payments described in paragraph (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) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer--Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(xi) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (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, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment 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 Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the

contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty 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 prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are 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. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

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

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor 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) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(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 41 U.S.C. 7109 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 use:

(i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and

(ii) 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) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

(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 paragraph (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 paragraph (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 paragraph (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 41 U.S.C. 7109 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 paragraph (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 paragraph (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 40 U.S.C. 3133, 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 paragraph (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 paragraph (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 paragraph (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 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), 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 Government is a party. The Government 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 Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

(l) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall--

(1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the--

(i) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(ii) Affected contract number and delivery order number if applicable;

(iii) Affected contract line item or subline item, if applicable; and

(iv) Contractor point of contact.

(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(End of clause)

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—SYSTEM FOR AWARD MANAGEMENT (JULY 2013)

(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 System for Award Management (SAM) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the SAM 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 SAM database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the SAM 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) 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.

(f) 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.

(g) 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 separately in the SAM database and shall be paid by EFT in accordance with the terms of

this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a financial institution properly recognized under an assignment of claims pursuant to subpart 32.8, is not permitted. 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.

(h) 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.

(i) 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 SAM database.

(End of Clause)

52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an ``I agree" click box or other comparable mechanism (e.g., ``click-wrap" or ``browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(End of clause)

52.232-40 PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS (DEC 2013)

(a) Upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

(End of clause)

52.233-1 DISPUTES. (MAY 2014) -- ALTERNATE I (DEC 1991)

(a) This contract is subject to 41 U.S.C. chapter 71, Contract Disputes.

(b) Except as provided in 41 U.S.C. chapter 71, 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. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under 41 U.S.C. chapter 71 until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under 41 U.S.C. chapter 71. The submission may be converted to a claim under 41 U.S.C. chapter 71, 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) Contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claimexceeding $100,000.

(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 authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person 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 41 U.S.C. chapter 71.

(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 ADR. If the Contractor refuses an offer for alternative disputes resolution, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request. When using arbitration conducted pursuant to 5 U.S.C. 575-580, or when

using any other ADR technique that the agency elects to handle in accordance with the ADRA, any claim, regardless of amount, shall be accompanied by the certification described in subparagraph (d)(2)(iii) of this clause, and executed in accordance with subparagraph (d)(3) of this clause.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (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 or relating to 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.

(End of clause)

52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

(End of clause)

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (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.

(f) Before commencing the work, the Contractor shall-

(1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and

(2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

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.

(End of clause)

52.243-4 CHANGES (JUN 2007)

(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 property or services; or

(4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (MAY 2014)

(a) Definitions.

"Commercial item", has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c) (1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010) (41 U.S.C. 3509), if the subcontract exceeds $5,000,000 and has a performance period of more than 120 days. In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(ii) 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5), if the subcontract is funded under the Recovery Act.

(iii) 52.219-8, Utilization of Small Business Concerns (May 2014) (15 U.S.C. 637(d)(2) and (3)), if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $650,000 ($1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iv) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212(a));

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793).

(vii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496), if flow down is required in accordance with paragraph (f) of FAR clause 52.222-40.

(viii) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

(ix) 52.225-26, Contractors Performing Private Security Functions Outside the United States Jul 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(x) 52.232-40, Providing Accelerated Payments to Small Business Subcontractors (Dec 2013), if flow down is required in accordance with paragraph (c) of FAR clause 52.232-40.

(xi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. App. 1241 and 10 U.S.C. 2631), if flow down is required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

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

(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(c) (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 $65,000 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) (APR 2012) - ALTERNATE I (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 49.001 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 Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(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.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(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, for the loss of the Government property.

(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.

(End of clause)

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

(xi) Delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

(d) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

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 cost basis, the following principles will be applied to determine allowable equipment costs:

(i) 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.

(ii) 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 expenses will be used to determine equipment operating expenses.

(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 are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.

(End of Clause)

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.

(iii) 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.

(End of clause)

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)

252.203-7000 REQUIREMENTS RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2011)

(a) Definition. Covered DoD official, as used in this clause, means an individual that--

(1) Leaves or left DoD service on or after January 28, 2008; and

(2)(i) Participated personally and substantially in an acquisition as defined in 41 U.S.C. 131 with a value in excess of $10 million, and serves or served--

(A) In an Executive Schedule position under subchapter II of chapter 53 of Title 5, United States Code;

(B) In a position in the Senior Executive Service under subchapter VIII of chapter 53 of Title 5, United States Code; or

(C) In a general or flag officer position compensated at a rate of pay for grade O-7 or above under section 201 of Title 37, United States Code; or

(ii) Serves or served in DoD in one of the following positions: Program manager, deputy program manager, procuring contracting officer, administrative contracting officer, source selection authority, member of the source selection evaluation board, or chief of a financial or technical evaluation team for a contract in an amount in excess of $10 million.

(b) The Contractor shall not knowingly provide compensation to a covered DoD official within 2 years after the official leaves DoD service, without first determining that the official has sought and received, or has not received after 30 days of seeking, a written opinion from the appropriate DoD ethics counselor regarding the applicability of post-employment restrictions to the activities that the official is expected to undertake on behalf of the Contractor.

(c) Failure by the Contractor to comply with paragraph (b) of this clause may subject the Contractor to rescission of this contract, suspension, or debarment in accordance with 41 U.S.C. 2105(c).

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (DEC 2008)

(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 this contract;

(2) On the board of directors of the Contractor;

(3) As a consultant, agent, or representative for the Contractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of the Contractor with regard to this contract.

(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 the Contractor 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 301-937-1542; www.ojp.usdoj.gov/BJA/grant/DPFC.html".

(End of clause)

252.203-7002 REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

(a) The Contractor shall inform its employees in writing, in the predominant native language of the workforce, of contractor employee whistleblower rights and protections under 10 U.S.C. 2409, as described in subpart 203.9 of the Defense Federal Acquisition Regulation Supplement.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts.

(End of clause)

252.203-7003 AGENCY OFFICE OF THE INSPECTOR GENERAL (DEC 2012)

The agency office of the Inspector General referenced in paragraphs (c) and (d) of FAR clause 52.203-13, Contractor Code of Business Ethics and Conduct, is the DoD Office of Inspector General at the following address:

Department of Defense Office of Inspector General, Investigative Policy and Oversight, Contractor Disclosure Program, 4800 Mark Center Drive, Suite 11H25, Alexandria, VA 22350-1500.

Toll Free Telephone: 866-429-8011.

(End of clause)

252.203-7005 REPRESENTATION RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (NOV 2011)

(a) Definition. Covered DoD official is defined in the clause at 252.203-7000, Requirements Relating to Compensation of Former DoD Officials.

(b) By submission of this offer, the offeror represents, to the best of its knowledge and belief, that all covered DoD officials employed by or otherwise receiving compensation from the offeror, and who are expected to undertake activities on behalf of the offeror for any resulting contract, are presently in compliance with all post-employment restrictions covered by 18 U.S.C. 207, 41 U.S.C. 2101-2107, and 5 CFR parts 2637 and 2641, including Federal Acquisition Regulation 3.104-2.

(End of provision)

252.204-7000 DISCLOSURE OF INFORMATION (AUG 2013)

(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;

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

(3) The information results from or arises during the performance of a project that has been scoped and negotiated by the contracting activity with the Contractor and research performer and determined in writing by the Contracting Officer to be fundamental research in accordance with National Security Decision Directive 189, National Policy on the Transfer of Scientific, Technical and Engineering Information, in effect on the date of contract award and the USD (AT&L) memoranda on Fundamental Research, dated May 24, 2010, and on Contracted Fundamental Research, dated June 26, 2008, (available at DFARS PGI 204.4).

(b) Requests for approval under paragraph (a)(1) 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 10 business days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement, including this paragraph (c), 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)

252.204-7004 ALTERNATE A, SYSTEM FOR AWARD MANAGEMENT (FEB 2014)

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

``System for Award Management (SAM) database'' means the primary Government repository for contractor information required for the conduct of business with the Government.

``Commercial and Government Entity (CAGE) code'' means—

(1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or

(2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE master file. This type of code is known as an ``NCAGE code.''

``Data Universal Numbering System (DUNS) number'' means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

``Data Universal Numbering System +4 (DUNS+4) number'' means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional SAM records for identifying alternative Electronic Funds Transfer (EFT) accounts (see FAR 32.11) for the same parent concern.

``Registered in the System for Award Management (SAM) database" means that—

(1) The contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, and Contractor and Government Entity (CAGE) code into the SAM database;

(2) The contractor has completed the Core Data, Assertions, Representations and Certifications, and Points of Contact sections of the registration in the SAM database;

(3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The Contractor will be required to provide consent for TIN validation to the Government as part of the SAM registration process; and

(4) The Government has marked the record ``Active."

(End of clause)

252.204-7006 BILLING INSTRUCTIONS (OCT 2005)

When submitting a request for payment, the Contractor shall--

(a) Identify the contract line item(s) on the payment request that reasonably reflect contract work performance; and

(b) Separately identify a payment amount for each contract line item included in the payment request.

(End of clause)

252.204-7012 SAFEGUARDING OF UNCLASSIFIED CONTROLLED TECHNICAL INFORMATION (NOV 2013)

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

Adequate security means protective measures that are commensurate with the consequences and probability of loss, misuse, or unauthorized access to, or modification of information.

Attribution information means information that identifies the Contractor, whether directly or indirectly, by the grouping of information that can be traced back to the Contractor (e.g., program description or facility locations).

Compromise means disclosure of information to unauthorized persons, or a violation of the security policy of a system, in which unauthorized intentional or unintentional disclosure, modification, destruction, or loss of an object, or the copying of information to unauthorized media may have occurred.

Contractor information system means an information system belonging to, or operated by or for, the Contractor.

Controlled technical information means technical information with military or space application that is subject to controls on the access, use, reproduction, modification, performance, display, release, disclosure, or dissemination. Controlled technical information is to be marked with one of the distribution statements B-through-F, in accordance with DoD Instruction 5230.24, Distribution Statements on Technical Documents. The term does not include information that is lawfully publicly available without restrictions.

Cyber incident means actions taken through the use of computer networks that result in an actual or potentially adverse effect on an information system and/or the information residing therein.

Exfiltration means any unauthorized release of data from within an information system. This includes copying the data through covert network channels or the copying of data to unauthorized media.

Media means physical devices or writing surfaces including, but is not limited to, magnetic tapes, optical disks, magnetic disks, large-scale integration memory chips, and printouts onto which information is recorded, stored, or printed within an information system.

Technical information means technical data or computer software, as those terms are defined in the clause at DFARS 252.227-7013, Rights in Technical Data--Non Commercial Items, regardless of whether or not the clause is incorporated in this solicitation or contract. Examples of technical information include research and engineering data, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, technical orders, catalog-item identifications, data sets, studies and analyses and related information, and computer software executable code and source code.

(b) Safeguarding requirements and procedures for unclassified controlled technical information. The Contractor shall provide adequate security to safeguard unclassified controlled technical information from compromise. To provide adequate security, the Contractor shall—

(1) Implement information systems security in its project, enterprise, or company-wide unclassified information technology system(s) that may have unclassified controlled technical information resident on or transiting through them. The information systems security program shall implement, at a minimum—

(i) The specified National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 security controls identified in the following table; or

(ii) If a NIST control is not implemented, the Contractor shall submit to the Contracting Officer a written explanation of how—

(A) The required security control identified in the following table is not applicable; or

(B) An alternative control or protective measure is used to achieve equivalent protection.

(2) Apply other information systems security requirements when the Contractor reasonably determines that information systems security measures, in addition to those identified in paragraph (b)(1) of this clause, may be required to provide adequate security in a dynamic environment based on an assessed risk or vulnerability.

Table 1--Minimum Security Controls for Safeguarding

Minimum required security controls for unclassified controlled technical information requiring safeguarding in accordance with paragraph (d) of this clause. (A description of the security controls is in the NIST SP 800-53, ``Security and Privacy Controls for Federal Information Systems and Organizations'' (http://csrc.nist.gov/publications/PubsSPs.html).)

BILLING CODE 5001-06-P
[GRAPHIC] [TIFF OMITTED] TR18NO13.031

BILLING CODE 5001-06-C

Legend:

AC: Access Control
AT: Awareness and Training MP:

AU: Auditing and Accountability
CM: Configuration Management
CP: Contingency Planning
IA: Identification and Authentication
IR: Incident Response
MA: Maintenance
MP: Media Protection
PE: Physical & Environmental Protection
PM: Program Management
RA: Risk Assessment
SC: System & Communications Protection
SI: System & Information Integrity

(c) Other requirements. This clause does not relieve the Contractor of the requirements specified by applicable statutes or other Federal and DoD safeguarding requirements for Controlled Unclassified Information as established by Executive Order 13556, as well as regulations and guidance established pursuant thereto.

(d) Cyber incident and compromise reporting.

(1) Reporting requirement. The Contractor shall report as much of the following information as can be obtained to the Department of Defense via (http://dibnet.dod.mil/) within 72 hours of discovery of any cyber incident, as described in paragraph (d)(2) of this clause, that affects unclassified controlled technical information resident on or transiting through the Contractor's unclassified information systems:

(i) Data Universal Numbering System (DUNS).

(ii) Contract numbers affected unless all contracts by the company are affected.

(iii) Facility CAGE code if the location of the event is different than the prime Contractor location.

(iv) Point of contact if different than the POC recorded in the System for Award Management (address, position, telephone, email).

(v) Contracting Officer point of contact (address, position, telephone, email).

(vi) Contract clearance level.

(vii) Name of subcontractor and CAGE code if this was an incident on a subcontractor network.

(viii) DoD programs, platforms or systems involved.

(ix) Location(s) of compromise.

(x) Date incident discovered.

(xi) Type of compromise (e.g., unauthorized access, inadvertent release, other).

(xii) Description of technical information compromised.

(xiii) Any additional information relevant to the information compromise.

(2) Reportable cyber incidents. Reportable cyber incidents include the following:

(i) A cyber incident involving possible exfiltration, manipulation, or other loss or compromise of any unclassified controlled technical information resident on or transiting through Contractor's, or its subcontractors', unclassified information systems.

(ii) Any other activities not included in paragraph (d)(2)(i) of this clause that allow unauthorized access to the Contractor's unclassified information system on which unclassified controlled technical information is resident on or transiting.

(3) Other reporting requirements. This reporting in no way abrogates the Contractor's responsibility for additional safeguarding and cyber incident reporting requirements pertaining to its unclassified information systems under other clauses that may apply to its contract, or as a result of other U.S. Government legislative and regulatory requirements that may apply (e.g., as cited in paragraph (c) of this clause).

(4) Contractor actions to support DoD damage assessment. In response to the reported cyber incident, the Contractor shall—

(i) Conduct further review of its unclassified network for evidence of compromise resulting from a cyber incident to include, but is not limited to, identifying compromised computers, servers, specific data and users accounts. This includes analyzing information systems that were part of the compromise, as well as other information systems on the network that were accessed as a result of the compromise;

(ii) Review the data accessed during the cyber incident to identify specific unclassified controlled technical information associated with DoD programs, systems or contracts, including military programs, systems and technology; and

(iii) Preserve and protect images of known affected information systems and all relevant monitoring/packet capture data for at least 90 days from the cyber incident to allow DoD to request information or decline interest.

(5) DoD damage assessment activities. If DoD elects to conduct a damage assessment, the Contracting Officer will request that the Contractor point of contact identified in the incident report at (d)(1) of this clause provide all of the damage assessment information gathered in accordance with paragraph (d)(4) of this clause. The Contractor shall comply with damage assessment information requests. The requirement to share files and images exists unless there are legal restrictions that limit a company's ability to share digital media. The Contractor shall inform the Contracting Officer of the source, nature, and prescription of such limitations and the authority responsible.

(e) Protection of reported information. Except to the extent that such information is lawfully publicly available without restrictions, the Government will protect information reported or otherwise provided to DoD under this clause in accordance with applicable statutes, regulations, and policies. The Contractor shall identify and mark attribution information reported or otherwise provided to the DoD. The Government may use information, including attribution information and disclose it only to authorized persons for purposes and activities consistent with this clause.

(f) Nothing in this clause limits the Government's ability to conduct law enforcement or counterintelligence activities, or other lawful activities in the interest of homeland security and national security. The results of the activities described in this clause may be used to support an investigation and prosecution of any person or entity, including those attempting to infiltrate or compromise information on a contractor information system in violation of any statute.

(g) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (g), in all subcontracts, including subcontracts for commercial items.

(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)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (JAN 2009)

(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 subject to this provision include: Cuba, Iran, 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)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 2014)

(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 $30,000 with a firm, or a subsidiary of a firm, that is identified in the Exclusions section of the System for Award Management System 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.

(End of clause)

252.219-7003 SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS) (AUG 2012)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small Business Subcontracting Plan, clause of this contract.

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

Historically black colleges and universities means institutions determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions means institutions meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in Section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

Summary Subcontract Report (SSR) Coordinator means the individual at the department or agency level who is registered in eSRS and is responsible for acknowledging receipt or rejecting SSRs in eSRS for the department or agency.

(b) Except for company or division-wide commercial items subcontracting plans, the term ``small disadvantaged business," when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph

(d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian Tribe or a Tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 8502-8504), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under section 831 of Public Law 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(1) Protege firms which are qualified organizations employing the severely disabled; and

(2) Former protege firms that meet the criteria in Section 831(g)(4) of Public Law 101-510.

(f) The master plan is approved by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small business firms, for the small business firms specifically identified in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(h)(1) For DoD, the Contractor shall submit reports in eSRS as follows:

(i) The Individual Subcontract Report (ISR) shall be submitted to the contracting officer at the procuring contracting office, even when contract administration has been delegated to the Defense Contract Management Agency.

(ii) An SSR for other than a commercial subcontracting plan, or construction and related maintenance repair contracts, shall be submitted in eSRS to the department or agency within DoD that administers the majority of the Contractor's individual subcontracting plans. An example would be Defense Finance and Accounting Service or Missile Defense Agency.

(2) For DoD, the authority to acknowledge receipt or reject reports in eSRS is as follows:

(i) The authority to acknowledge receipt or reject the ISR resides with the contracting officer who receives it, as described in paragraph (h)(1)(i) of this clause.

(ii) Except as provided in (h)(2)(iii), the authority to acknowledge receipt or reject SSRs in eSRS resides with the SSR Coordinator at the department or agency that administers the majority of the Contractor's individual subcontracting plans.

(iii) The authority to acknowledge receipt or reject SSRs for construction and related maintenance and repair contracts resides with the SSR Coordinator for each department or agency.

(iv) The authority to acknowledge receipt or reject the Year-End Supplementary Report for Small Disadvantaged Businesses resides with the SSR Coordinator who acknowledges receipt or rejects the SSR.

(v) If the Contractor submits the Small Disadvantaged Business Participation report using eSRS, the authority to acknowledge receipt or reject this report in eSRS resides with the contracting officer who acknowledges receipt or rejects the ISR.

(End of clause)

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 (FEB 2013)

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

Component means any item supplied to the Government as part of an end product or of another component.

End product means supplies delivered under a line item of this contract.

Qualifying country means a country with a reciprocal defense procurement memorandum of understanding or international agreement with the United States in which both countries agree to remove barriers to purchases of supplies produced in the other country or services performed by sources of the other country, and the memorandum or agreement complies, where applicable, with the requirements of section 36 of the Arms Export Control Act (22 U.S.C. 2776) and with 10 U.S.C. 2457. Accordingly, the following are qualifying countries:

Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Egypt
Finland
France
Germany
Greece
Israel
Italy
Luxembourg
Netherlands
Norway
Poland
Portugal
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland.

Structural component of a tent--

(i) Means a component that contributes to the form and stability of the tent (e.g., poles, frames, flooring, guy ropes, pegs);

(ii) Does not include equipment such as heating, cooling, or lighting.

United States means the 50 States, the District of Columbia, and outlying areas.

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) The Contractor shall deliver under this contract only such of the following items, either as end products or components, that have been grown, reprocessed, reused, or produced in the United States:

(1) Food.

(2) Clothing and the materials and components thereof, other than sensors, electronics, or other items added to, and not normally associated with, clothing and the materials and components thereof. Clothing includes items such as outerwear, headwear, underwear, nightwear, footwear, hosiery, handwear, belts, badges, and insignia.

(3) (i) Tents and structural components of tents;

(ii) Tarpaulins; or

(iii) 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).

(10) Any item of individual equipment (Federal Supply Class 8465) manufactured from or containing fibers, yarns, fabrics, or materials listed in this paragraph (b).

(c) This clause does not apply--

(1) To items listed in section 25.104(a) of the Federal Acquisition Regulation (FAR), or other items 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 incidental amounts of cotton, other natural fibers, or wool incoporated in an end product, for which the estimated value of the cotton, other natural fibers, or wool--

(i) Is not more than 10 percent of the total price of the end product; and (ii) Does not exceed the simplified acquisition threshold in FAR part 2;

(3) To waste and byproducts of cotton or wool fiber for use in the production of propellants and explosives;

(4) To foods, other than fish, shellfish, or seafood, that have been manufactured or processed in the United States, regardless of where the foods (and any component if applicable) were grown or produced. Fish, shellfish, or seafood manufactured or processed in the United States and fish, shellfish, or seafood contained in foods manufactured or processed in the United States shall be provided in accordance with paragraph (d) of this clause;

(5) To chemical warfare protective clothing produced in a qualifying country; or

(6) 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 product 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 continuous filament para-aramid yarns manufactured in a qualifying country.

(d)(1) Fish, shellfish, and seafood delivered under this contract, or contained in foods delivered under this contract--

(i) Shall be taken from the sea by U.S.-flag vessels; or

(ii) If not taken from the sea, shall be obtained from fishing within the United States; and

(2) Any processing or manufacturing of the fish, shellfish, or seafood shall be performed on a U.S.-flag vessel or in the United States.

(End of clause)

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.

252.232-7010 LEVIES ON CONTRACT PAYMENTS (DEC 2006)

(a) 26 U.S.C. 6331(h) authorizes the Internal Revenue Service (IRS) to continuously levy up to 100 percent of contract payments, up to the amount of tax debt.

(b) When a levy is imposed on a payment under this contract and the Contractor believes that the levy may result in an inability to perform the contract, the Contractor shall promptly notify the Procuring Contracting Officer in writing, with a copy to the Administrative Contracting Officer, and shall provide--

(1) The total dollar amount of the levy;

(2) A statement that the Contractor believes that the levy may result in an inability to perform the contract, including rationale and adequate supporting documentation; and

(3) Advice as to whether the inability to perform may adversely affect national security, including rationale and adequate supporting documentation.

(c) DoD shall promptly review the Contractor's assessment, and the Procuring Contracting Officer shall provide a written notification to the Contractor including--

(1) A statement as to whether DoD agrees that the levy may result in an inability to perform the contract; and

(2)(i) If the levy may result in an inability to perform the contract and the lack of performance will adversely affect national security, the total amount of the monies collected that should be returned to the Contractor; or

(ii) If the levy may result in an inability to perform the contract but will not impact national security, a recommendation that the Contractor promptly notify the IRS to attempt to resolve the tax situation.

(d) Any DoD determination under this clause is not subject to appeal under the Contract Disputes Act.

(End of clause)

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.

252.236-7001 CONTRACT DRAWINGS 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:

See Technical Specifications and 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.).

252.236-7004 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.

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.

252.243-7001 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 (DEC 2012)

(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) Certified cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Data other than certified 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 certified 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.

252.244-7000 SUBCONTRACTS FOR COMMERCIAL ITEMS (JUN 2013)

(a) The Contractor is not required to flow down the terms of any Defense Federal Acquisition Regulation Supplement (DFARS) clause in subcontracts for commercial items at any tier under this contract, unless so specified in the particular clause.

(b) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligation.

(c) The Contractor shall include the terms of this clause, including this paragraph (c), in subcontracts awarded under this contract, including subcontracts for the acquisition of commercial items.

(End of clause)

252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (APR 2014)

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

"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.

"Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

"Foreign-flag vessel" means any vessel that is not a U.S.-flag vessel.

"Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

"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.

"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.

"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 foreign-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 Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh Street SW., 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) If this contract exceeds the simplified acquisition threshold, the Contractor shall 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 foreign-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on foreign-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 this contract exceeds the simplified acquisition threshold and 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 foreign-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, including subcontracts for commercial items, the Contractor shall flow down the requirements of this clause as follows:

(1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(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)

This page was intentionally left blank for duplex printing.

TABLE OF CONTENTS

SUPPLEMENTARY CONDITIONS

00 73 00 SPECIAL CLAUSES

00 73 05 CONTRACT ADMINISTRATION DATA

00 73 15 WAGE RATES

00 73 25 REGIONS FOR THE CONSTRUCTION EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

00 73 30 SURVEY CONTROL DESCRIPTION SHEETS

00 73 41 VIBRACORE LOGS

00 73 42 VIBRACORE SAMPLE GRAIN SIZE DISTRIBUTION DATA

00 73 90 GRADATION CURVE WORKSHEET

This page was intentionally left blank for duplex printing.

SECTION 00 73 00

SPECIAL CLAUSES

INDEX

PARA	TITLE
SC-1	COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK
SC-2	LIQUIDATED DAMAGES - CONSTRUCTION
SC-3	CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS
SC-4	PHYSICAL DATA
SC-5	DAMAGE TO WORK
SC-6	LAYOUT OF WORK
SC-7	PERFORMANCE OF WORK BY THE CONTRACTOR
SC-8	ENVIRONMENTAL LITIGATION
SC-9	SIGNAL LIGHTS
SC-10	QUANTITY SURVEYS
SC-11	INSPECTION
SC-12	ACCOMODATIONS AND MEALS FOR GOVERNMENT INSPECTORS
SC-13	EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
SC-14	PERFORMANCE EVALUATION OF CONTRACTOR
SC-15	CONTRACTOR SUPPLY AND USE OF ELECTRONIC SOFTWARE FOR PROCESSING DAVIS-BACON ACT CERTIFIED LABOR PAYROLLS
SC-16	CERTIFICATES OF COMPLIANCE
SC-17	INSURANCE REQUIREMENTS

SECTION 00 73 00

SPECIAL CLAUSES

SC-1 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date of receipt by him of the notice to proceed, (b) prosecute the work diligently, and (c) complete all work except dune grass planting, complete and ready for use not later than 180 calendar days after the date the Contractor receives the notice to proceed for the Base Bid work, and (d) complete the entire work ready for use not later than 15 April 2016. Notice to proceed for the Base Bid will be issued within 90 days of award of this contract.

It is the responsibility of the Contractor to determine the scheduling necessary to ensure there are no dredging delays.

The Contracting Officer has the right to exercise any one of, or any combination of, Options 1 through 4 within 21 calendar days after Government approval of the pre-placement condition surveys, as specified in Section 01 72 23 SURVEY REQUIREMENTS, for the Margate City/Ventnor City portion of the Base Bid.

The Contracting Officer has the right to exercise any one of, or any combination of, Options 5 through 8 within 21 calendar days after Government approval of the pre-placement condition surveys, as specified in Section 01 72 23 SURVEY REQUIREMENTS, for the Longport Borough portion of the Base Bid.

The contract will not be extended if any or all of Options 1 through 8 are awarded.

The time stated for completion shall include final cleanup of the premises.

SC-2 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 $4,700.00 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. (FAR 52.211-12)

SC-3 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 provided, all of which are available in electronic bid set format on the internet at the following address: https://www.fbo.gov. Drawings are titled: "Initial Beachfill - Margate and Longport, Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island, Atlantic County, New Jersey", and have the drawing numbers and subtitles as indicated on contract drawing Sheet CS-100, "COVER SHEET". (DFARS 252.236-7001)

SC-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. (FAR 52.236-4)

a. The indications of physical conditions on the contract drawings are the result of site investigations by surveys. Samples of materials to be dredged for beachfill were obtained by using vibracore samplers.

b. Weather Conditions. The site of the work is in the open ocean and is exposed to storms. However, safe refuge from the ocean is available in Great Egg Harbor which is immediately adjacent to the work site. It is believed that work can be performed during all seasons of the year except during winter months when ice and storm conditions may interfere with dredging operations. Complete weather records and reports may be obtained from the local U.S. Weather Bureau Office nearest to the work site. The Contractor shall satisfy himself as to the hazards likely to arise from weather conditions during the construction period.

c. Channel Traffic. Traffic in the work area consists of ocean going and commercial fishing, sport fishing vessels, U.S. Coast Guard vessels, and recreational craft. The traffic and vessels using Absecon and Great Egg Harbor Inlets may interfere with dredging operations.

d. Obstruction of Channel. The Government will not undertake to keep the channel free from vessels or other obstructions, except to the extent of such regulations if any, as may be prescribed by the Secretary of the Army,

in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917. The Contractor will be required to conduct the work in such 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 as extent as may be necessary to afford a practicable passage. The Contractor shall request the U.S. Coast Guard to issue a Notice to Mariners for each work assignment advising navigation interests that the Contractor's dredging plant will be operating in the area. The Contractor shall submit each such request to the U.S. Coast Guard, MSO/Group Philadelphia, 1 Washington Avenue, Philadelphia, PA 19147-4395. The Contractor shall furnish a copy of each request to the Contracting Officer not less than five days prior to the start of dredging. Each request shall contain the approximate time required for completion of dredging. Upon completion of dredging, the Contractor shall promptly remove his plant, including ranges, buoys, piles and other marks placed by him under the contract in navigable waters and on shore.

e. Navigation Aids.

The Contractor shall not relocate or move any aids to navigation that have been established by the U.S. Coast Guard. If it becomes necessary to have any aid to navigation moved in order to complete dredging operations under this contract, the Contractor shall notify the Fifth Coast Guard District (dpw) at least three weeks prior to the desired date for movement of the aid. To request a relocation, Contractors shall contact Amy Harrison at (757)398-6229 or Tiffany Johnson at (757) 398-6516 and Mr. John Walters at (757)398-6230; e-mail both amy.e.harrison@uscg.mil and john.r.walters@uscg.mil or FAX (757)398-6303 at least three weeks before the desired date for movement of the aid. When making a request by telephone, Contractors must speak to the designated points of contact. The leaving of voicemail messages will not be acceptable. The Fifth CG District (dpw) will coordinate all temporary relocations or discontinuances. A copy of each request shall be furnished to the Contracting Officer.

f. Transportation Facilities. The work site is accessible from the New Jersey Garden State Parkway and the Atlantic City Expressway. The Contractor shall be responsible for all investigations of load carrying capacities of bridges and roadways.

g. Location. Absecon Island is located on the Atlantic Ocean coast of New Jersey in Atlantic County.

h. Laying of Submerged Pipelines and Obstruction of Channel. If it becomes necessary in the performance of this contract to use a submerged pipeline, the Contractor shall notify the Contracting Officer in advance of the scheduled for placement of the pipeline. If the submerged line is to be placed across a navigable channel, the Contractor shall submit a request for approval at least ten working days (Sundays and holidays excluded) prior to the desired closure date, to the U.S. Coast Guard, MSO/Group Philadelphia, 1 Washington Avenue, Philadelphia, PA 19147-4395. A copy of each request shall be furnished to the Contracting Officer. This request shall contain the following information:

(1) Location (Channel Centerline Stationing) and depth (over the top of the pipeline) at which the submerged line will be placed;

(2) The desired length of time the channel is to be closed;

(3) The date and hour placement or removal will commence;

(4) The date and hour of anticipated completion; and

(5) The name and telephone number of the person to be contacted for information and response to any emergency condition.

The Coast Guard has indicated that the requirements of navigation may make it necessary to establish times other then those requested. The Contractor shall coordinate his plans with the Coast Guard sufficiently in advance of the planned closing to prevent delay to the dredging operations and comply with the Coast Guard requirements. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS PLANS WITH THE COAST GUARD SUFFICIENTLY IN ADVANCE OF THE PLANNED CLOSING TO PREVENT DELAY TO THE DREDGING OPERATIONS AND COMPLY WITH THE COAST GUARD REQUIREMENTS.

i. Bridge to Bridge Radio Telephone Equipment. In order that radio telephone communication may be made with passing vessels, all dredges engaged in work under the contract shall be equipped with and operate bridge-to-bridge radio telephone equipment. The radio telephone equipment shall operate on VHF Channel 13 (156.65 MHz) with low power output having a communication range of approximately ten miles. The frequency has been approved by the Federal Communication Commission.

j. Magnitude of the Contract Work. The estimated value of the contract work is between $10,000,000 and $25,000,000.

k. Vibracore logs representative of the material to be dredged under this contract are provided in these specifications. Vibracore logs for Borrow Area H are included in Section 00 73 41. Those samples were collected in December 1997, June 2004 and April 2006. Associated sieve curves for the area are included in Section 00 73 42.

l. The location of submarine cables and pipelines are in proximity to the project limits of work. Use extreme caution when operating vessels and equipment in the locations where cables and pipelines exist. Comply with all rules and regulations governing activities within the vicinity of submarine cables and pipelines. Coordinate the location of submarine cables and pipelines with the Department of Homeland Security and the U.S. Coast Guard. Preliminary locations of these structures are identified on NOAA nautical charts for the area. Nautical charts can be downloaded from NOAA's website: http://www.nauticalcharts.noaa.gov/pdfcharts.

Additional uncharted submarine cable and submarine pipelines may exist with the area of work.

m. Inspection of the Site. Prospective bidders are expected to visit the work site to acquaint themselves with the site conditions and any problems incident to the prosecution of the work.

SC-5 DAMAGE TO WORK

The responsibility for damage to any part of the permanent work shall be as set forth in the clause of the contract titled "Permits and Responsibilities". However, if, in the judgement of the Contracting Officer, any part of the permanent work performed by the Contractor is damaged by flood or hurricane, which damage is not due to the failure of

the Contractor to take reasonable precautions or to exercise sound engineering and construction practices in the conduct of the work, the Contractor shall make the repairs as ordered by the Contracting Officer and full compensation for such repairs will be made at the applicable contract unit or lump sum prices as fixed and established in the contract. If, in the opinion of the Contracting Officer, there are no contract unit or lump sum prices applicable to any part of such work, an equitable adjustment pursuant to Contract Clause titled "Changes", will be made as full compensation for the repairs of that part of the permanent work for which there are no applicable contract unit or lump sum prices. Except as herein provided, damages to all work (including temporary construction), utilities, materials, equipment and plant shall be repaired to the satisfaction of the Contracting Officer at the Contractor's expense regardless of the cause of such damage. (CENAP)

SC-6 LAYOUT OF WORK (DEC 1996)

The Contractor shall lay out its work from Government-established survey controls, and shall be responsible for all measurements in connection therewith. The Contractor shall furnish, at its own expense, such stakes, templates, platforms, equipment, range markers and labor as may be required in laying out any part of the work, from the the survey controls furnished by the Government and shall be responsible for all measurements in connection therewith. If any Government control is found disturbed or destroyed, this must be communicated to the Philadelphia District Surveys Branch through the COR before any control is re-established. The Contractor shall be responsible for executing the work to such lines and grades as may be established or indicated by the Contracting Officer. The Contractor shall promptly remove all stakes and markers at the completion and acceptance of work, as directed by the Contracting Officer. (CENAP)

SC-7 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 forty (40) 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. (FAR 52.236-1)

SC-8 ENVIRONMENTAL LITIGATION (1974 NOV OCE)

a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of the contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the SUSPENSION OF WORK clause of this contract. The period of such suspension, delay, or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided

in that clause, subject to all the provisions thereof.

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

SC-9 SIGNAL LIGHTS (FEB 1983)

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Coast Guard governing lights and day 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 pipe lines, 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 passing by other vessels of floating plant working in navigable channels, as approved by the Commandant, U.S. Coast Guard with respect to vessels on the high seas (33 CFR 81 App. A), vessels in inland waters (37 CFR 84 and 33 CFR 88), as applicable. (DAEN-PRP Ind dtd 12 Sep 83)

SC-10 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 Contractor shall conduct the original and final surveys and surveys for any periods for which progress payments are requested. All these surveys shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance. The Government shall make such computations as are necessary to determine the quantities of work performed or finally in place. The Contractor shall make the computations based on the surveys for any periods for which progress payments are requested.

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. (FAR 52.236-16)

d. Surveys shall be conducted in accordance with Section 01 71 23 SURVEY REQUIREMENTS.

SC-11 INSPECTION (DEC 1996)

The presence of the inspector shall not relieve the Contractor of responsibility for the proper execution of the work in accordance with the specifications. The Contractor shall be required to furnish, on the request of the Contracting Officer or any inspector;

a. the use of such boats, boatmen, laborers, a part of the ordinary and usual equipment and crew of the dredging 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 clause titled "FINAL EXAMINATION AND ACCEPTANCE".

b. 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 borrow area. Transportation requests may occur on a daily basis.

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. (CENAP)

SC-12 ACCOMMODATIONS AND MEALS FOR GOVERNMENT INSPECTORS (1965 APR OCE)

a. The Contractor shall furnish regularly to Government inspectors on board the dredge a suitable separate area for an office. A separate trailer on the dredge may be supplied in lieu of a room. The trailer must be securely lashed to the dredge and enclosed by railings. The room or trailer shall be fully equipped and maintained to the satisfaction of the Contracting Officer; it shall be properly heated, ventilated, lighted and insulated from noise, and shall have a desk which can be locked, a chair for each inspector, and washing conveniences. The entire cost of the Contractor for furnishing, equipping and maintaining the foregoing accommodations shall be included in the cost of all the bid items. If the Contractor fails to meet these requirements, the facilities referred to above will be secured by the Contracting Officer, and the cost thereof will be deducted from payments to the Contractor.

b. If the Contractor maintains on this work an establishment for the subsistence of his own employees, he shall, when requested, furnish to inspectors employed on the work, and to all Government agents who may visit the work on official business, meals of a quality satisfactory to the Contracting Officer. The meals furnished will be paid for the Government at a rate of $5.00 per person for each meal. (CENAP)

SC-13 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995) - EFARS

a. This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals, and FAR Part 49.

b. Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by the Contractor or sub-contractor at any tier shall be based on actual cost data for each piece of equipment, or groups of similar serial and series, from 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 and series, 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 I. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retrospective pricing,

the schedule in effect as of the time work was performed shall apply.

c. Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements and sale-leaseback arrangements will be determined using the schedule except that actual costs will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

d. When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the Contracting Officer shall request the Contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, "Contract Pricing Proposal Cover Sheet." (UAI 31.105-101)

Note #1: The small purchase threshold is $150,000.

Note #2: 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. This right shall extend for two years after expiration of contract performance. After price agreement the Contractor shall certify that the equipment costs or pricing data submitted are accurate, complete and current.

SC-14 PERFORMANCE EVALUATION OF CONTRACTOR (MAR 2014)

a. As a minimum, the Contractor's performance will be evaluated upon final acceptance of the work. However, interim evaluation may be prepared at any time during contract performance when determined to be in the best interest of the Government. The evaluation will be entered into the Construction Contractor Appraisal Support System (CCASSS) of the Contractor Performance Assessment Reporting System (CPARS).

b. CCASS is a web-enabled application that supports the completion, distribution, and retrieval of construction contract performance evaluations (DD Form 2626). CCASS is for UNCLASSIFIED use only. An evaluation assesses Contractor performance and provides a record, both positive and negative, on a given contract. Each evaluation is based on objective facts and supported by contract management data, such as contract performance elements that evaluate quality, timely performance, effectiveness of management, and compliance with contract terms, labor standards, and safety requirements. The Contractor will be rated either outstanding, above average, satisfactory, marginal or unsatisfactory in the areas of Contractor Quality Control, Timely Performance, Effectiveness of Management, Compliance with Labor Standards, and Compliance with Safety Standards. The Contractor will be advised of any unsatisfactory rating, either in an individual element or in the overall rating, prior to completing the evaluation, and all Contractor comments will be made a part of the official record. Performance Evaluation Reports will be available to all DOD Contracting offices for their future use in determining Contractor responsibility, in compliance with ER 415-1-17.

c. Upon successful award of the contract, the Contractor will be notified by CPARS via email that access has been granted to a contract within the system. The email will contain instructions of how to log into the system.

(CENAP)

SC-15 CONTRACTOR SUPPLY AND USE OF ELECTRONIC SOFTWARE FOR PROCESSING DAVIS-BACON ACT CERTIFIED LABOR PAYROLLS (APR 2011)

(a) The contractor is encouraged to use a commercially-available electronic system to process and submit certified payrolls electronically to the Government. The requirements for preparing, processing and providing certified labor payrolls are established by the Davis-Bacon Act as stated in FAR clause 52.222-8, Payrolls and Basic Records and FAR clause 52.222-13, Compliance with Davis-Bacon and Related Act Regulations.

(b) If the contractor elects to use an electronic Davis-Bacon Act payroll processing system, then the contractor shall be responsible for obtaining and providing for all access, licenses, and other services required to provide for receipt, processing, certifying, electronically transmitting to the Government, and storing weekly payrolls and other data required for the contractor to comply with Davis-Bacon and Related Act Regulations. When the contractor uses an electronic Davis-Bacon Act payroll system, the electronic payroll service shall be used by the contractor to prepare, process, and maintain the relevant payrolls and basic records during all work under this construction contract and the electronic payroll service shall be capable of preserving these payrolls and related basic records for the required 3 years after contract completion. If the contractor chooses to use an electronic Davis-Bacon Act payroll system, then the contractor shall obtain and provide electronic system access to the Government, as required to comply with the Davis-Bacon and Related Act Regulations over the duration of this construction contract. The access shall include electronic review access by the Government contract admin office to the electronic payroll processing system used by the contractor.

(c) The contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria: commercially available; compliant with appropriate Davis Bacon Act payroll provisions in the FAR; able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract; capable of producing an Excel spreadsheet-compatible electronic output of weekly payroll records (format at http://rms.usace.army.mil/guides.aspx) for export in an Excel spreadsheet to be imported into the contractor's Quality Control System (QCS) version of Resident Management System (RMS), that in turn shall export payroll data to the Government's Resident Management System (RMS); demonstrated security of data and data entry rights; ability to produce contractor-certified electronic versions of weekly payroll data; ability to identify erroneous entries and track the data/time of all versions of the certified Davis-Bacon Act payrolls submitted to the government over the life of the contract; capable of generating a durable record copy, that is, a CD or DVD and PDF file record of data from the system database at end of the contract closeout. This durable record copy of data from the electronic D-B payroll processing system shall be provided to the Government during contract closeout.

(d) All contractor-incurred costs related to the contractor's provision and use of an electronic payroll processing service shall be included in the contractor's price for the overall work under the contract. The costs for Davis-Bacon Act compliance using electronic payroll processing services shall not be a separately bid or reimbursed item under this contract. (UAI 22.406-6-100)

SC-16 CERTIFICATES OF COMPLIANCE

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

SC-17 INSURANCE REQUIREMENTS

Evidence of the following types of insurance shall be provided to the Contracting Officer prior to commencement of work and shall be maintained through the period of performance: Contractor shall co-insure the State of New Jersey, the Borough of Longport, and the City of Margate City under General Liability Insurance, as noted below in paragraph (a).

a. General Liability Insurance (Comprehensive form of policy): Bodily Injury Liability - $500,000 per occurrence.

In addition, the Contractor shall name the State of New Jersey, Ventnor City, Margate City and the Borough of Longport as "Additional Insured" under their General Liability Insurance. Any additional premiums incurred to accomplish this shall be included as respective Base Bid Items titled "Name the State of New Jersey and Ventnor City as 'Additional Insured' under General Liability Insurance", "Name the State of New Jersey and Margate City as 'Additional Insured' under General Liability Insurance" and Bid Item titled "Name the State of New Jersey and Longport Borough as 'Additional Insured' under General Liability Insurance."

b. Automobile Liability Insurance (Comprehensive form of policy): Bodily Injury Liability - $200,000 per person and $500,000 per accident. Property Damage Liability - $20,000 per accident.

c. Workmen's Compensation and Employer's Liability Insurance: Compliance with applicable workmen's compensation and occupational disease statutes is required. Employer's liability coverage in the minimum amount of $100,000 is also required.

d. Applicable Marine Casualty Insurance and appropriate Marine Workmen's Compensation Insurance.

-- End of Section --

SECTION 00 73 05

CONTRACT ADMINISTRATION DATA

This page was intentionally left blank for duplex printing.

SECTION 00 73 05

CONTRACT ADMINISTRATION DATA

G.1 ACCOUNTING AND APPROPRIATION DATA:
TO BE FURNISHED AT TIME OF AWARD

G.2 CONTRACT ADMINISTRATION IS RETAINED BY THE CONTRACTING OFFICER:

US Army Engineer District, Philadelphia
ATTN: CENAP-CT-C (Edward A. Boddie)
Wanamaker Building, 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390
(215) 656-6786

G.3 PAYMENT BY:

US Army Corps of Engineers
FINANCE CENTER
5720 Integrity Drive
Millington, Tennessee 38054-5005

G.4 BILLING ADDRESS:

Invoices shall be forwarded as follows:

US Army Engineer District, Philadelphia
ATTN: CENAP-OP-TN
Wanamaker Building, 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390

G.5 TECHNICAL INQUIRIES:
All technical inquiries should be sent in writing to:

Pre-Award: Michelle Johnson at Michelle.L.Johnson@usace.army.mil
Post Award: (To be furnished upon award)

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

SECTION 00 73 15

WAGE RATES

General Decision Number: NJ140003 06/20/2014 NJ3

Superseded General Decision Number: NJ20130003

State: New Jersey

Construction Type: Heavy Dredging

Counties: Atlantic, Bergen, Camden, Cape May, Cumberland, Gloucester, Hudson, Mercer, Middlesex, Monmouth, Ocean, Salem and Union Counties in New Jersey.

STATEWIDE

All dredging except self-propelled hopper dredging on the Atlantic Coast and tributary waters emptying into the Atlantic Ocean

Modification Number	Publication Date
0	01/03/2014
1	01/24/2014
2	06/20/2014

* ENGI0025-001 10/01/2013

STATEWIDE

	Rates	Fringes
Dredging:		
CLASS A	$ 34.73	14.13+a+b
CLASS B1	$ 30.05	13.75+a+b
CLASS B2	$ 28.30	13.61+a+b
CLASS C1	$ 27.54	12.80+a+b
CLASS C2	$ 26.65	12.73+a+b
CLASS D	$ 22.17	11.62+a+b

CLASSIFICATIONS:
CLASS A: Lead Dredgeman, Operator, Leverman, Licensed Tug Operator over 1000 HP.
CLASS B1: Derrick Operator, Spider/Spill Barge Operator, Engineer, Electrician, Chief Welder, Chief Mate, Fill Placer, Operator II, Maintenance Engineer, Licensed Boat Operator. CLASS B2: Certified Welder.
CLASS C1: Mate, Drag Barge Operator, Steward, Assistant Fill Placer, Welder.
CLASS C2: Boat Operator
CLASS D: Shoreman, Deckhand, Rodman, Scowman, Cook, Messman, Porter/Janitor, Oiler.

INCENTIVE PAY: (Add to Hourly Rate)
Operator (NCCCO License/Certification) $1.50 Licensed Tug Operator over 1000 HP (Assigned as Master) (USCG licensed Master of Towing Vessels (MOTV) $1.50; Licensed Boat Operator (Assigned as lead boat captain) USCG licensed

boat operator $1.00; Engineer (QMED and Tankerman endorsement or licensed engineer (USCG) $1.50 Oiler (QMED and Tankerman endorsement (USCG) $1.50; All classifications (Tankerman endorsement only) USCG $1.25; Deckhand or Mate (AB with Lifeboatman endorsement (USCG) $1.50; All classifications (lifeboatman endorsement only (USCG) $1.25; Welder (ABS certification) $0.50

FOOTNOTES APPLICABLE TO ABOVE CRAFTS:
a. PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr.'s Birthday, Memorial Day, Good Friday, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day
b. VACATION: Eight percent (8%) of the straight time rate, multiplied by the total hours worked.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

==========

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any

changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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, DC 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, DC 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, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

END OF GENERAL DECISION

General Decision Number: NJ140046 08/08/2014 NJ46

Superseded General Decision Number: NJ20130046

State: New Jersey

Construction Type: Heavy

County: Atlantic County in New Jersey.

HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/03/2014
1	05/09/2014
2	06/20/2014
3	08/08/2014

CARP0006-013 11/01/2012

	Rates	Fringes
CARPENTER (Including Form Work)	$ 41.49	56%

The first sixty feet at the regular rate, 10% per hour additional for each additional fifty feet thereafter.

CARP0454-009 05/01/2013

	Rates	Fringes
PILEDRIVERMAN	$ 39.65	29.12

PAID HOLIDAYS:
New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day; provided that the worker works any of the three days in the five-day work week preceding the holiday and the first work day after the holiday.

CARP0715-007 05/01/2014

	Rates	Fringes
Millwright	$ 43.88	56%

Work of erection and dismantling of elevators and towers, such as concrete conveyors and temporary material elevators, scaffolding or other structures to be used as scaffolding inside or outside of buildings: the first sixty feet at the regular rate, 10% per hour additional for each additional fifty feet thereafter.

ELEC0351-011 09/30/2013

	Rates	Fringes
Electricians:		
Cable splicer on lead cable	$ 46.51	72.54% + .65
Electrician and cable splicer	$ 44.51	72.54% + .65

ENGI0825-019 07/01/2013

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 43.07	28.50
GROUP 2	$ 41.48	28.50
GROUP 3	$ 39.57	28.50
GROUP 4	$ 37.94	28.50
GROUP 5	$ 36.23	28.50

Hazardous waste removal work:
Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: 20% per hour additional.

PAID HOLIDAYS:
New Year's Day, Washington's Birthday observed, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided 1) that the worker works three of the preceding five work days before the holiday; or, the work day before the holiday and the work day after the holiday; and, 2) that the worker works the work day before and the work day after the holiday.

DEFINITION OF GROUPS:

GROUP 1:
Backhoe, Including Backhoe Track; Boom; Concrete Paving Machine; Crane (all types, including overhead and straddle traveling type); Drill (down-the-hole drill, rotary drill, self-propelled hydraulic drill, self-powered drill); Elevating Grader; Excavator; Front End Loader (5 cu. yd. and over); Piledriver (length of boom, including length of leads, shall determine premium rate applicable)

GROUP 2:
Concrete Pumper; Grader/Blade (Finish); Hoist; Hydraulic Crane, 10 Tons and under; Front End Loader (2 cu. yd. but less than 5 cu. yd.); Scraper; Side Boom

GROUP 3:
Asphalt Spreader; Bulldozer; Compressor(2 or 3) (in Battery)

(within 100 ft.); Crusher; Forklift; Front End Loader (1 cu. yd. and over but less than 2 cu. yd.); Lull; Mechanic; Paver, Asphalt; Roller, Blacktop; Tractor;

GROUP 4:
Broom; Compressor (Single); Farm Tractor; Front End Loader (under 1 cu. yd.); Roller, Grade; Pump

GROUP 5:
Oiler

IRON0350-006 07/01/2013

	Rates	Fringes
Ironworkers:		
Reinforcing	$ 43.62	26.25
Structural and Ornamental	$ 44.62	26.25

LABO0172-007 09/01/2012

	Rates	Fringes
Laborers:		
Landsacpe Laborer, Power Tool Operator	$ 33.20	22.40
Pipelayer	$ 33.90	22.40

Hazardous waste removal work:
Work on a state or federally designated hazardous waste site, where the worker is required to wear Level A, B or C personal protection: $3.00 per hour additional.

Work on a state or federally designated hazardous waste site, where the worker is not required to wear Level A, B, or C personal protection: $1.00 per hour additional.

PAID HOLIDAYS:
New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided that the worker works three days for the same employer within a period of ten working days consisting of five working days before and five working days after the day upon which the holiday falls or is observed.

LABO0222-013 07/01/2012

	Rates	Fringes
LABORER		
MASON TENDER:		
Cement/Concrete	$ 29.35	23.07

PAIN0711-023 05/01/2009

	Rates	Fringes
Painters:		
Work on bridges (Major Bridges Designed for Commercial Navigation)	$ 46.50	19.13

---

* PAIN0711-024 05/01/2014

	Rates	Fringes
Painters:		
New Construction		
Brush and roller	$ 37.22	20.19
Spray	$ 37.92	16.14
Steel	$ 35.81	16.30
Repaint work, on projects on which no major alterations occur.		
Brush and roller	$ 28.56	16.95
Spray	$ 29.34	13.80
Steel	$ 27.74	13.93

PLAS0592-036 05/01/2014

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 38.52	30.21

PLUM0322-010 05/01/2013

	Rates	Fringes
PIPEFITTER	$ 43.02	32.54

TEAM0331-003 05/01/2013

	Rates	Fringes
Truck drivers:		
Dump Truck, Pickup Truck	$ 30.75	17.725
Off the Road Truck, Flatbed Truck	$ 31.10	17.725

Hazardous waste removal work:
Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: $3.00 per hour additional.

Work on a state or federally designated hazardous waste site where the worker is not working in a zone requiring Level A, B or C personal protection: $1.00 per hour additional.

PAID HOLIDAYS:
New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day.

BEREAVEMENT LEAVE:
Any worker having a death in his or her immediate family (parent, spouse, child, brother or sister, mother-in-law or father-in-law) shall be given three days time off with pay at the time of death upon furnishing proof of said death. This provision shall also apply to grandparents, when living with the worker.

SUNJ2004-022 01/02/2009

	Rates	Fringes
LABORER: Common or General	$ 25.30	11.92
OPERATOR: Backhoe Loader Combo	$ 31.28	20.79

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

==========

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union

number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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, DC 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, DC 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, DC 20210

4.) All decisions by the Administrative Review Board are final.

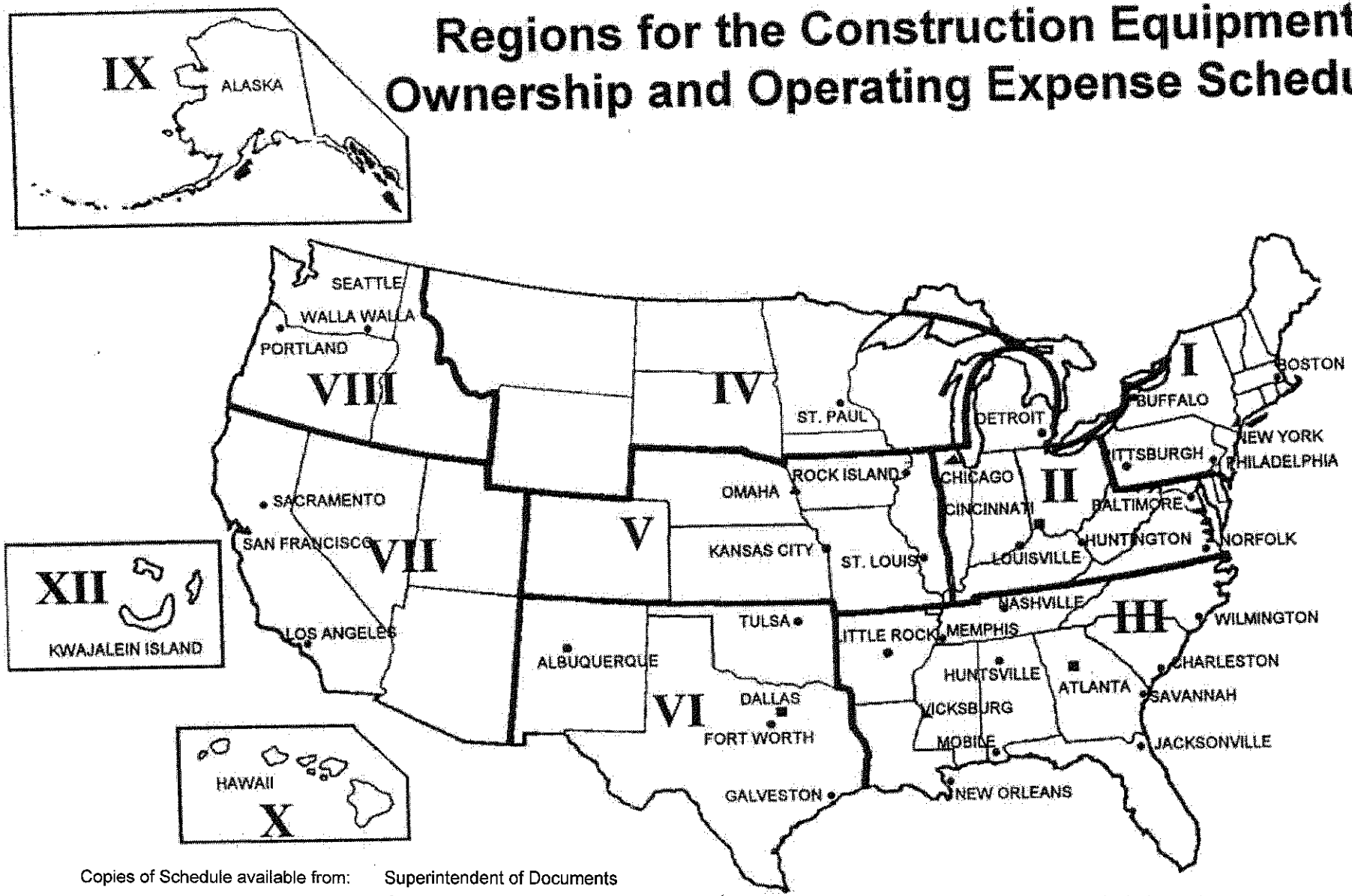
==========

END OF GENERAL DECISION

SECTION 00 73 25

REGIONS FOR THE CONSTRUCTION EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

Regions for the Construction Equipment Ownership and Operating Expense Schedule



Copies of Schedule available from: Superintendent of Documents
Government Printing Office
732 N. Capitol Street NW
Washington, D.C. 20401
www.gpo.gov

P' 202-512-1800

SECTION 00 73 30

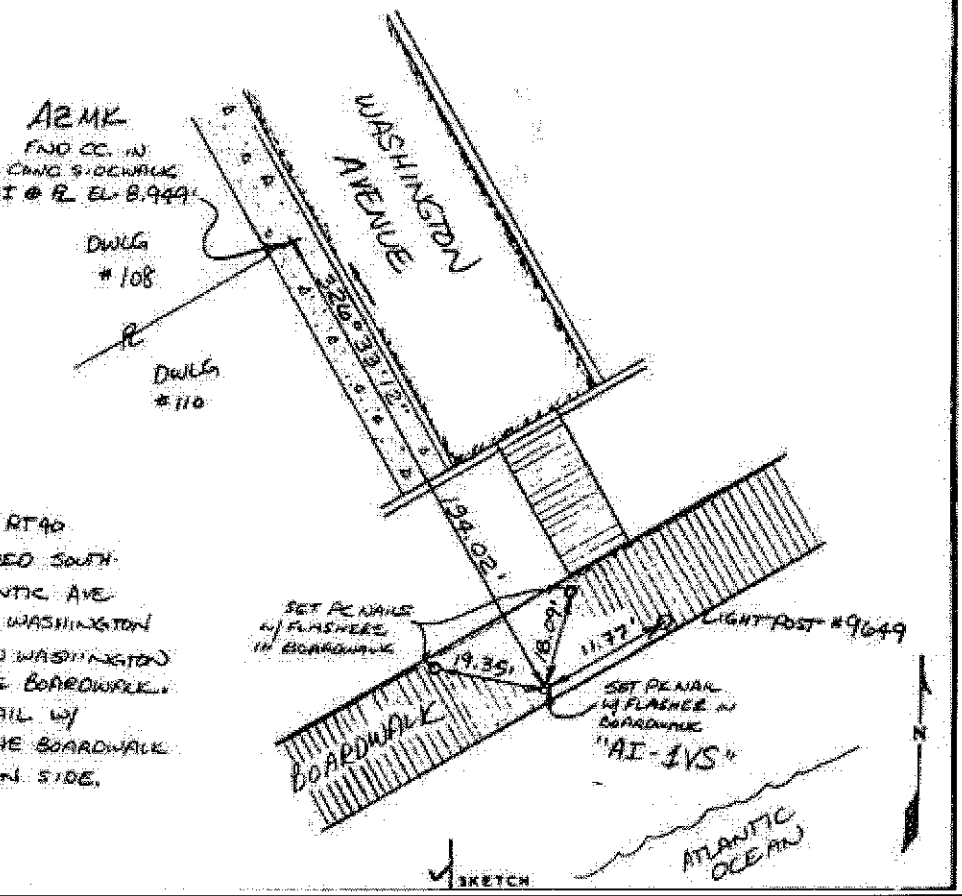
SURVEY CONTROL DATA

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-1VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 11.941
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 181276.929 (M)	(EASTING) (FT) 495034.445 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE DEC 2007 / ORDER GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK @ PL CONC CC	326° 33' 12" ✓	° ' "		194.02' ✓
WALK DIV. LINE				
# 108/110 WASHINGTON				
"AI BMS" 1.P.PC	244°49' 11" ✓			1,068.11' ✓
"AI-2VS" PK	37°58'56" ✓			1,227.04' ✓

AZ. MK @ PL CC (12.1)
N. 181,438.809 ✓
E. 194,927.527 ✓
EL. 8.949' ✓

*NOTE: ( ) DENOTES COORDINATE NUMBERS IN SURV & FILE "ABSECON"



TO REACH: FROM RT 40 (ALBANY AVE) PROCEED SOUTH-WEST ALONG ATLANTIC AVE INTO VENTNOR TO WASHINGTON AVE. TURN LEFT ON WASHINGTON TO THE END AT THE BOARDWALK. STATION IS A PK NAIL W/ FLASHER SET ON THE BOARDWALK CLOSE TO THE OCEAN SIDE.

FORM 1959 1 OCT **DA** 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

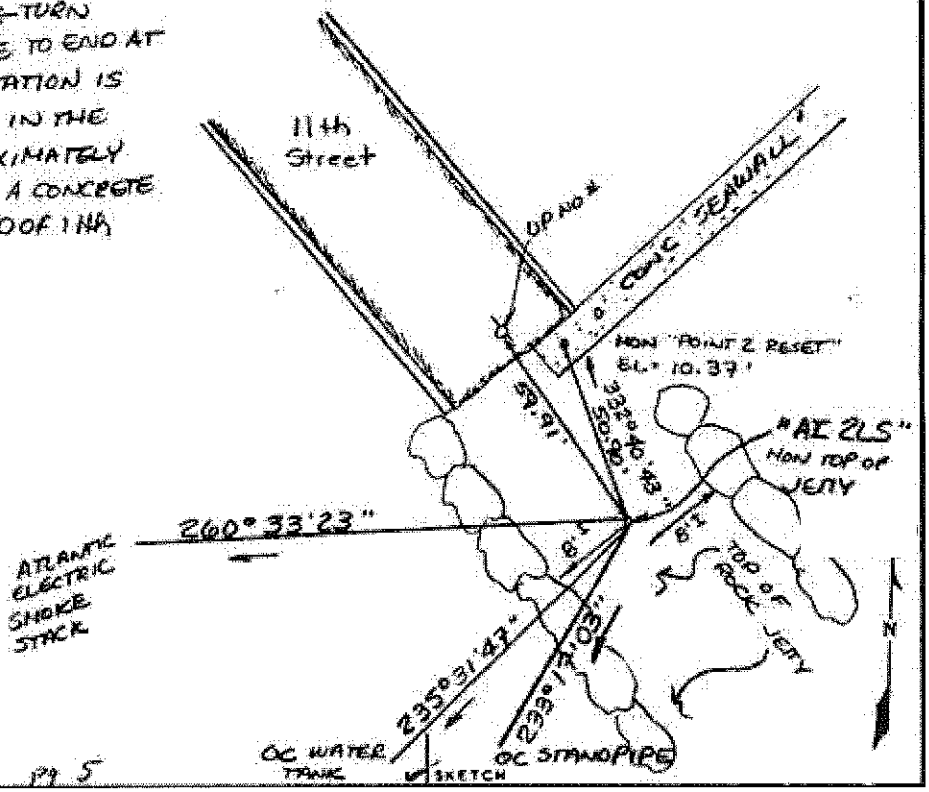
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	DISK IN JETTY	AI-2LS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 8.556
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 171197.046 (M)	(EASTING) (FT) 482107.218 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NAD 83: NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD. DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
OC STANDPIPE	233° 17' 03" ✓	° ' "		—
OC WATER TANK	235° 31' 47" ✓			—
ACE SMOKESTACK	260° 33' 23" ✓			—
"AI 2LS"	43°03'40" ✓			1,779.363'
MON "POINT 2 RESET"	332° 40' 43" ✓			50.90' ✓

* NOTE: ( ) Denotes Coordinate Number in Surv 4 File "Absecon"

TO REACH: FROM RT 40 (ALBANY AVE.) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE TO 11th AVE IN LONGPORT—TURN LEFT ONTO 11th AVE TO END AT THE ROCK JETTY. STATION IS A NGS MON SET IN THE TOP OF JETTY APPROXIMATELY 51' ± SEAWARD OF A CONCRETE SEAWALL AT THE END OF 11th STREET.



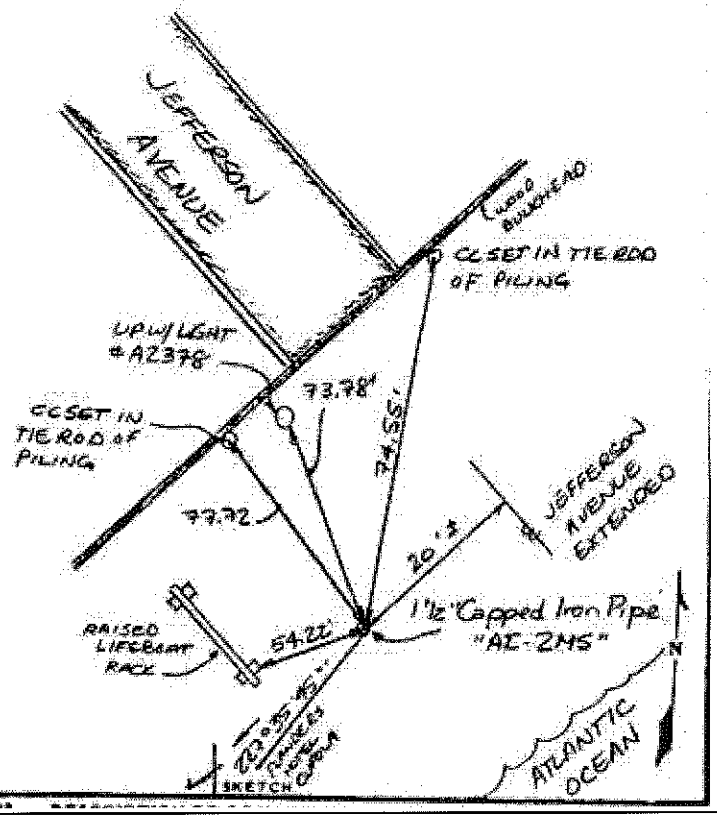
See Book 71-114 pg 5

FORM 1959	REPLACES DA FORMS 1959	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-2MS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 9.05
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 176904.167sft (M)	**(EASTING)** (FT) 488308.505sft (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	**(EASTING)** (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
LB. "AI-1 MS"	232° 01' 05" ✓	° ' "		955.84' ✓
LB. "AI-3 MS"	58° 46' 02" ✓			1,373.07' ✓
FLANDERS HOTEL				
CUPOLA, QC.	227° 35' 45" ✓			—

TO REACH:
FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO JEFFERSON AVE. IN MARGATE - TURN LEFT ONTO JEFFERSON TO THE END. STATION IS A 1½" CAPPED IRON PIPE SET ON THE BEACH 20'± SOUTHWESTERLY OF THE EXTENDED ℄ OF JEFFERSON AVENUE.



NOTE: ( ) Denotes coordinate Numbers in Surv4 file Absecon"

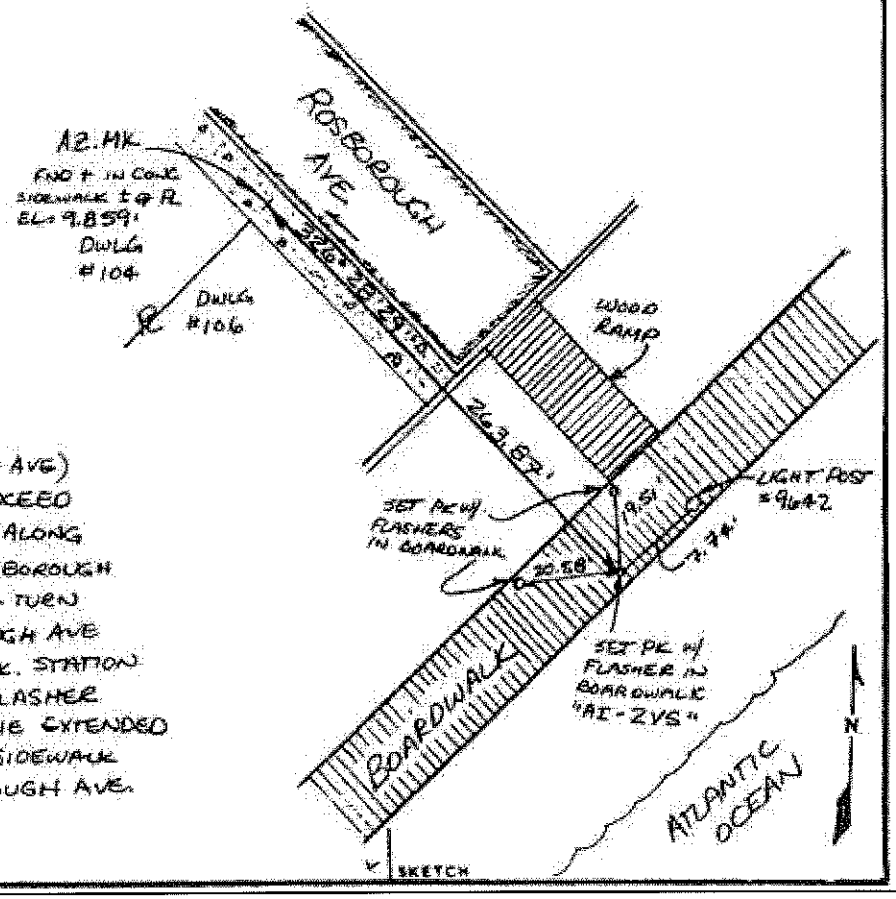
FORM 1959	REPLACES DA FORMS 1959	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-2VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 11.589
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 181927.414 (M)	(EASTING) (FT) 496074.908 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
A2 MK @ PK CONC CC	326° 28' 29" ✓	° ' "		263.87' ✓
* 104/106 ROSBOROUGH				
"AI-1VS"	237° 58' 56" ✓			1,237.04' ✓
"AI-3VS"	58° 00' 44" ✓			1,263.20' ✓

A2 MK
N. 182,147.448 ✓
E 495,923.113
EL 9.859 ✓

* NOTE: ( ) DENOTES COORDINATE POINT NUMBER IN SURV 4 FILE "ABSECON"



TO REACH:

FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE TO ROSBOROUGH AVE. IN VENTNOR. — TURN LEFT ONTO ROSBOROUGH AVE TO END AT BOARDWALK. STATION IS A PK NAIL WITH FLASHER SET LINE UP WITH THE EXTENDED ℄ OF THE WESTERLY SIDEWALK LINE ALONG ROSBOROUGH AVE.

FORM 1959	REPLACES DA FORMS 1959	**DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION**
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

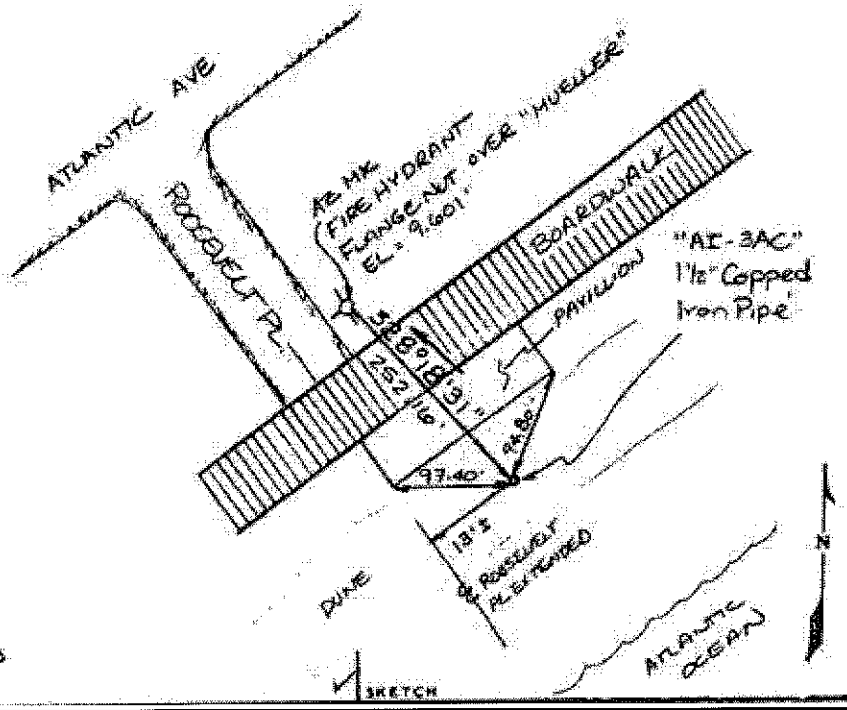
COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-3AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.573
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 187491.164 (M)	**(EASTING)** (FT) 505299.156 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	**(EASTING)** (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (~~GEODETIC~~/GRID) (~~MAGNETIC~~)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (~~METERS~~/FEET)
AZ MK PK NAIL W/	328° 18' 31" ✓	° ' "		252.170' ✓
FLASHER IN BOARDWALK				
OC STANDPIPE	234° 19' 26" ✓			—
OC WATER TANK	235° 06' 48" ✓			—

AZ. MK FLANGE NUT OVER "MUELLER FIREHYDRANT

N. 187,705.848 ✓
E. 505,166.205 ✓
EL. 9.601' ✓

TO REACH: FROM RT 40 (ALBANY AVE) PROCEED SOUTH WEST ON ATLANTIC AVE 1 BLOCK TO ROOSEVELT PL — TURN LEFT TO END — STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNE SOUTH OF THE ROOSEVELT PL. BOARDWALK PAVILLION.



*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

FORM 1959 1 OCT 64 DA

REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CROSS CUT	AI-3ALS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 10.379
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 173514.583 (M)	(EASTING) (FT) 484369.181 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NAD 83: NJ 2900	DATE: DEC 2007 / ORDER: GPS

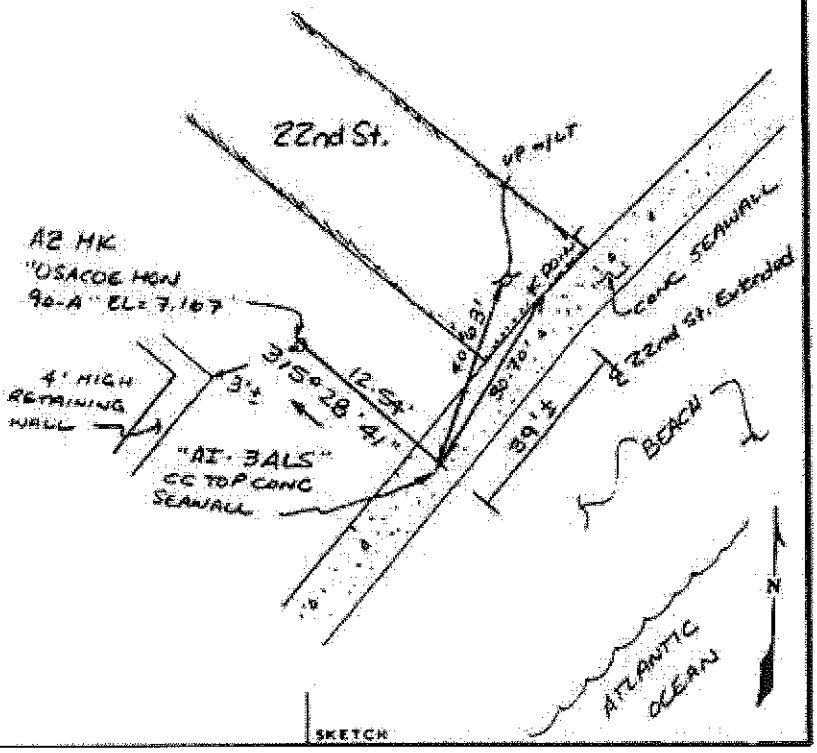
OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
"AI - 3LS"	225° 49' 03" ✓	° ' "		1,460.12' ✓
"AI - 4LS"	52° 32' 33" ✓			434.52' ✓
AZ. MK USACOE MON 90-A	315° 28' 41" ✓			12.54' ✓

AZ MK USACOE MON "90 A"

N. 173,523.566
E. 484,360.596
EL. 7.167

*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV & FILE "ABSECON"

TO REACH:
FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO 22nd STREET IN LONGPORT— TURN LEFT ONTO 22nd STREET TO END. STATION IS A CROSS CUT SET IN THE TOP OF A CONCRETE SEAWALL 39'± SOUTHWESTERLY OF THE ℄ OF 22nd STREET.



FORM 1959 1 OCT 64 DA — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

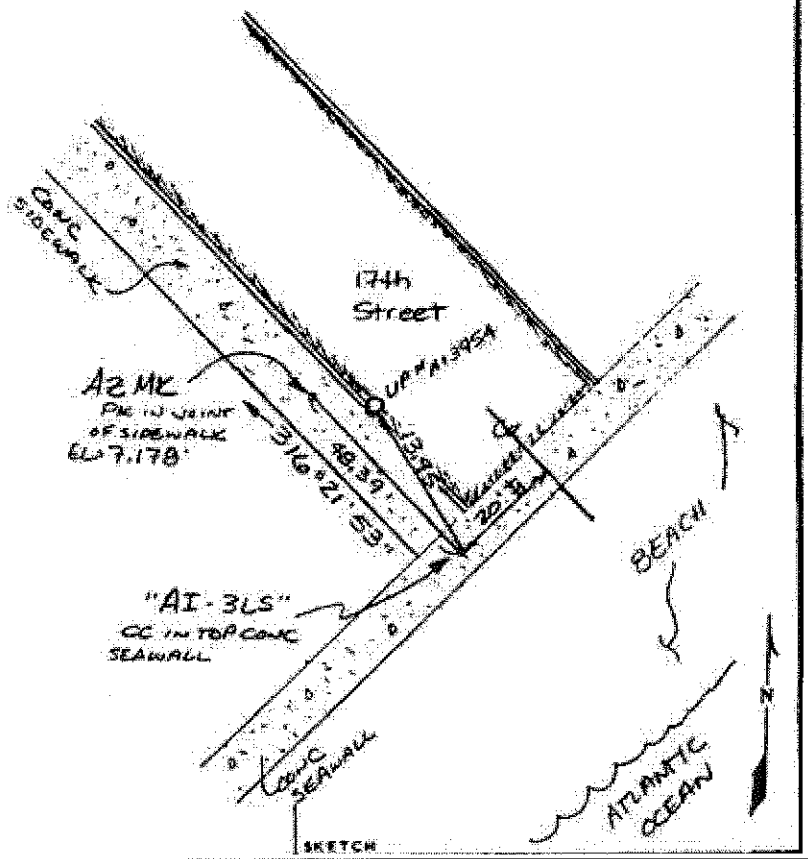
COUNTRY	TYPE OF MARK	STATION	
USA	CROSS CUT	AI-3LS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 10.301
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 172497.113 (M)	(EASTING) (FT) 483322.148 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NAD 83: NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
"AI - 2LS"	223° 03' 40" ✓	° ' "		1,779.36' ✓
AZ MK PK NAIL IN SIDEWALK	316° 21' 53" ✓			48.39' ✓

AZ MK PK NAIL IN SIDEWALK
N. 172,532.022 ✓
E. 483,288.911 ✓
EL. 7.178 ✓

NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

TO REACH:
FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVENUE TO 17TH STREET IN LONGPORT. TURN LEFT ON 17TH TO THE END. THE STATION IS A CROSS CUT SET IN THE TOP OF A CONCRETE SEAWALL 20'± SOUTHWEST OF 17TH STREET EXTENDED.



DA FORM 1959, 1 OCT 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

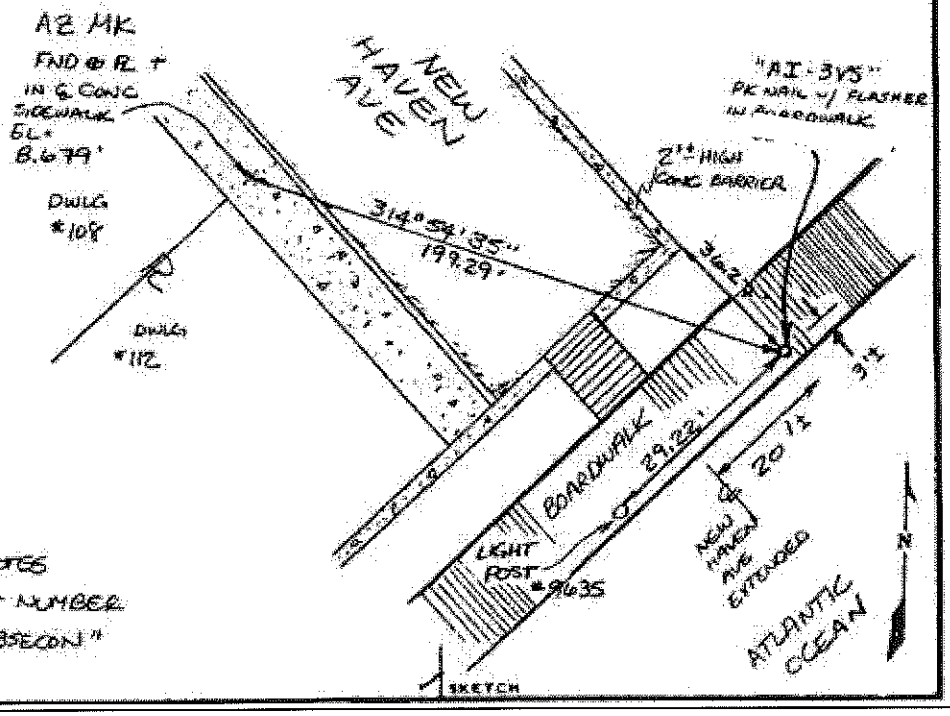
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-3VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 11.587
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 182596.553 (M)	(EASTING) (FT) 497146.184 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK ⊕ PL CONC CC	314°54'36" ✓	° ' "		199.29' ✓
* 108/112 NEW HAVEN				
"AI-2VS"	238°00'44" ✓			1,263.20' ✓
"AI-4VS"	57°58'51" ✓			690.07' ✓

AZ MK ⊕ R CC SIDEWALK
N. 182,737.338 ✓
E. 497,005.100 ✓
El. 8.679' ✓

TO REACH: FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO NEW HAVEN AVE — TURN LEFT ONTO NEW HAVEN AVE. TO THE END. STATION IS A PK NAIL WITH FLASHER SET IN THE BOARDWALK 20'± NORTHEASTERLY OF THE EXTENDED ℄ OF NEW HAVEN AVE.



* NOTE: ( ) DENOTES COORDINATE POINT NUMBER IN SURV 4 FILE "ABSECON"

FORM 1959 1 OCT 64 DA — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

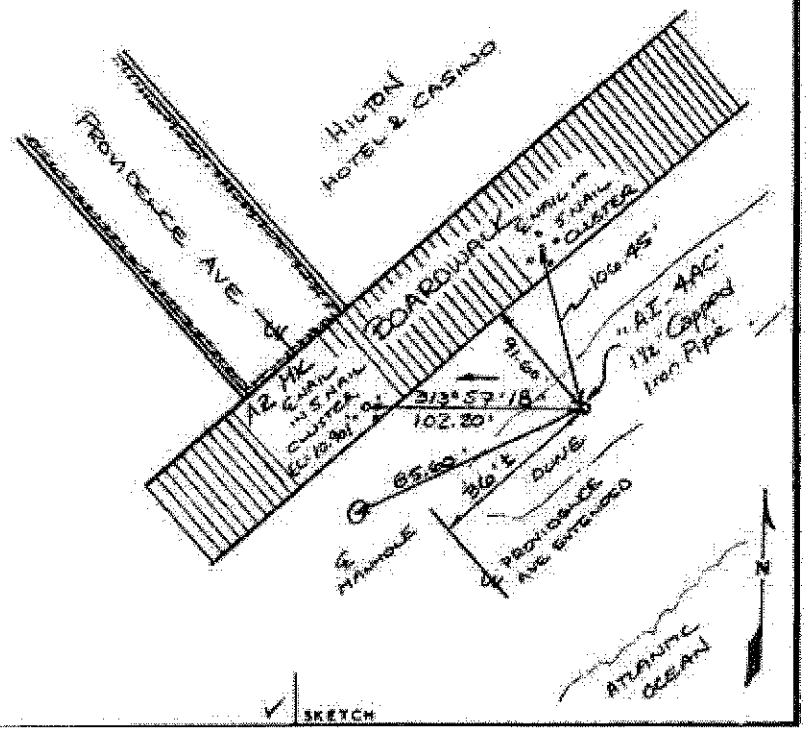
COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-4AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 16.955
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 187964.168 (M)	(EASTING) (FT) 506127.968 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOG DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
A2 HK CENTER NAIL	313° 57' 18" ✓	° ' "		102.20 ✓
IN S NAIL CLUSTER				
FLANDERS HOTEL CUPOLA	232° 31' 16" ✓			—
OC STANDPIPE	234° 26' 59" ✓			—
OC WATER TANK	235° 13' 38" ✓			—

A2, HK. CENTER NAIL IN SNAIL CLUSTER

N. 188,035.171 ✓
E. 506,054.010 ✓
EL. 10.901 ✓

TO REACH: FROM RT 40 (ALBANY AVE) PROCEED NORTHEAST on PACIFIC AVE TO PROVIDENCE AVE. — TURN RIGHT TO END. STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNES JUST NORTHEAST OF PROVIDENCE AVE.



*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV4 FILE "ABSECON"

✓ SKETCH

FORM 1959 1 OCT **DA** 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

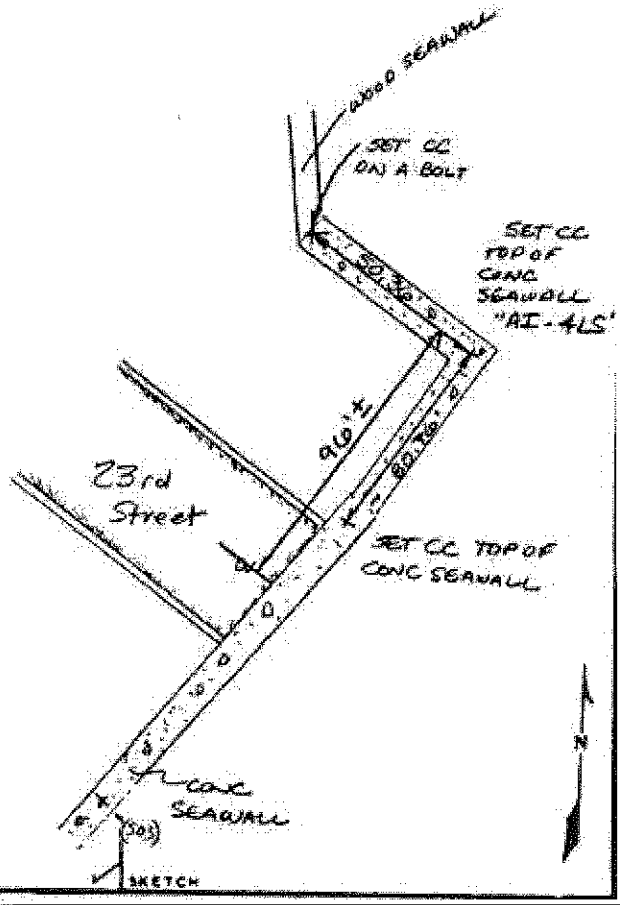
COUNTRY	TYPE OF MARK	STATION	
USA	CROSS CUT	AI-4LS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 10.48
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 173778.889 (M)	(EASTING) (FT) 484714.23 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID/MAGNETIC)	BACK AZIMUTH	GEOD. DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
PK NAIL BULKHEAD	45° 30 49" ✓	° ' "		1,141.20' ✓
"AI-3LS"				
CC CONC SEAWALL	227° 21' 30" ✓			1,892.38' ✓
"AI-3LS"				
CC SEAWALL	232° 32' 53" ✓			434.52' ✓
"AI-3ALS"				

*NOTE ( ) DENOTES COORDINATE NUMBER IN SURVEY FILE "ABSECON"

TO REACH:

FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVENUE TO 23rd STREET IN LONGPORT, TURN LEFT ONTO 23rd STREET TO END. STATION IS A CROSS CUT SET IN THE TOP OF A CONC. SEAWALL AT AN ANGLE POINT 90'± NORTHEASTERLY OF THE ℄ OF 23rd STREET.



FORM 1959	REPLACES DA FORMS 1959	**DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION**
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

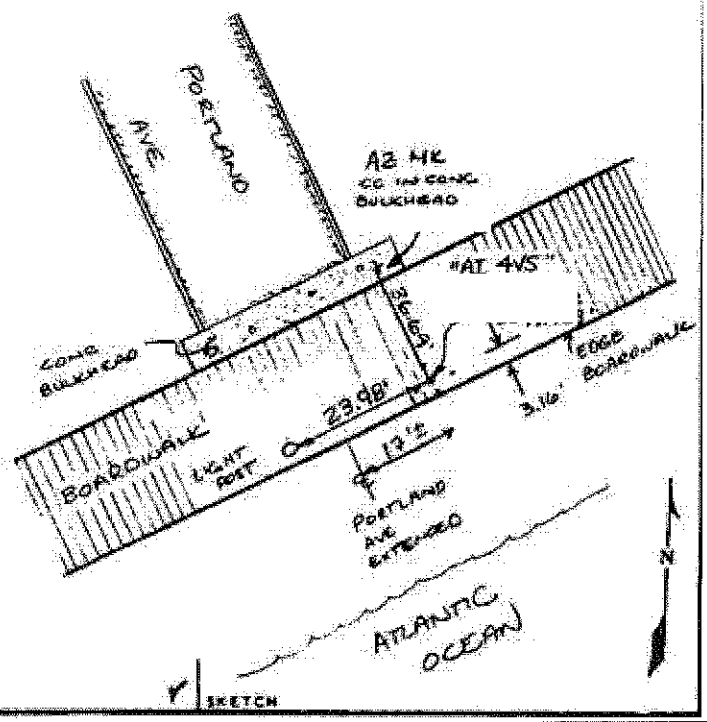
COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-4VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.782
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 182962.396 (M)	(EASTING) (FT) 497731.319 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK CC IN CONC BULKHEAD	328° 06' 18" ✓	° ' "		36.69' ✓
"AI 3VS"	237°58'51" ✓			690.07' ✓
"AI-5VS"	57°59'04" ✓			833.58' ✓

AZ MK CC IN CONC BULKHEAD
N. 182,993.667 ✓
E. 497,711.946 ✓
EL. 11.329 ✓

* NOTE, ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

TO REACH:
FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO PORTLAND AVE IN VENTNOR. TURN LEFT ONTO PORTLAND AVE. TO END. STATION IS THE CENTER NAIL OF A 5 NAIL CLUSTER SET IN THE BOARDWALK 19'± NORTHEASTERLY OF THE EXTENDED ℄ OF PORTLAND AVE.



FORM	REPLACES	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
DA FORM 1959, 1 OCT 64	REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.	For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-5AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 15.01
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 188547.795 (M)	(EASTING) (FT) 507392.035 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) ~~(MAGNETIC)~~	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE ~~(METERS)~~ (FEET)
AZ MK PK NAIL W/ FLASHER IN BOARDWALK	332° 27' 54" ✓	° ' "		115.15' ✓
"AI 4AC"	245°13'14" ✓			1,392.56' ✓

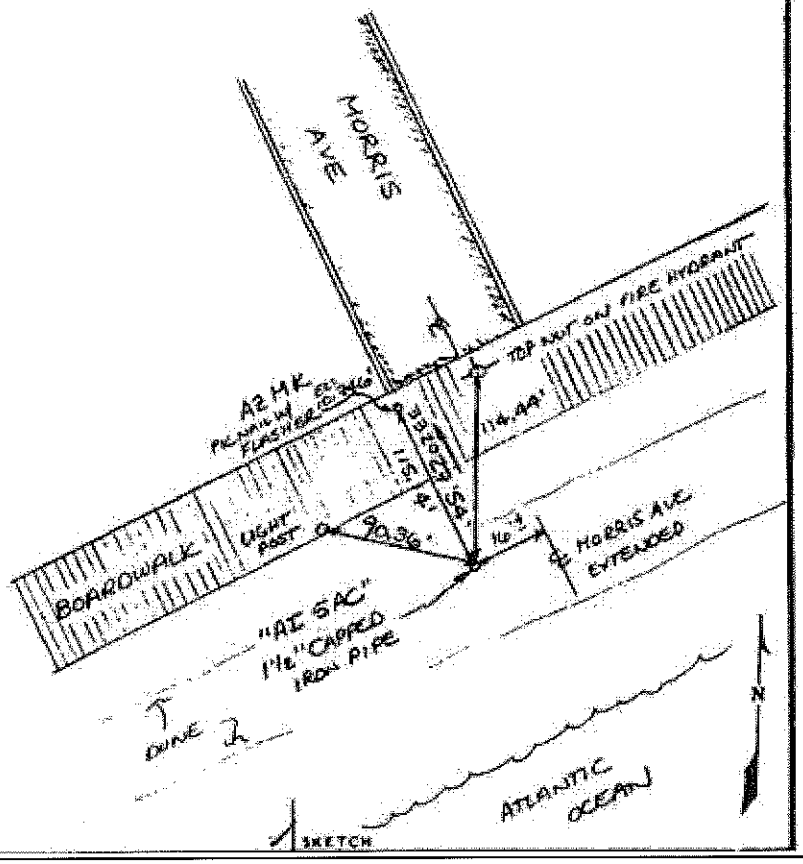
AZ MK PK NAIL W/ FLASHER

N. 188,650.000 ✓
E. 507,338.693 ✓
EL. 10.746 ✓

*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

TO REACH:

FROM RT 40 (ALBANY AVE) PROCEED NORTHEASTWARDLY ALONG PACIFIC AVENUE TO MORRIS AVENUE. TURN RIGHT TO END AT BOARDWALK. STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNE 16'± SOUTHWESTERLY OF THE EXTENDED ℄ OF MORRIS AVE.



FORM 1959 1 OCT 64 DA

REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

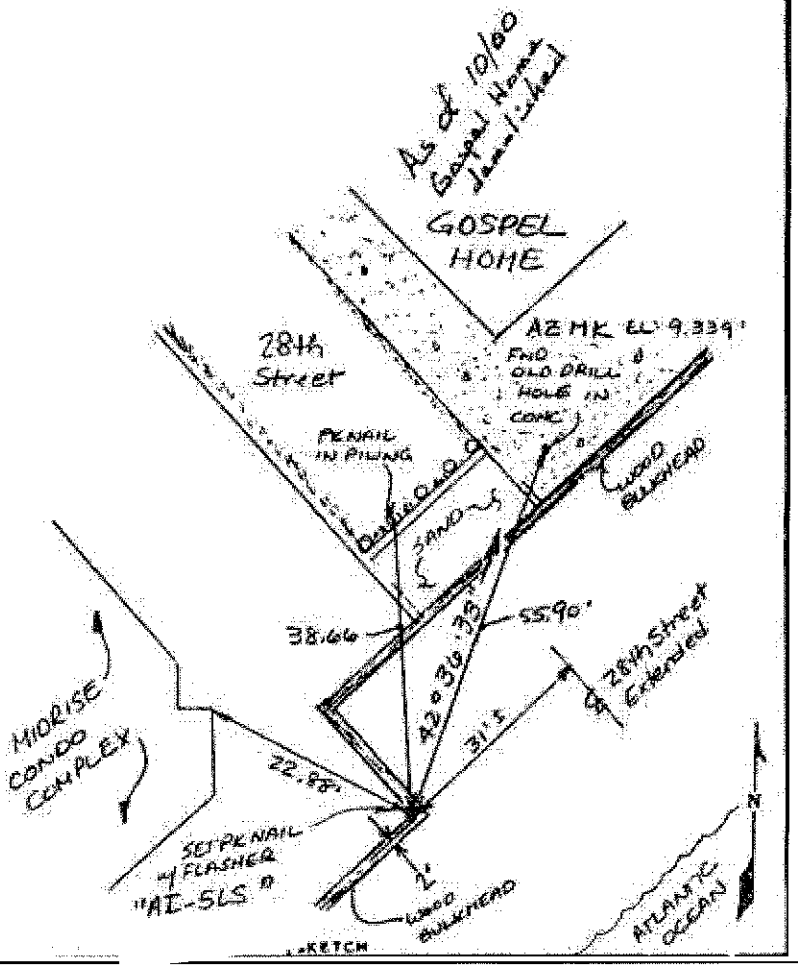
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-5LS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.005
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 174578.527 (M)	(EASTING) (FT) 485528.432 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
DH IN CONC AZ MK.	42°36'33" ✓	° ' "		55.90' ✓
CC IN SEAWALL "AI-4LS"	225°30'49" ✓			1,141.20' ✓
CC IN ROCK GROIN "AI-6LS"	47°02'02" ✓			1,555.23' ✓

AZ MK. DH IN CONC.

N. 174,619.714 ✓
E. 485,566.306 ✓
EL. 9.339 ✓



TO REACH:

FROM RT. 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO 28th STREET IN LONGPORT. — TURN LEFT ONTO 28th STREET TO THE END. STATION IS A PK NAIL WITH FLASHER SET IN WHALER OF BULKHEAD 31'± SOUTHWESTERLY OF THE ℄ OF 28th ST.

* NOTE:
( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

SKETCH

FORM 1959	REPLACES DA FORMS 1959	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

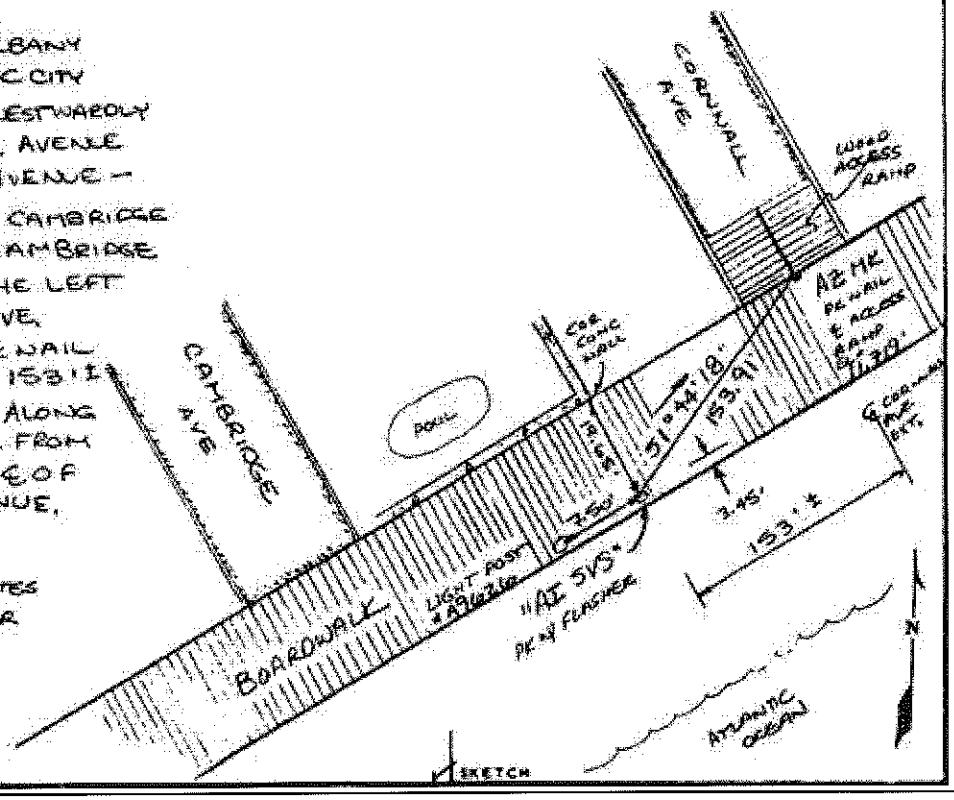
COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-5VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 11.917
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 183404.523 (M)	(EASTING) (FT) 498438.124 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL &	51° 44' 18" ✓	° ' "		153.91' ✓
ACCESS RAMP				
"AI 4VS"	237°59'04" ✓			833.58' ✓
"AI 6VS"	57° 30' 58" ✓			751.68' ✓

AZ MK PK NAIL & ACCESS RAMP @ CORNWALL AVE.
N. 183,339.746 ✓
E. 498,558.977 ✓
EL. 11.719' ✓

TO REACH:
FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVENUE TO CAMBRIDGE AVENUE — TURN LEFT ON CAMBRIDGE AVE — FOLLOW CAMBRIDGE AVE. AROUND THE LEFT TO CORNWALL AVE. STATION IS A PK NAIL WITH FLAGHER 153.1' SOUTHWESTERLY ALONG THE BOARDWALK FROM THE EXTENDED ℄ OF CORNWALL AVENUE.

* NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"



FORM 1959 1 OCT 64 DA

REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-6AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 13.002
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 189010.015 (M)	(EASTING) (FT) 508430.621 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL W/	332° 02' 12" ✓	° ' "		70.30 ✓
FLASHER IN BOARDWALK				
FLANDERS HOTEL CUPOLA	233° 12' 47" ✓			
OC STANDPIPE	235° 02' 09" ✓			
OC WATER TANK	235° 47' 46" ✓			

AZ MK PK NAIL W/ FLASHER IN BOARDWALK

N. 189,072.221 ✓

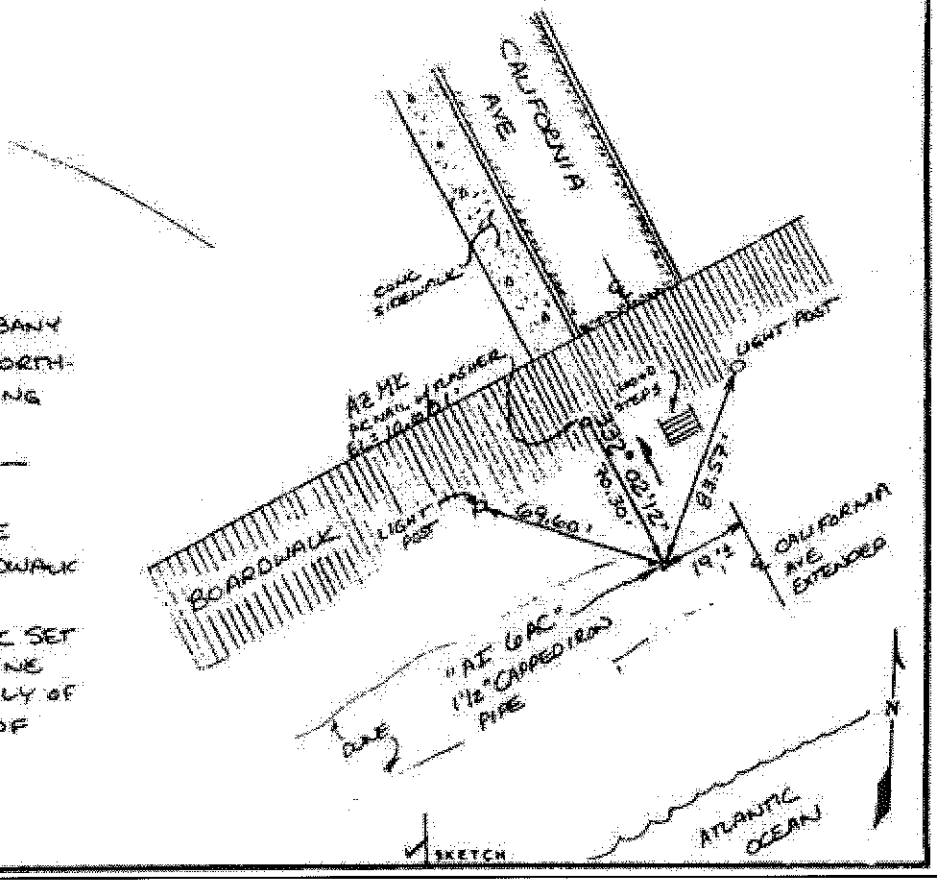
E. 508,397.325 ✓

EL. 10.608 ✓

* NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

TO REACH:

FROM RT 40 (ALBANY AVE) PROCEED NORTH-EASTWARDLY ALONG PACIFIC AVE. TO CALIFORNIA AVE. — TURN RIGHT ON CALIFORNIA TO THE END AT THE BOARDWALK STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNE 19'± SOUTHWESTERLY OF THE EXTENDED ℄ OF CALIFORNIA AVE.



FORM 1959 1 OCT **DA** 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CROSS CUT	AI-6LS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 10.389
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 175638.636 (M)	(EASTING) (FT) 486666.396 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

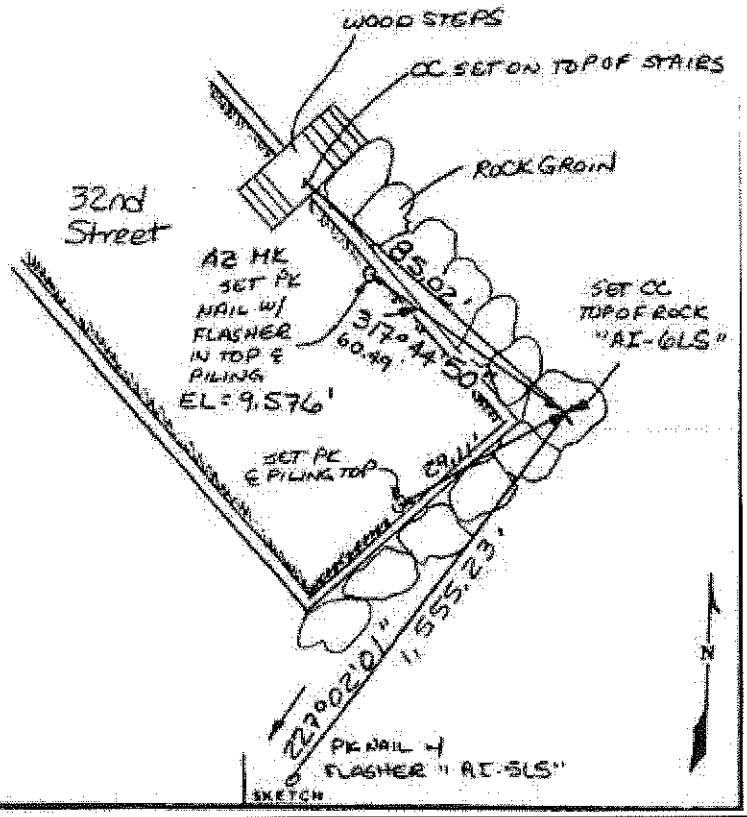
OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK IN PILING	317° 44' 50" ✓	° ' "		60.49' ✓
PK "AI-SLS"	227° 02' 02" ✓			1555.23' ✓
I. PIPE "AI-1HS"	52° 40' 28" ✓			1,113.15' ✓

AZ MK PK NAIL W/ FLASHER IN PILING (106)

N. 175,683.341
E. 486,625.838
EL. 9.576'

TO REACH:

FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY, PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO 32nd STREET IN LONGPORT. — TURN LEFT ONTO 32nd STREET TO THE END. STATION IS A CROSS CUT SET IN THE TOP OF ROCK GROIN AT THE NORTHEAST CORNER OF THE TERMINUS OF 32nd STREET.



*NOTE:
( ) DENOTES COORDINATE NUMBER IN SURV4 FILE "ABSECON"

FORM 1959	REPLACES DA FORMS 1959	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-6VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.83
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 183803.459 (M)	**(EASTING)** (FT) 499074.729 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	**(EASTING)** (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

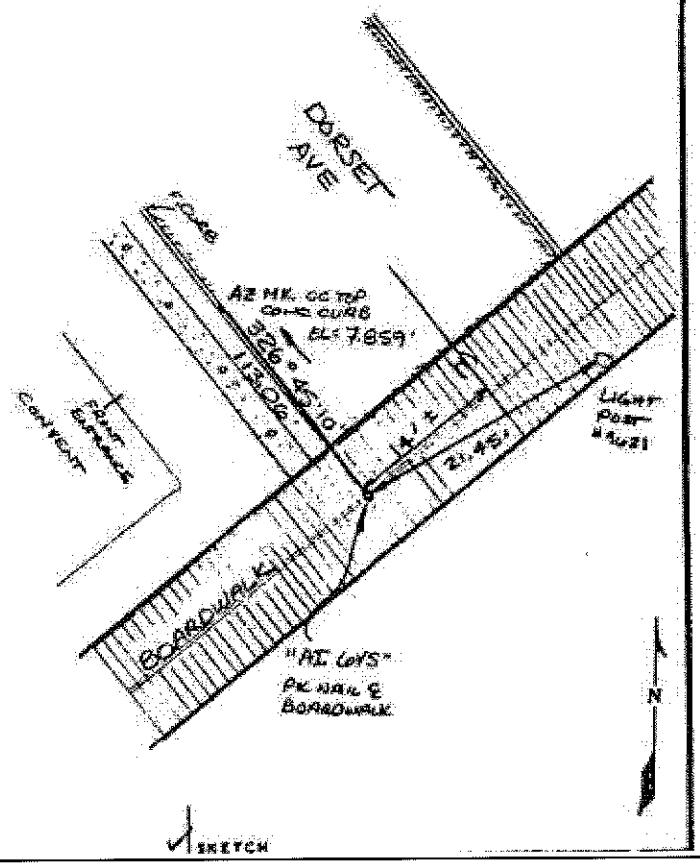
OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK. CC TOP CONC CURB	326° 45' 10" ✓	° ' "		113.06' ✓
"AI 6VS"	237° 30' 58" ✓			751.68' ✓
"AI 7VS"	58° 18' 37" ✓			1,187.22' ✓

AZ MK. CC TOP CONC CURB

N. 183,902.691 ✓
E. 499,010.216 ✓
EL. 7.859 ✓

* NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV4 FILE "ABSECON"

TO REACH: FROM RT 40 (ALBANY AVE) PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVE. TO DORSET AVE. — TURN LEFT ONTO DORSET TO THE END AT THE BOARDWALK — STATION IS AN OLD PK NAIL IN THE CENTER LINE OF THE BOARDWALK LINED UP WITH THE EXTENDED SOUTHWESTERLY CURB LINE OF DORSET AVE



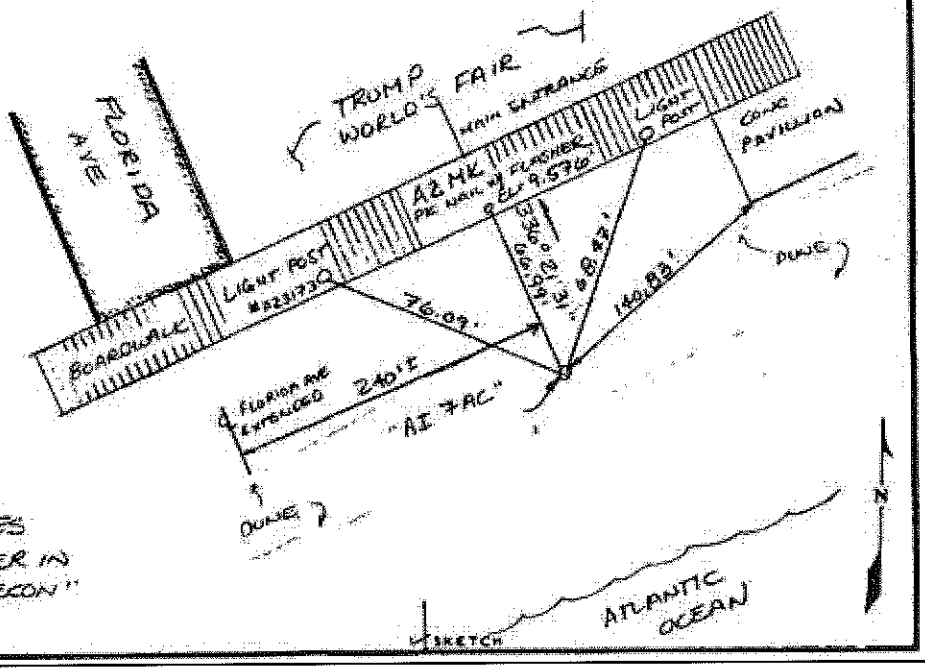
FORM 1959	REPLACES DA FORMS 1959	**DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION**
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-7AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 15.164
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 189403.679 (M)	**(EASTING)** (FT) 509416.491 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	**(EASTING)** (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL W/	336° 21' 31" ✓	° ' "		66.99' ✓
FLASHER ON BOARDWALK				
"AI 6AC"	249° 14' 34" ✓			1,061.56' ✓

AZ MK PK NAIL W/ FLASHER
N. 189,464.990 ✓
E. 509,389.363 ✓
EL. 9.576' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY PROCEED SOUTHWEST ALONG PACIFIC AVENUE TO FLORIDA AVENUE — TURN LEFT ONTO FLORIDA AVENUE TO THE END — STATION IS A USACOE DRIVE MONUMENT SET IN THE TOP OF DUNE 240' ± NORTHEASTERLY OF THE EXTENDED ℄ OF FLORIDA AVE.



*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

	FORM 1959	REPLACES DA FORMS 1959	**DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION**
	1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA	64	ARE OBSOLETE.	agnecy is TRADOC.

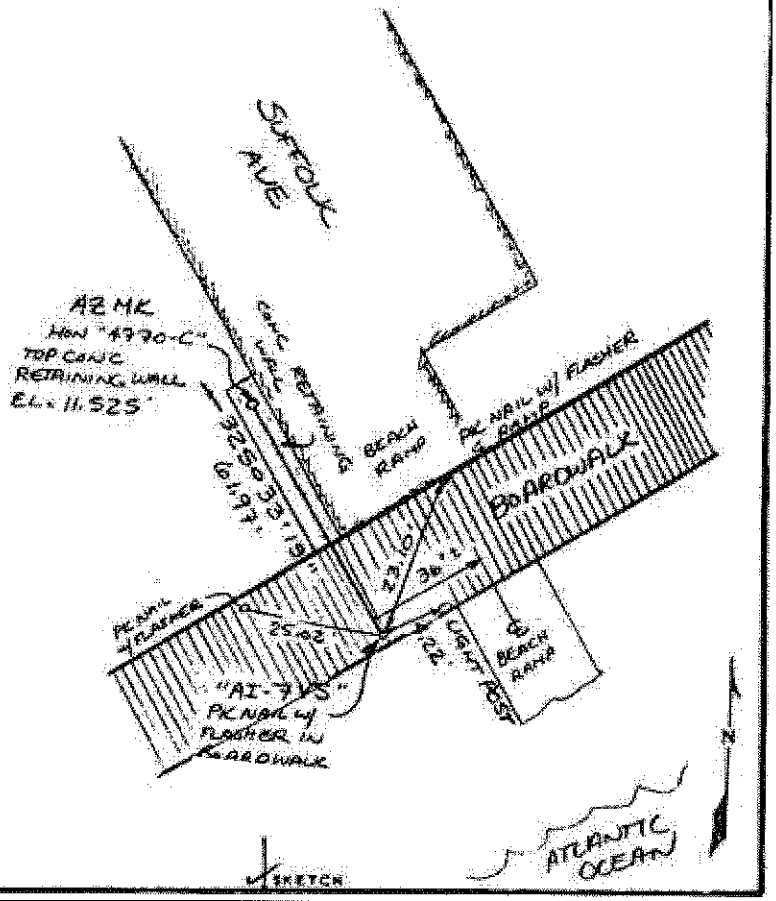
COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-7VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.863
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 184431.813 (M)	(EASTING) (FT) 500082.537 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK HON 4770C	325° 33' 19" ✓	° ' "		61.97 ✓
"AI-6VS"	238° 18' 37" ✓			1,187.220 ✓
"AI-8VS"	59° 42' 33" ✓			1,378.37' ✓

AZ MK HON "4770C"
N. 184,482.909 ✓
E. 500,047.364 ✓
EL. 11.525' ✓

* NOTE: ( ) DENOTES COORDINATE NUMBER IN SURVEY FILE "ABSECON"

TO REACH: FROM RT 40 (ALBANY AVE.) PROCEED SOUTHWEST ALONG ATLANTIC AVE. TO SUFFOLK AVE. — TURN LEFT ONTO SUFFOLK TO END AT BOARDWALK. STATION IS A PK NAIL W/ FLASHER SET IN THE BOARDWALK NEAR THE BEACH ACCESS RAMP.



FORM 1959 — 1 OCT — DA 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-8MS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.657
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 180822.329 (M)	(EASTING) (FT) 494068.02 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
IP "AI 7MS"	228° 20' 31" ✓	° ' "		882.85 ✓
AZ MK NAIL & PILING, BRUNSWICK	328° 29' 44" ✓			115.67 ✓
PK NAIL, BOARDWALK "AI-1 VS"	64° 49' 11" ✓			1,068.11' ✓

AZ MK NAIL IN & PILING (118)

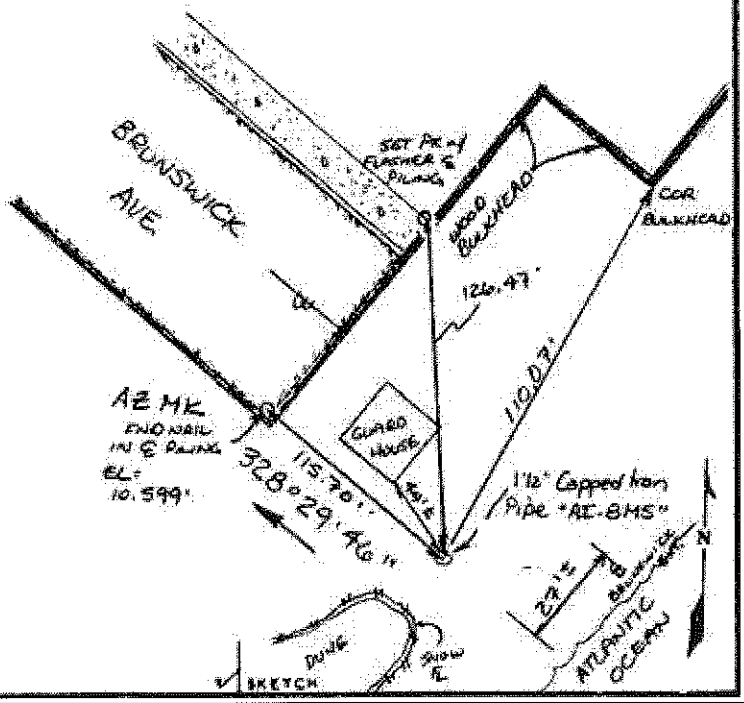
N. 180,921.090 ✓

E. 494,007.403 ✓

EL. 10.599' ✓

TO REACH:

FROM RT 40 (ALBANY AVE) IN ATLANTIC CITY PROCEED SOUTHWESTWARDLY ALONG ATLANTIC AVENUE TO BRUNSWICK AVENUE IN MARGATE — TURN LEFT ONTO BRUNSWICK AVENUE TO THE END. STATION IS A 1½" CAPPED PIPE SET ON THE BEACH 27'± SOUTHWESTERLY OF THE EXTENDED ℄ OF BRUNSWICK AVENUE.



*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

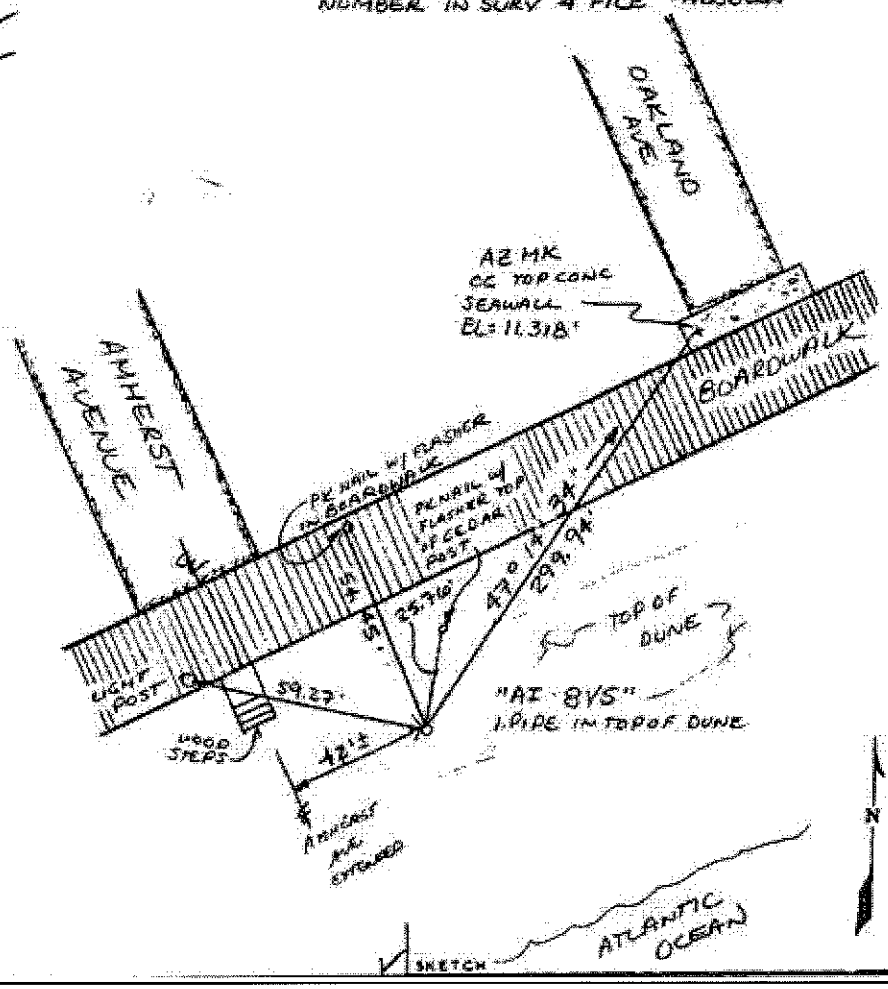
DA	FORM 1959 1 OCT 64	REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.	**DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION** For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-8VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 11.141
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 185076.592 (M)	(EASTING) (FT) 501186.545 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK	17° 14' 34"	° ' "		299.94'
"AI · 7VS"	239° 42' 33"			1,278.37'
"AI · 9VS"	59° 27' 53"			1,264.32

AZ MK CC TOP SEAWALL OAKLAND AVE
N. 185,280.223
E. 501,406.481
EL. 11.318'

* NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"



TO REACH: FROM RT 40 (ALBANY AVE) PROCEED SOUTHWEST ALONG ATLANTIC AVE TO AMHERST AVE. TURN LEFT ONTO AMHERST TO END AT BOARDWALK — STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNE, JUST NORTH EAST OF AMHERST AVE EXTENDED.

FORM 1959 1 OCT **DA** 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

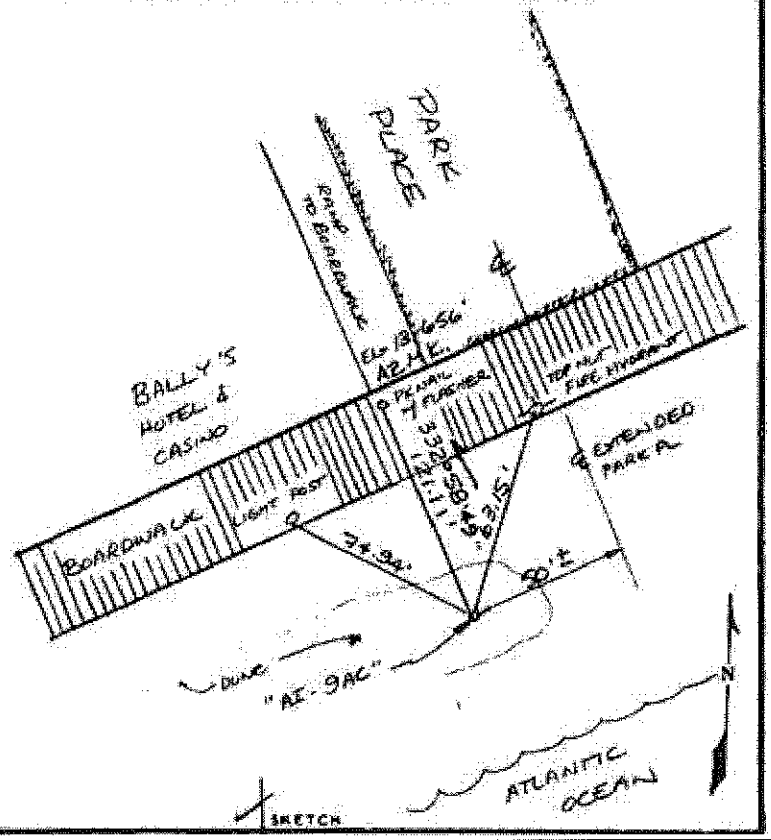
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-9AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 16.654
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 190188.564 (M)	(EASTING) (FT) 511626.488 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID/MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL W/	332°58'49" ✓	° ' "		121.110 ✓
FLASHER BOARDWALK				
CLARIDGE DOMTE	343°25'39" ✓			

AZ MARK PK NAIL W/ FLASHER
N. 190,296.432 ✓
E. 511,571.021 ✓
EL. 13.656' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, TAKE PACIFIC AVENUE NORTHEAST TO PARK PLACE – TURN RIGHT TO THE END AT THE BOARDWALK – STATION IS A DRIVE MONUMENT SET IN THE TOP OF DUNE JUST SOUTHWEST OF PARK PL. EXTENDED.



NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

DA FORM 1959, 1 OCT 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

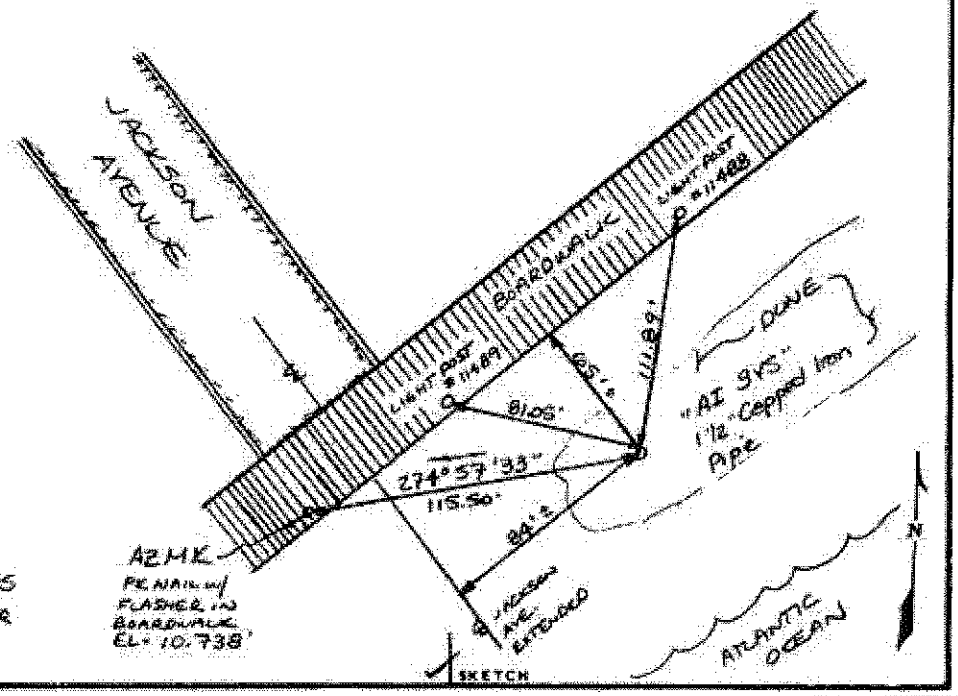
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-9VS	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 15.972
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 185718.877 (M)	(EASTING) (FT) 502275.439 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK w/ FLASHER	274° 57' 33" ✓	° ' "		115.52 ✓

AZ MK PK NAIL w/ FLASHER IN BOARDWALK
N. 185,728.940 ✓
E 502,160.147 ✓
EL. 10.738' ✓

To Reach: From Rt 40 (Albany Ave) go southwest along Atlantic Ave. to Jackson Ave. (First street into Ventnor). Turn left to end-station is a 1½" Capped Iron Pipe just northeasterly of the end of Jackson Avenue at the top of dune.



NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

FORM		REPLACES	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
DA	1959 1 OCT 64	DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.	For use of this form, see TM 5-237; the proponent agency is TRADOC.

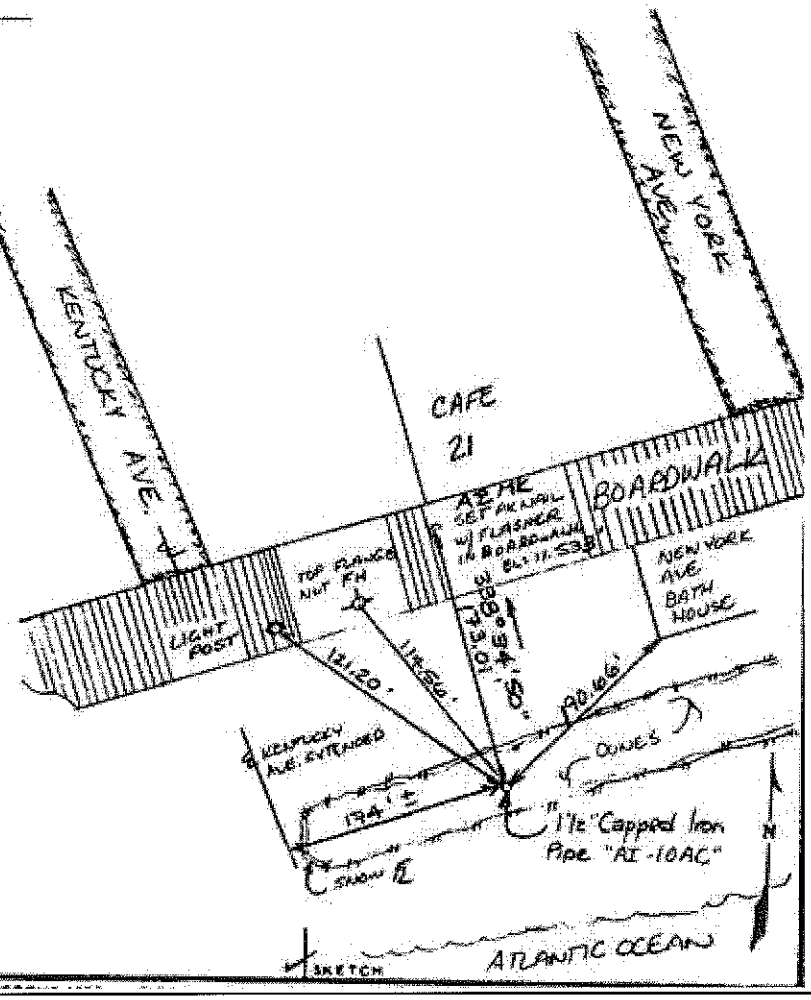
COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-10AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 16.965
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 190459.791 (M)	(EASTING) (FT) 512862.736 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
A2 MK PK NAIL W/	338° 34' 50" ✓	° ' "		173.01' ✓
FLASHER IN BOARDWALK				
"AI - 9AC"	257°36'42" ✓			1,265.92' ✓

A2 MK PK NAIL W/ FLASHER IN BOARDWALK
N. 190,621.186 ✓
E. 512,799.306 ✓
EL. 11.533' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, FOLLOW PACIFIC AVE NORTHEAST TO KENTUCKY AVE - TURN RIGHT TO END AT THE BOARDWALK — STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNE BETWEEN KENTUCKY AVE AND NEW YORK AVE.

*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV & FILE "ABSECON"



FORM 1959 1 OCT 64 DA — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

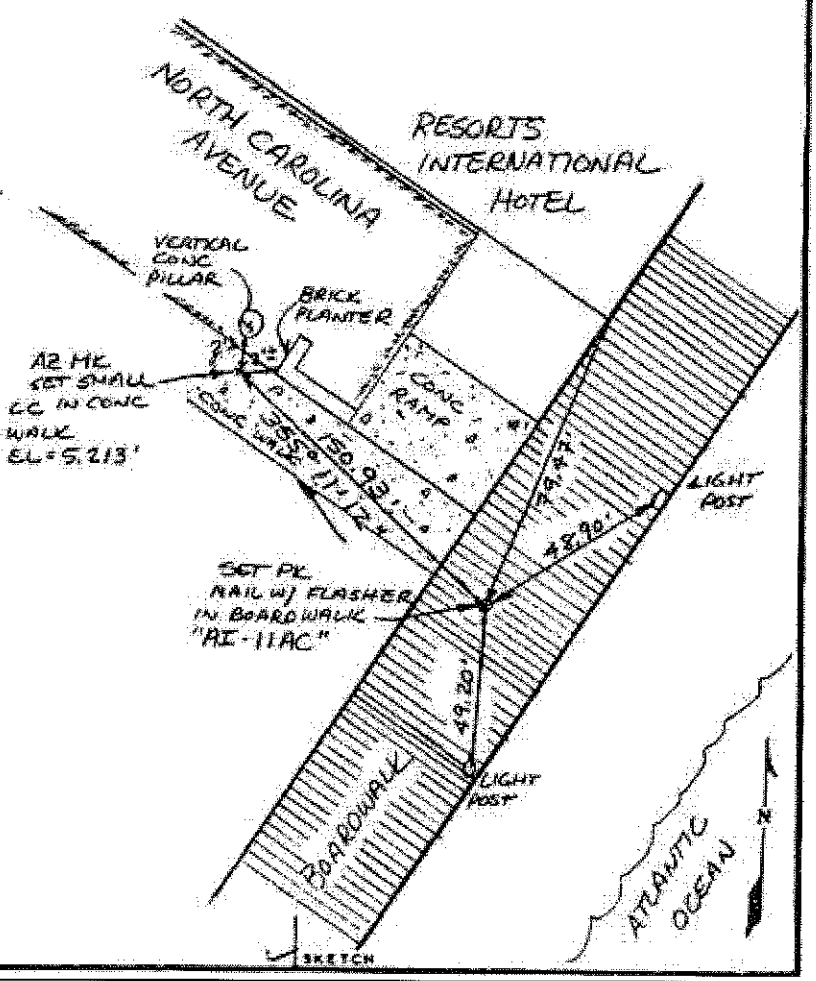
COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-11AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 12.306
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 191052.176 (M)	(EASTING) (FT) 514122.75 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GROUND DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
A2 HK CC IN CONC	335°11'12" ✓	° ' "		150.93 ✓
BOARDWALK				
"AI-10AC"	244°50'07" ✓			1,392.30' ✓

A2. HK SMALL CC IN CONC. WALK
N. 191,189.157 ✓
E. 514,059.304 ✓
EL. 5.213' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, PROCEED NORTHEAST ALONG PACIFIC AVE TO NORTH CAROLINA AVE - TURN RIGHT - STATION IS A PK NAIL W/ FLASHER SET IN THE BOARDWALK JUST SOUTHWEST OF NORTH CAROLINA AVE. EXTENDED

✓ NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"



FORM 1959 1 OCT 64 DA

REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-12AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 12.288
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 191678.911 (M)	(EASTING) (FT) 515381.065 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL	327° 58' 30" ✓	° ' "		49.92 ✓
w/ FLASHER				
"AI 11 AC"	243° 31' 04" ✓			1,405.79' ✓

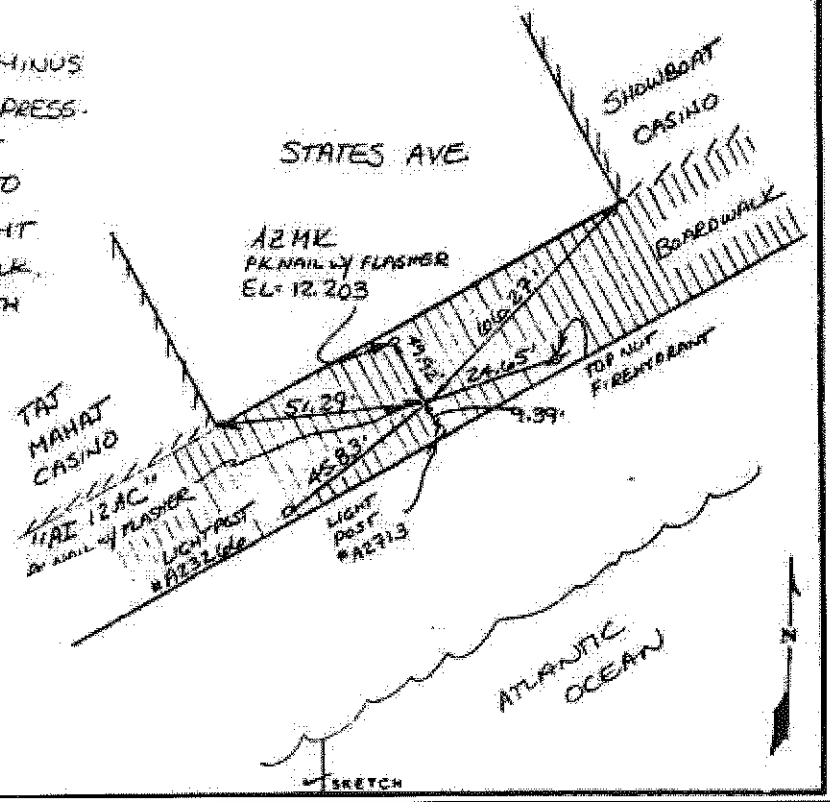
AZ. MK. PK NAIL w/ FLASHER IN BOARDWALK

N. 191,721.352 ✓

E. 515,354.458 ✓

EL. 12.203' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESS-WAY, PROCEED NORTHEAST ALONG PACIFIC AVENUE TO STATES AVE — TURN RIGHT TO END AT THE BOARDWALK. STATION IS A PK NAIL WITH FLASHER ON BOARDWALK ± 10' FROM OCEAN EDGE OF BOARDWALK.



*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

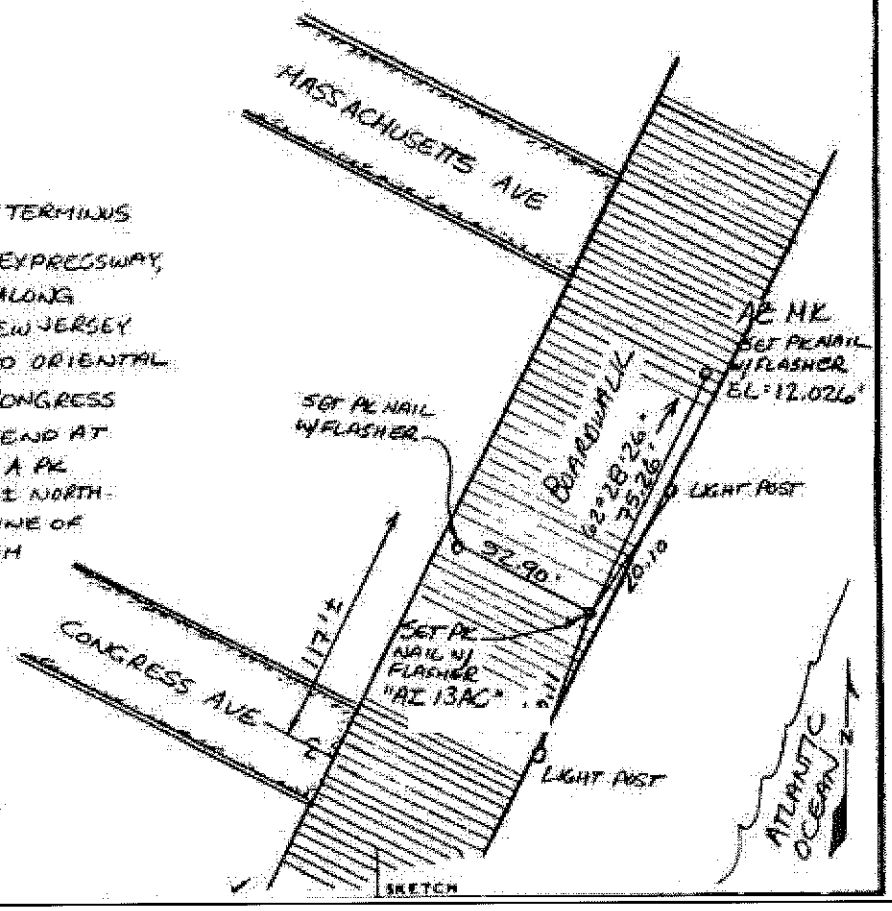
DA FORM 1959, 1 OCT 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-13AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 12.38
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 192397.521 (M)	(EASTING) (FT) 516520.655 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL W/	62° 28' 28" ✓	° ' "		75.26 ✓
FLASHER NEAR				
MASSACHUSETTS AVE				
"AZ-14AC"	54° 00' 16" ✓			979.01' ✓

AZ MK PK NAIL W/ FLASHER
N. 192,432.117 ✓
E. 516,587.151 ✓
EL. 12.026' ✓



TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, PROCEED NORTHEAST ALONG PACIFIC AVENUE TO NEW JERSEY AVE, - TURN RIGHT TO ORIENTAL AVE. - TURN LEFT TO CONGRESS AVE - TURN RIGHT TO END AT BOARDWALK. STATION IS A PK NAIL WITH FLASHER 117'± NORTHWARDLY OF THE CENTERLINE OF CONGRESS AVE. 3'± FROM THE OCEAN EDGE OF BOARDWALK.

*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

FORM 1959	REPLACES DA FORMS 1959	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	CAPPED PIPE	AI-14AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) *Corps of Engineers*	ELEVATION (FT) 14.621
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 192973.004 (M)	(EASTING) (FT) 517312.519 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

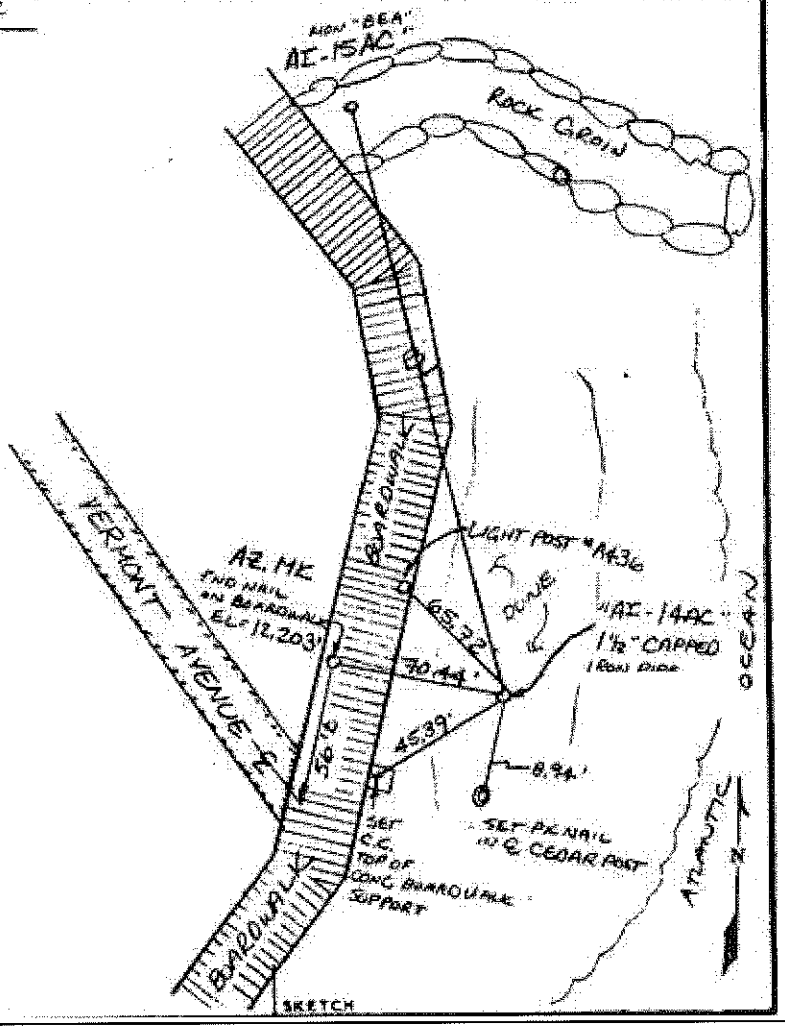
OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK NAIL IN BOARDWALK	304° 43' 28" ✓	° ' "		70.44 ✓
CLARIDGE HOTEL DOME	250° 46' 21" ✓			—

AZ MK NAIL w/ SILVER FLASHER

N. 193,012.846 ✓
E. 517,254.597 ✓
EL. 12.203' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, PROCEED NORTHEAST ALONG PACIFIC AVE. TO VERMONT AVE. — TURN RIGHT ON VERMONT AVE. TO END AT BOARDWALK STATION IS A 1½" CAPPED IRON PIPE SET IN THE TOP OF DUNE JUST NORTH OF THE EXTENDED VERMONT AVE.

*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"



FORM 1959	REPLACES DA FORMS 1959	**DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION**
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

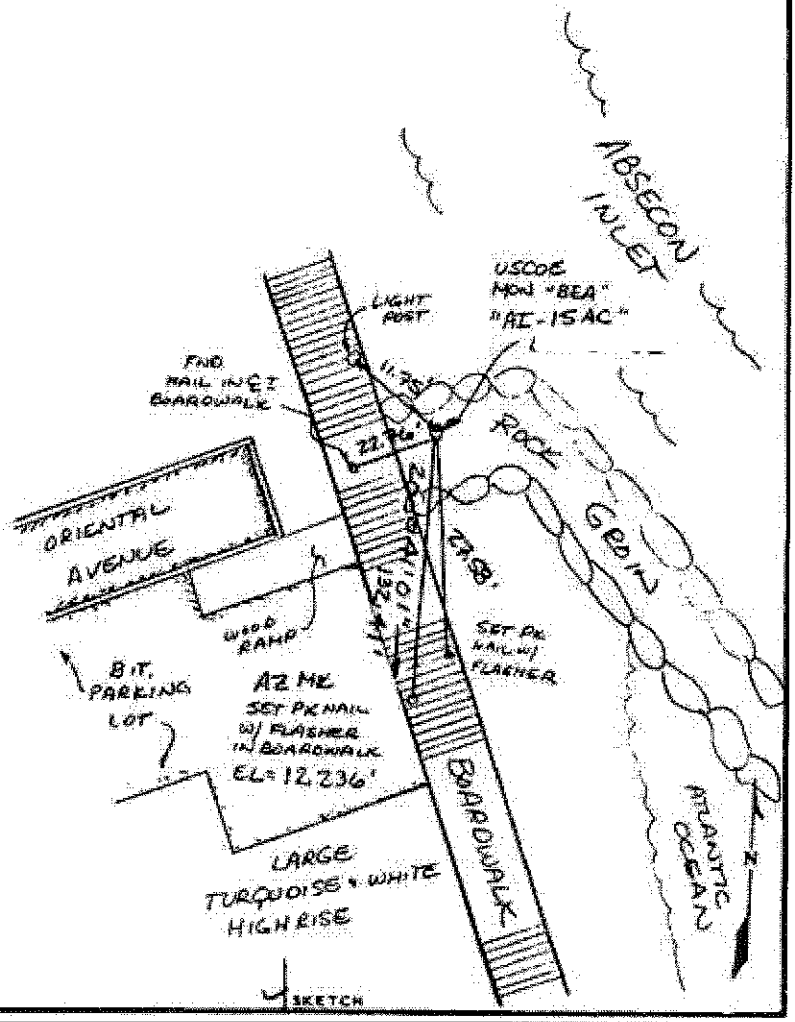
COUNTRY	TYPE OF MARK	STATION	
USA	DISK IN JETTY	AI-15AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 9.154
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 194063.259 (M)	(EASTING) (FT) 517638.555 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL w/ FLASHER	200° 41' 01" ✓	° ' "		132.41' ✓
CLARIDGE HOTEL DOME	243° 10' 38" ✓			—
ABSECON LIGHTHOUSE	192° 51' 49" ✓			—

AZ MK PK w/ FLASHER
N. 193,939.498 ✓
E. 517,591.665 ✓
EL. 12.236' ✓

TO REACH: FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, PROCEED NORTHEASTWARDLY ALONG PACIFIC AVE. TO NEW JERSEY AVE – TURN RIGHT TO ORIENTAL AVE. – TURN LEFT – PROCEED ALONG ORIENTAL AVE. TO END – STATION IS A USACOE MON SET IN THE TOP OF ROCK GROIN JUST EAST OF THE EDGE OF BOARDWALK.

NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"



FORM 1959 / 1 OCT / DA 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-16AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 12.215
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 195274.98 (M)	**(EASTING)** (FT) 517050.672 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	**(EASTING)** (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

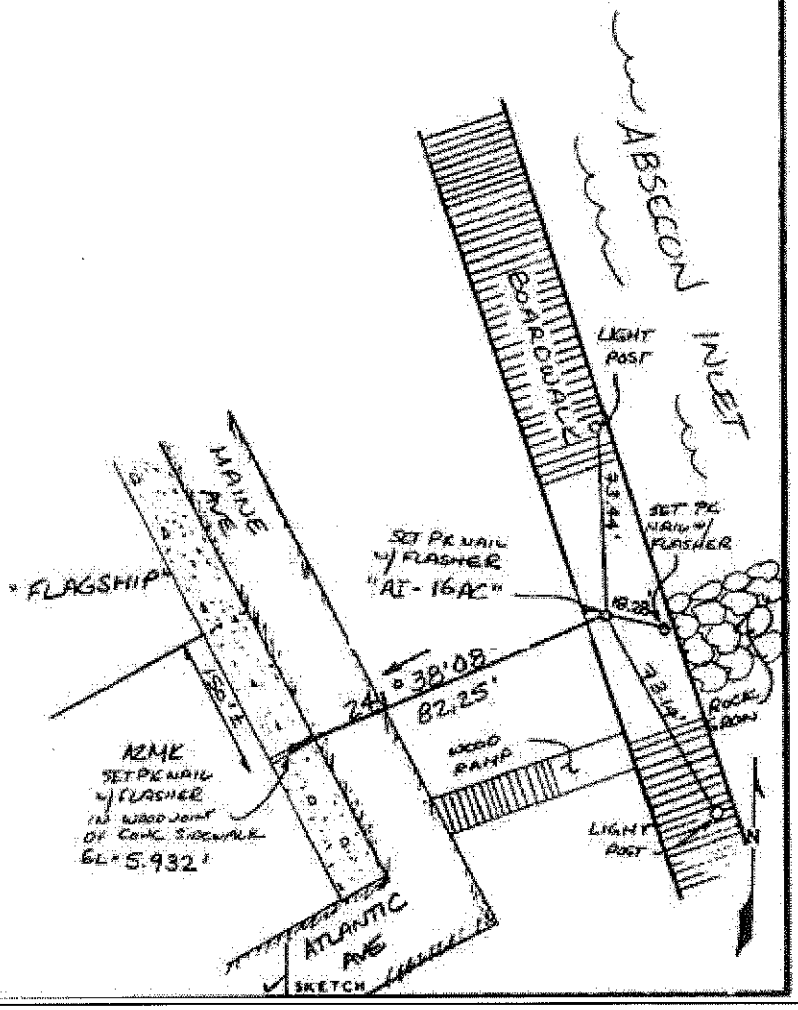
OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
AZ MK PK NAIL W/ FLASHER	241° 38' 08" ✓	° ' "		82.25 ✓
ABSECON LIGHTHOUSE	166° 26' 09" ✓			—

AZ MK PK NAIL W/ FLASHER

N. 195,256.006 ✓
E. 516,978.158 ✓
EL. 5,932' ✓

TO REACH: FROM THE ATLANTIC CITY EXPRESSWAY, PROCEED NORTHEAST WARDLY ALONG ATLANTIC AVE. TO THE END — TURN LEFT ONTO MAINE AVE. STATION IS A PK NAIL WITH FLASHER SET IN THE BOARDWALK JUST SOUTHEAST OPPOSITE THE "FLAGSHIP" HIGHRISE.

NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"



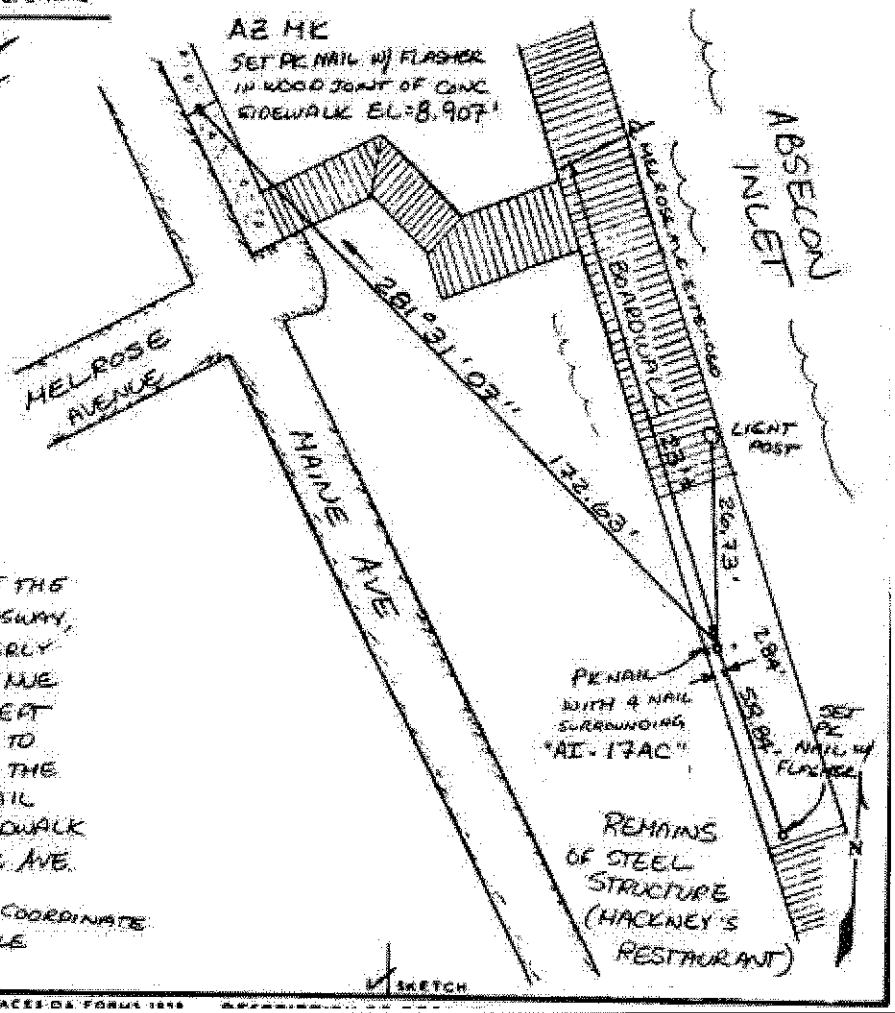
FORM 1959	REPLACES DA FORMS 1959	DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
1 OCT	AND 1960, 1FEB 57, WHICH	For use of this form, see TM 5-237; the proponent
DA 64	ARE OBSOLETE.	agnecy is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-17AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 12.179
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 196595.35 (M)	(EASTING) (FT) 516511.592 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
PK NAIL "AI-18AC"	328°47'42" ✓	° ' "		1,078.611 ✓
PK NAIL AZ MK	281°31'07" ✓			172.63' ✓

AZ MK PK NAIL W/ FLASHER

N. 196,630.038 ✓
E. 516,342.181 ✓
EL. 8.907' ✓



TO REACH:

FROM THE TERMINUS OF THE ATLANTIC CITY EXPRESSWAY, PROCEED NORTHEASTERLY ALONG ATLANTIC AVENUE TO THE END — TURN LEFT ONTO MAINE AVENUE TO MELROSE. STATION IS THE CENTER PK IN A SNAIL CLUSTER ON THE BOARDWALK 23'± SOUTH OF MELROSE AVE.

* NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSECON"

DA FORM 1959, 1 OCT 64 — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

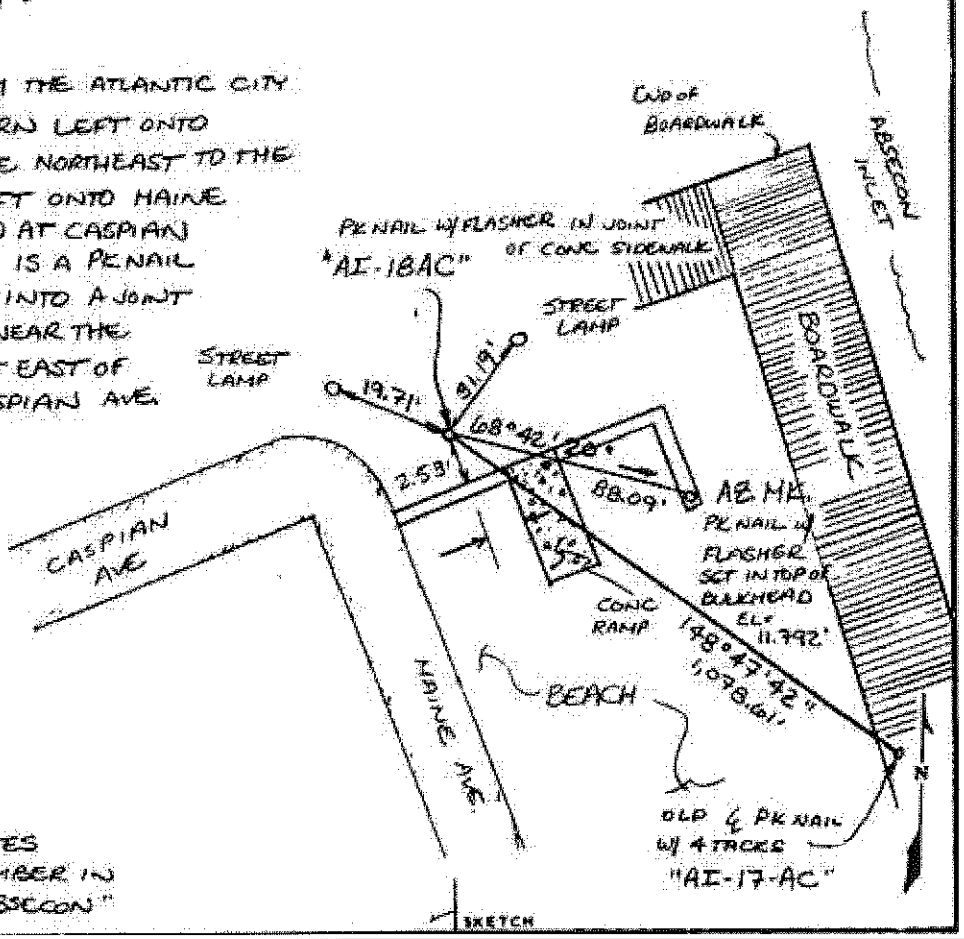
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

COUNTRY	TYPE OF MARK	STATION	
USA	PK NAIL	AI-18AC	
LOCALITY ABSECON ISLAND NJ	STAMPING ON MARK	AGENCY (CAST IN MARKS) ***Corps of Engineers***	ELEVATION (FT) 8.86
LATITUDE	LONGITUDE	DATUM NAD 83	DATUM NAVD 88
(NORTHING) (FT) 197518.163 (M)	(EASTING) (FT) 515952.654 (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY) USACE
(NORTHING) (FT)	(EASTING) (FT)	GRID AND ZONE NJ 2900	DATE: DEC 2007 / ORDER: GPS

OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
PK NAIL "AI-17AC"	148° 47' 42" ✓	° ' "		1078.61' ✓
PK NAIL AZ. MK	68° 42' 20" ✓			88.09' ✓

AZ. MK PK NAIL W/ FLASHER TOP OF BULKHEAD
N. 197,550.114 ✓
E. 516,034.581 ✓
EL. 11.792' ✓

TO REACH: FROM THE ATLANTIC CITY EXPRESSWAY, TURN LEFT ONTO ATLANTIC AVENUE NORTHEAST TO THE END — TURN LEFT ONTO MAINE AVE TO THE END AT CASPIAN AVE — STATION IS A PK NAIL W/ FLASHER SET INTO A JOINT OF CONC WALK NEAR THE CONC RAMP JUST EAST OF THE END OF CASPIAN AVE.



*NOTE: ( ) DENOTES COORDINATE NUMBER IN SURV 4 FILE "ABSCOON"

FORM 1959 1 OCT 64 DA — REPLACES DA FORMS 1959 AND 1960, 1FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

This page was intentionally left blank for duplex printing.

SECTION 00 73 41

VIBRACORE LOGS

Hole No. NJV-802

DRILLING LOG

DIVISION: Philadelphia District COE

INSTALLATION: W912BU-07-D-001, TO 0003

SHEET 1 OF 1 SHEETS

1. PROJECT	NJ
2. LOCATION (Coordinates or Station)	NAD83 NJSPG N 174,340.8 E 519,912.0
3. DRILLING AGENCY	Alpine Ocean
4. HOLE NO. *(As shown on drawing title and file number)*	NJV-802
5. NAME OF DRILLER	C. Dill
6. DIRECTION OF HOLE	☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.
7. PENETRATION (ft)	19.4
8. RECOVERY (ft)	19.1
9. TOTAL CORE RECOVERY (%)	98.0
10. SIZE AND TYPE OF BIT	3.5
11. DATUM FOR ELEVATION SHOWN *(TBM or MSL)*	NAVD-88
12. MANUFACTURER'S DESIGNATION OF DRILL	Alpine Vibracore
13. TOTAL NO. OF SAMPLES TAKEN / INTERVAL / COMPOSITE	4 / 0
14. TOTAL NUMBER CORE BOXES	
15. ELEVATION GROUND WATER	
16. DATE HOLE STARTED / COMPLETED	12/3/2008 / 12/3/2008
17. ELEVATION TOP OF HOLE	-45.8
18. TOTAL CORE RECOVERY FOR BORING	98 %
19. GEOLOGIST	D. Ciarletta

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	Sample No. Depth Interval, ft. f	REMARKS *(Drilling time, water loss, depth weathering, etc., if significant)* g
-45.8	0.0		Grey silty sand with shells	100	0.0 5.0	
-46.5	0.7		Dark grey fine sand			
				101	5.0 7.8	
-51.8	6.0		Dark grey silty sand			
-53.6	7.8		Dark grey silt with very fine sand			
-56.3	10.5		Grey clay			
-58.4	12.6		Grey medium sand			
-58.6	12.8		Grey clay			
-58.8	13.0		Grey brown coarse sand with gravel	98	13.0 15.2	
-61.0	15.2		Dark grey silt			
-61.2	15.4		Grey medium sand	100	15.4 19.4	
-63.8	18.0		Grey very fine to fine sand			
-65.2	19.4					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT NJ

HOLE NO. NJV-802

Hole No. NJV-803

DRILLING LOG	DIVISION: Philadelphia District COE	INSTALLATION: W912BU-07-D-001, TO 0003	SHEET 1 OF 1 SHEETS

1. PROJECT	NJ
2. LOCATION (Coordinates or Station)	NAD83 NJSPG N 177,530.0 E 516,224.0
3. DRILLING AGENCY	Alpine Ocean
4. HOLE NO. *(As shown on drawing title and file number)*	NJV-803
5. NAME OF DRILLER	C. Dill
6. DIRECTION OF HOLE	☒ VERTICAL ☐ INCLINED ___ DEG. FROM VERT.
7. PENETRATION (ft)	18.1
8. RECOVERY (ft)	18.5
9. TOTAL CORE RECOVERY (%)	102.0
10. SIZE AND TYPE OF BIT	3.5
11. DATUM FOR ELEVATION SHOWN *(TBM or MSL)*	NAVD-88
12. MANUFACTURER'S DESIGNATION OF DRILL	Alpine Vibracore
13. TOTAL NO. OF SAMPLES TAKEN	INTERVAL: 4 COMPOSITE: 0
14. TOTAL NUMBER CORE BOXES	
15. ELEVATION GROUND WATER	
16. DATE HOLE	STARTED: 12/3/2008 COMPLETED: 12/3/2008
17. ELEVATION TOP OF HOLE	-33.0
18. TOTAL CORE RECOVERY FOR BORING	102 %
19. GEOLOGIST	D. Ciarletta

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	Sample No Depth Interval, ft. f	REMARKS *(Drilling time, water loss, depth weathering, etc., if significant)* g
-33.0	0.0		Light brown medium sand	100	0.0 5.0	
-33.7	0.7		Light grey fine sand			
-34.2	1.2		Light brown medium sand			
-34.7	1.7		Grey fine sand with shell fragments			
-38.5	5.5		Dark grey silty sand with shell fragments	100	5.0 10.0	
-41.9	8.9		Dark grey fine sand with large shell fragments			
-43.0	10.0		Grey fine sand	83	10.0 15.0	
-44.2	11.2		Light brown fine sand with shell fragments			
-44.5	11.5		Grey fine sand			
-51.1	18.1			100	15.0 18.1	

Hole No. NJV-804

DRILLING LOG	DIVISION: Philadelphia District COE	INSTALLATION: W912BU-07-D-001, TO 0003	SHEET 1 OF 1 SHEETS

1. PROJECT	NJ
2. LOCATION (Coordinates or Station)	NAD83 NJSPG N 177,659.0 E 523,202.0
3. DRILLING AGENCY	Alpine Ocean
4. HOLE NO. *(As shown on drawing title and file number)*	NJV-804
5. NAME OF DRILLER	C. Dill
6. DIRECTION OF HOLE	☒ VERTICAL ☐ INCLINED ---- DEG. FROM VERT.
7. PENETRATION (ft)	18.5
8. RECOVERY (ft)	15.5
9. TOTAL CORE RECOVERY (%)	84.0
10. SIZE AND TYPE OF BIT	3.5
11. DATUM FOR ELEVATION SHOWN *(TBM or MSL)*	NAVD-88
12. MANUFACTURER'S DESIGNATION OF DRILL	Alpine Vibracore
13. TOTAL NO. OF SAMPLES TAKEN / INTERVAL / COMPOSITE	4 / 0
14. TOTAL NUMBER CORE BOXES	
15. ELEVATION GROUND WATER	
16. DATE HOLE STARTED / COMPLETED	12/3/2008 / 12/3/2008
17. ELEVATION TOP OF HOLE	-31.0
18. TOTAL CORE RECOVERY FOR BORING	84 %
19. GEOLOGIST	D. Ciarletta

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	Sample No. / Depth Interval, ft. f	REMARKS *(Drilling time, water loss, depth weathering, etc., if significant)* g
-31.0	0.0		Light brown medium sand, trace shell	100	0.0 5.0	
-32.4	1.4		Grey fine sand			
				99	5.0 7.1	
-38.1	7.1		Grey silty sand with shell fragments			
-41.1	10.1		Grey fine sand, large shell fragments	100	10.1 15.5	
-42.0	11.0		Light grey fine sand			
-46.5	15.5					

Hole No. NJV-805

DRILLING LOG

DIVISION: Philadelphia District COE

INSTALLATION: W912BU-07-D-001, TO 0003

SHEET 1 OF 1 SHEETS

1. PROJECT	NJ
2. LOCATION (Coordinates or Station)	NAD83 NJSPG N 178,986.0 E 520,477.0
3. DRILLING AGENCY	Alpine Ocean
4. HOLE NO. *(As shown on drawing title and file number)*	NJV-805
5. NAME OF DRILLER	C. Dill
6. DIRECTION OF HOLE	☒ VERTICAL ☐ INCLINED --- DEG. FROM VERT.
7. PENETRATION (ft)	19.7
8. RECOVERY (ft)	16.3
9. TOTAL CORE RECOVERY (%)	83.0
10. SIZE AND TYPE OF BIT	3.5
11. DATUM FOR ELEVATION SHOWN *(TBM or MSL)*	NAVD-88
12. MANUFACTURER'S DESIGNATION OF DRILL	Alpine Vibracore
13. TOTAL NO. OF SAMPLES TAKEN / INTERVAL / COMPOSITE	4 / 0
14. TOTAL NUMBER CORE BOXES	
15. ELEVATION GROUND WATER	
16. DATE HOLE STARTED / COMPLETED	12/3/2008 / 12/3/2008
17. ELEVATION TOP OF HOLE	-44.4
18. TOTAL CORE RECOVERY FOR BORING	83 %
19. GEOLOGIST	D. Ciarletta

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	Sample No. / Depth Interval, ft. f	REMARKS *(Drilling time, water loss, depth weathering, etc., if significant)* g
-44.4	0.0		Grey fine sand	100	0.0 3.5	
-47.9	3.5					
-48.4	4.0		Dark grey clay			
			Grey very fine sand	100	4.0 5.0	
-49.4	5.0					
			Grey silty sand	100	5.0 10.0	
-50.3	5.9					
-50.4	5.9		Dark grey clay			
			Grey silty sand			
-53.6	9.2					
-53.7	9.2		Dark grey clay			
			Grey very fine sand			
-54.4	10.0					
			Grey clay			
-55.3	10.9					
			Grey very fine sand with shell fragments	127	10.9 14.7	
-56.0	11.6					
			Brown-grey sand with gravel			
-57.6	13.2					
			Dark grey silty sand with gravel			
-59.1	14.7					
			Brown fine sand with gravel	99	14.7 16.3	
-59.9	15.5					
-60.0	15.5		Silt lense			
			Brown fine sand with gravel			
-60.7	16.3					

DRILLING LOG

DIVISION: Philadelphia District COE
INSTALLATION: W912BU-07-D-001, TO 0003
SHEET 1 OF 1 SHEETS

1. PROJECT: NJ
2. LOCATION (Coordinates or Station): NAD83 NJSPG N 178,661.0 E 527,785.0
3. DRILLING AGENCY: Alpine Ocean
4. HOLE NO. (As shown on drawing title and file number): NJV-806
5. NAME OF DRILLER: C. Dill
6. DIRECTION OF HOLE: ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.
7. PENETRATION (ft): 19.0
8. RECOVERY (ft): 16.5
9. TOTAL CORE RECOVERY (%): 87.0
10. SIZE AND TYPE OF BIT: 3.5
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): NAVD-88
12. MANUFACTURER'S DESIGNATION OF DRILL: Alpine Vibracore
13. TOTAL NO. OF SAMPLES TAKEN: INTERVAL 4 COMPOSITE 0
14. TOTAL NUMBER CORE BOXES:
15. ELEVATION GROUND WATER:
16. DATE HOLE: STARTED 12/3/2008 COMPLETED 12/3/2008
17. ELEVATION TOP OF HOLE: -34.5
18. TOTAL CORE RECOVERY FOR BORING: 87 %
19. GEOLOGIST: D. Ciarletta

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	Sample No. Depth interval, ft. f	REMARKS (Drilling time, water loss, depth weathering, etc., if significant) g
-34.7	0.2		Brown fine sand with shell fragments	100	0.0 5.0	
			Grey very fine sand with shell fragments			
-37.0	2.5					
-37.5	3.0		Light grey fine sand with shell fragments			
			Grey fine sand			
-38.8	4.3					
			Grey fine sand			
				100	5.0 10.0	
-43.3	8.8					
-43.3	8.8		Clay lense with shell fragments			
			Grey fine sand			
-44.7	10.2			101	10.0 12.3	
			Grey silty to fine sand			
-45.4	10.9					
			Grey fine sand with shells			
-46.4	11.9					
-46.8	12.3		Grey medium to fine sand with shells			
-46.9	12.4		Grey fine sand			
-46.9	12.4		Clay lense	100	12.5 15.0	
-47.1	12.6		Grey fine sand			
-47.1	12.6		Clay lense			
			Grey fine sand			
				100	15.0 19.5	
-54.0	19.5					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.
PROJECT NJ
HOLE NO. NJV-806

Hole No. NJV-807

DRILLING LOG	DIVISION: Philadelphia District COE	INSTALLATION: W912BU-07-D-001, TO 0003	SHEET 1 OF 1 SHEETS

1. PROJECT	NJ
2. LOCATION (Coordinates or Station)	NAD83 NJSPG N 181,189.0 E 525,511.0
3. DRILLING AGENCY	Alpine Ocean
4. HOLE NO. *(As shown on drawing title and file number)*	NJV-807
5. NAME OF DRILLER	C. Dill
6. DIRECTION OF HOLE	☒ VERTICAL ☐ INCLINED --- DEG. FROM VERT.
7. PENETRATION (ft)	19.7
8. RECOVERY (ft)	16.0
9. TOTAL CORE RECOVERY (%)	81.0
10. SIZE AND TYPE OF BIT	3.5
11. DATUM FOR ELEVATION SHOWN *(TBM or MSL)*	NAVD-88
12. MANUFACTURER'S DESIGNATION OF DRILL	Alpine Vibracore
13. TOTAL NO. OF SAMPLES TAKEN / INTERVAL / COMPOSITE	4 / 0
14. TOTAL NUMBER CORE BOXES	
15. ELEVATION GROUND WATER	
16. DATE HOLE STARTED / COMPLETED	12/3/2008 / 12/3/2008
17. ELEVATION TOP OF HOLE	-48.8
18. TOTAL CORE RECOVERY FOR BORING	81 %
19. GEOLOGIST	D. Ciarletta

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	Sample No. Depth Interval, ft. f	REMARKS *(Drilling time, water loss, depth weathering, etc., if significant)* g
-48.8	0.0		Dark grey silty sand	100	0.0 5.0	
-49.3	0.5		Grey fine sand with shell fragments			
-49.9	1.1		Grey fine sand			
-54.5	5.7			101	5.0 9.3	
-55.3	6.5		Grey fine sand with shells			
-56.4	7.6		Brown grey fine sand with silt and gravel			
-57.2	8.4		Dark grey silty sand			
-57.6	8.8		Grey fine sand			
-57.6	8.8		Clay lense			
-58.1	9.3		Grey fine sand			
-58.6	9.8		Grey clay			
-61.7	12.9		Grey fine sand	100	9.8 14.9	
-61.7	12.9		Clay lense			
-63.7	14.9		Grey fine sand			
-64.0	15.2		Grey clay			
-64.1	15.3		Dark grey medium sand			
-64.4	15.6		Grey clay	98	15.6 16.7	
-64.8	16.0		Dark grey fine sand			

This page was intentionally left blank for duplex printing.

SECTION 00 73 42

PARTICLE SIZE DISTRIBUTION CURVES

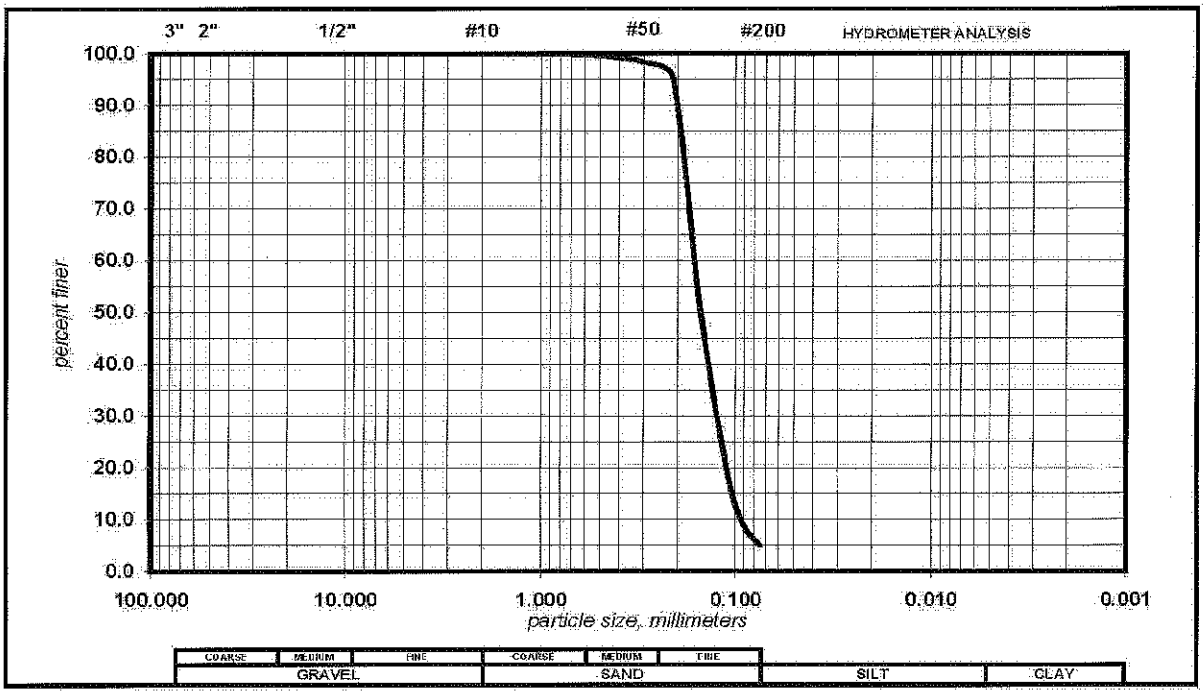
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	
#6	3.35	
#8	2.36	
#10	2.00	100.0
#20	0.850	99.8
#30	0.600	99.7
#40	0.425	99.3
#50	0.300	98.3
#70	0.212	95.2
#100	0.150	48.6
#140	0.106	16.1
#170	0.090	8.6
#200	0.075	5.0

Sample Identification

Sample No.: NJV-802
Lab No.: A07-432-53
Source/Location: 0'-5'
Description:
Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.0 **% Sand** 95.0 **% Mud** 5.0

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

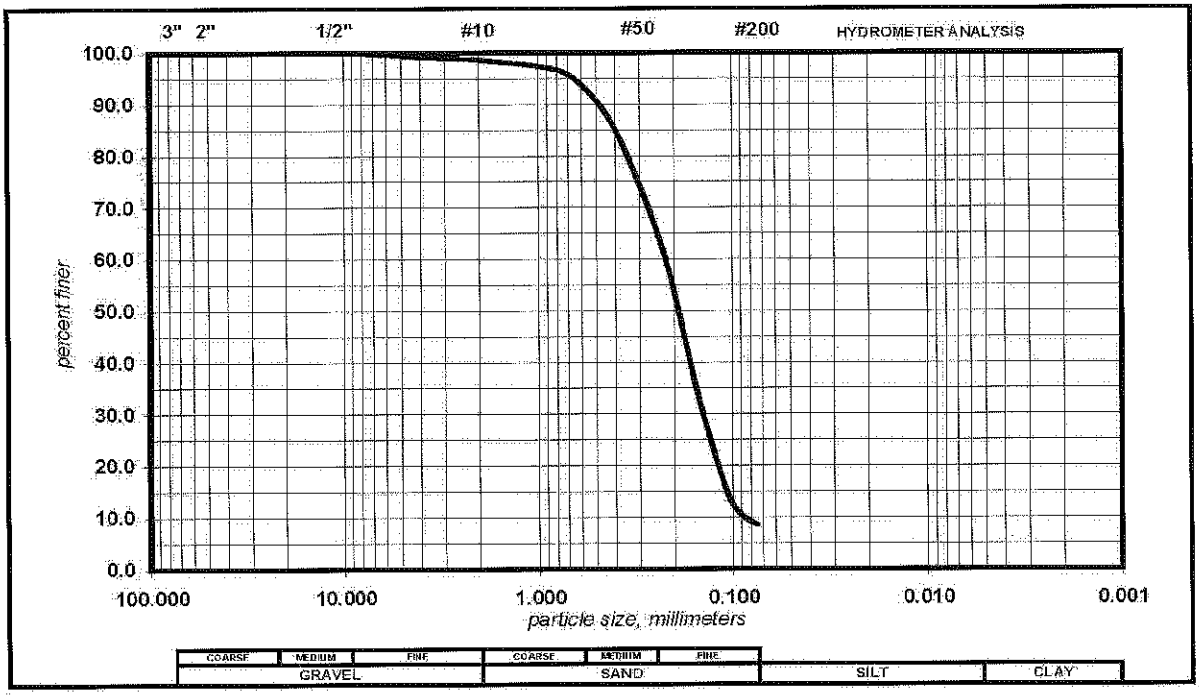
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	100.0
5/16"	8.00	
1/4"	6.30	
#4	4.75	99.3
#6	3.35	
#8	2.36	
#10	2.00	98.5
#20	0.850	96.8
#30	0.600	93.7
#40	0.425	86.9
#50	0.300	74.2
#70	0.212	57.4
#100	0.150	33.3
#140	0.106	14.6
#170	0.090	10.4
#200	0.075	8.5

Sample Identification

Sample No.: NJV-802
Lab No.: A07-432-54
Source/Location: 5'-7.8'
Description:
Dark Gray of SAND, trace Silt, trace fine Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 1.5 **% Sand** 90.0 **% Mud** 8.5

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

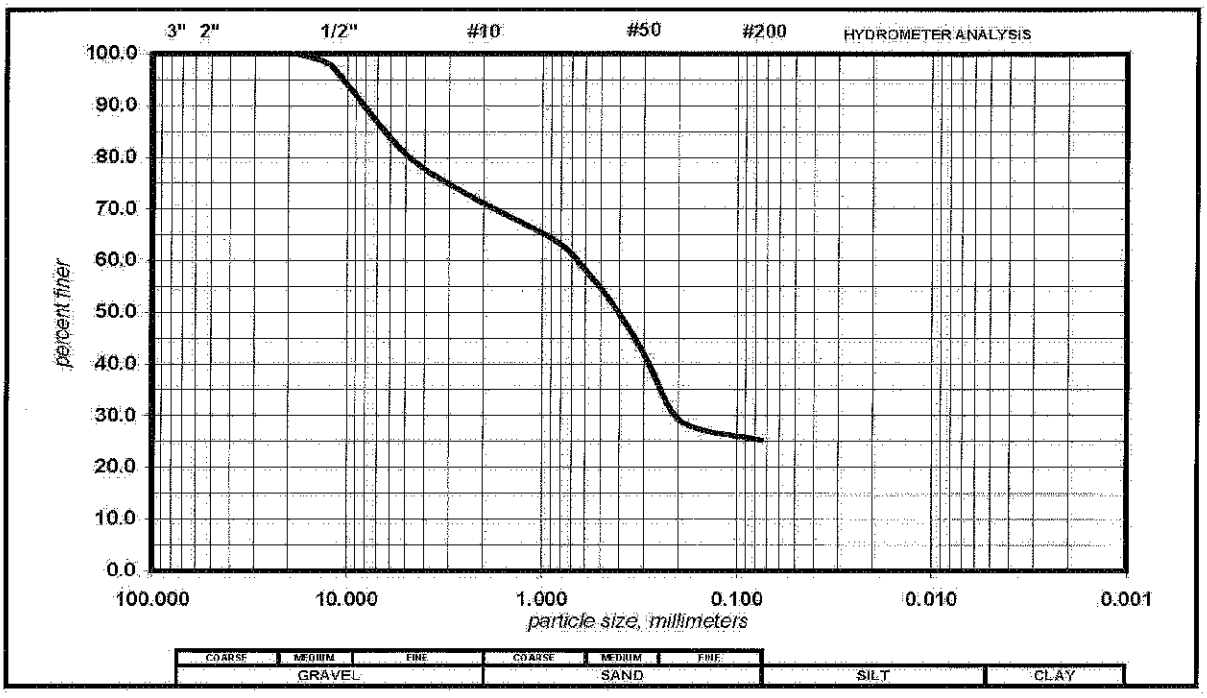
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	100.0
5/8"	16.00	
1/2"	12.50	98.0
3/8"	9.50	92.9
5/16"	8.00	
1/4"	6.30	
#4	4.75	79.7
#6	3.35	
#8	2.36	
#10	2.00	71.0
#20	0.850	63.7
#30	0.600	58.1
#40	0.425	51.1
#50	0.300	41.9
#70	0.212	30.4
#100	0.150	27.2
#140	0.106	26.3
#170	0.090	25.7
#200	0.075	25.3

Sample Identification

Sample No.: NJV-802
Lab No.: A07-432-55
Source/Location: 13'-15.2'
Description:
Dark Gray cf Sand, some Silt, some mf Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 29.0 **% Sand** 45.8 **% Mud** 25.3

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

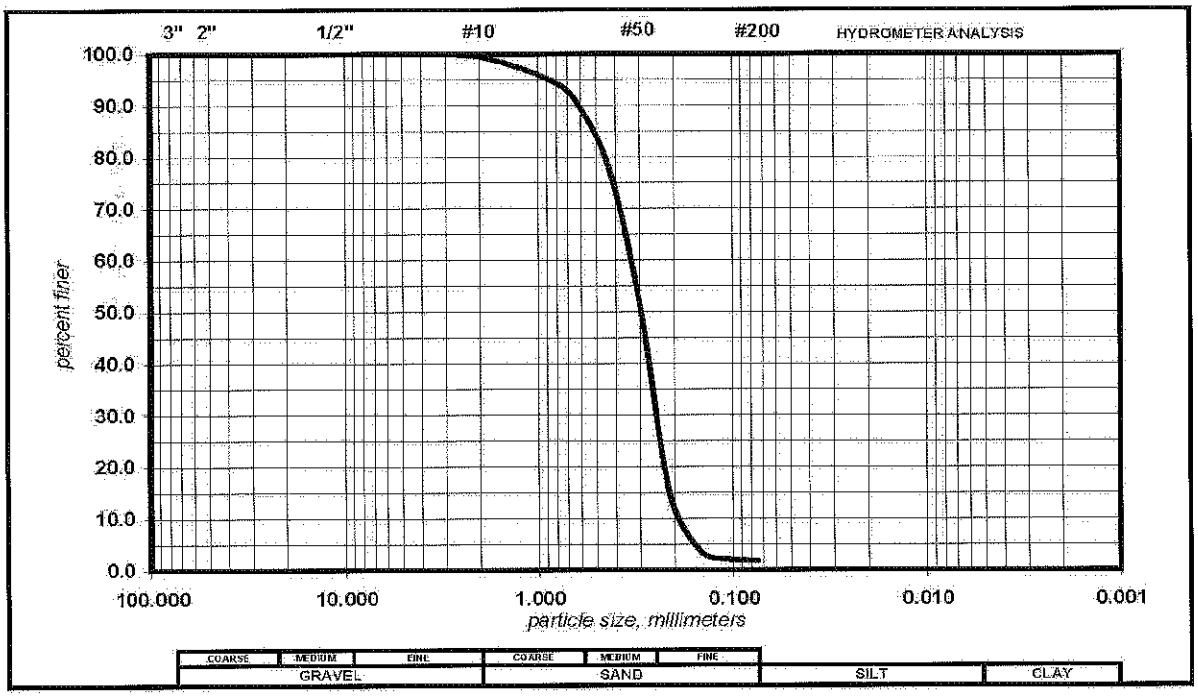
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.4
#20	0.850	94.7
#30	0.600	89.3
#40	0.425	77.0
#50	0.300	51.5
#70	0.212	14.8
#100	0.150	3.8
#140	0.106	2.1
#170	0.090	1.9
#200	0.075	1.7

Sample Identification

Sample No.: NJV-802
Lab No.: A07-432-56
Source/Location: 15.4'-19.4'
Description: Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.6 **% Sand** 97.6 **% Mud** 1.7

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

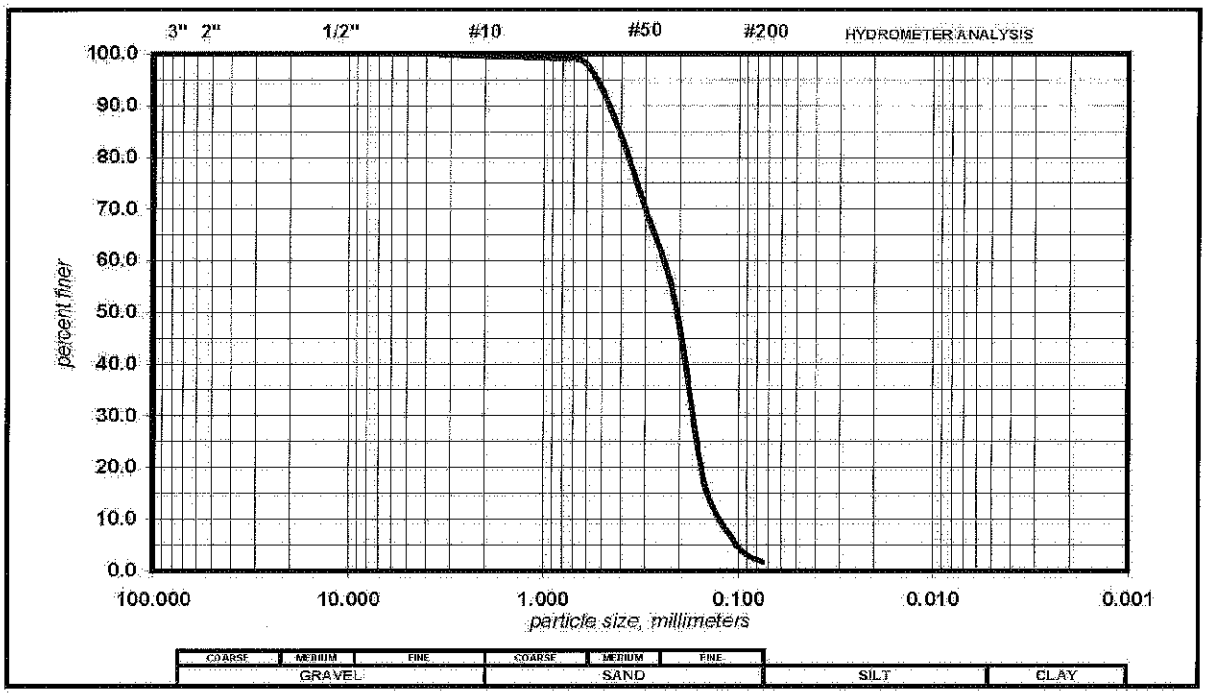
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.5
#20	0.850	99.1
#30	0.600	97.9
#40	0.425	86.8
#50	0.300	70.0
#70	0.212	52.1
#100	0.150	17.3
#140	0.106	5.9
#170	0.090	3.0
#200	0.075	1.6

Sample Identification

Sample No.: NJV-803
Lab No.: A07-432-57
Source/Location: 0'-5'
Description:
Dark Gray / Pale Yellow of SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.5 **% Sand** 97.9 **% Mud** 1.6

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

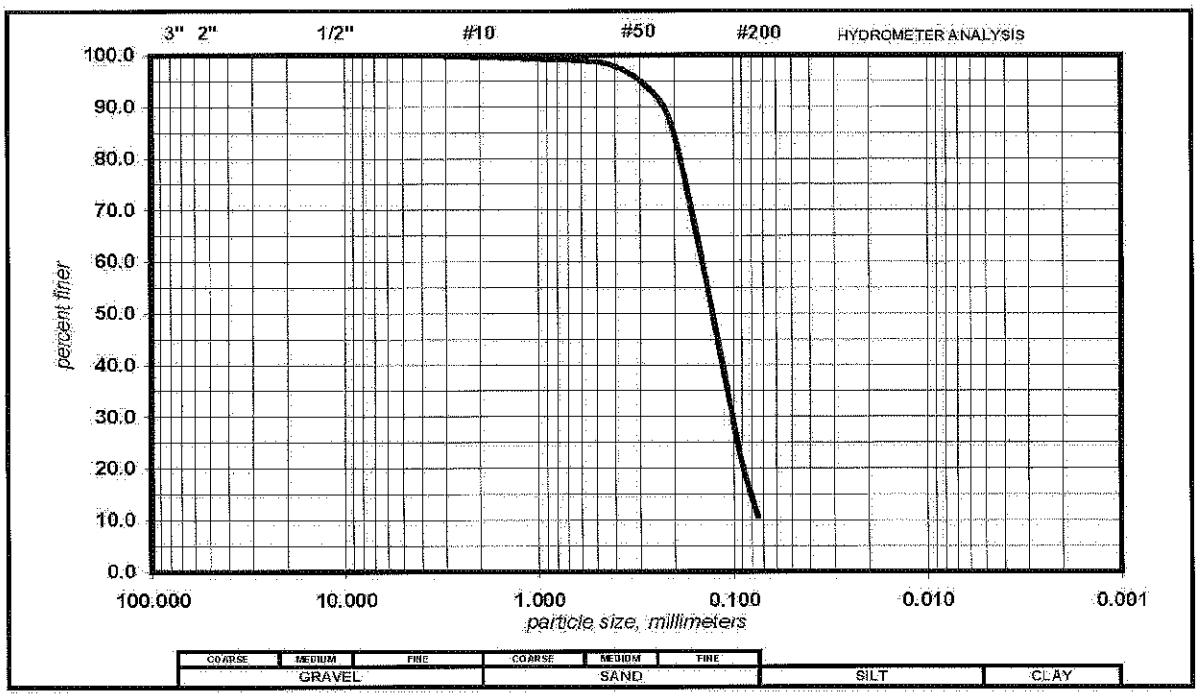
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.6
#20	0.850	99.1
#30	0.600	98.9
#40	0.425	98.1
#50	0.300	95.1
#70	0.212	87.5
#100	0.150	63.0
#140	0.106	34.0
#170	0.090	20.7
#200	0.075	10.6

Sample Identification

Sample No.: NJV-803
Lab No.: A07-432-58
Source/Location: 5'-10'
Description: Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.4 **% Sand** 89.0 **% Mud** 10.6

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

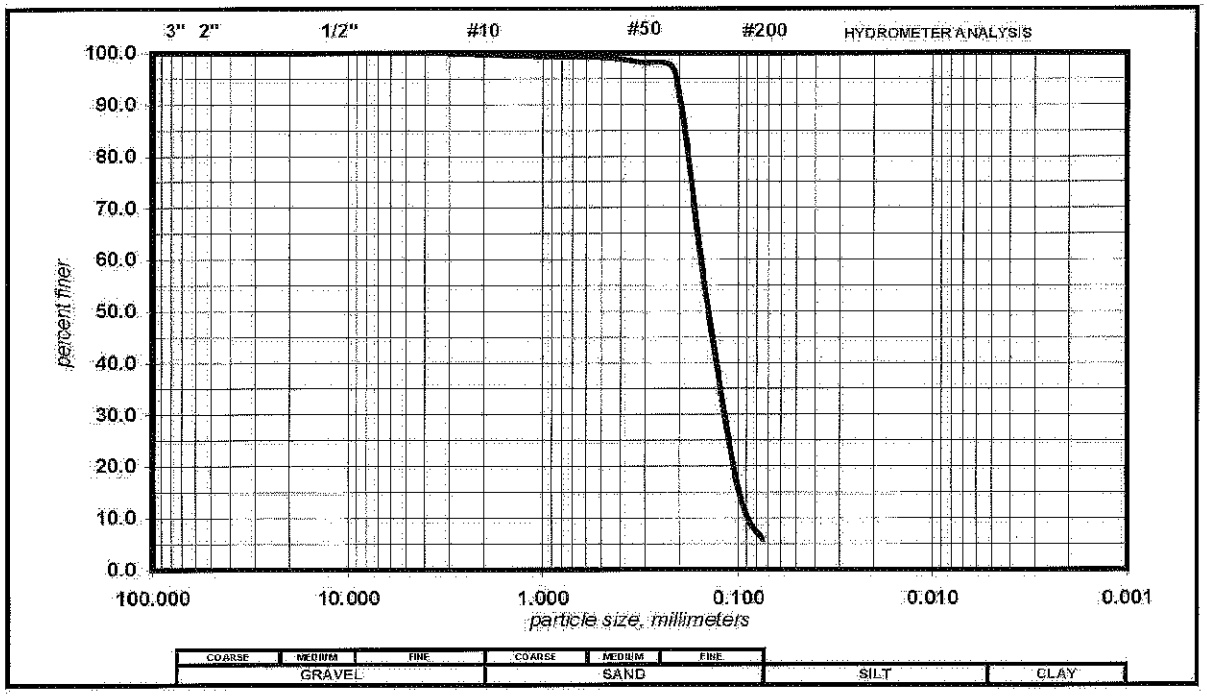
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.6
#20	0.850	99.3
#30	0.600	99.2
#40	0.425	98.9
#50	0.300	98.0
#70	0.212	96.4
#100	0.150	55.7
#140	0.106	20.3
#170	0.090	10.3
#200	0.075	5.8

Sample Identification

Sample No.: NJV-803
Lab No.: A07-432-59
Source/Location: 10'-15'
Description:
Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.4 **% Sand** 93.8 **% Mud** 5.8

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

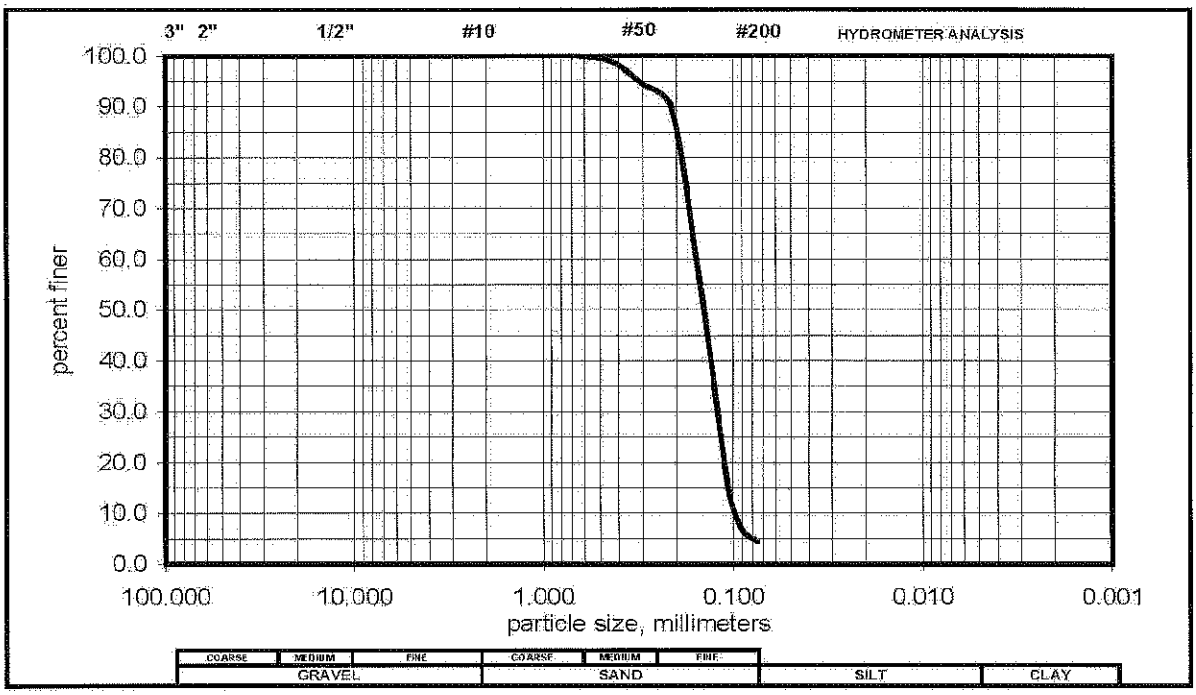
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	
#6	3.35	
#8	2.36	
#10	2.00	
#20	0.850	100.0
#30	0.600	99.8
#40	0.425	98.7
#50	0.300	94.4
#70	0.212	89.8
#100	0.150	55.0
#140	0.106	14.6
#170	0.090	6.8
#200	0.075	4.4

Sample Identification

Sample No.: NJV-803
Lab No.: A07-432-60
Source/Location: 15'-18.1'
Description: Dark Gray of SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.0 **% Sand** 95.6 **% Mud** 4.4

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

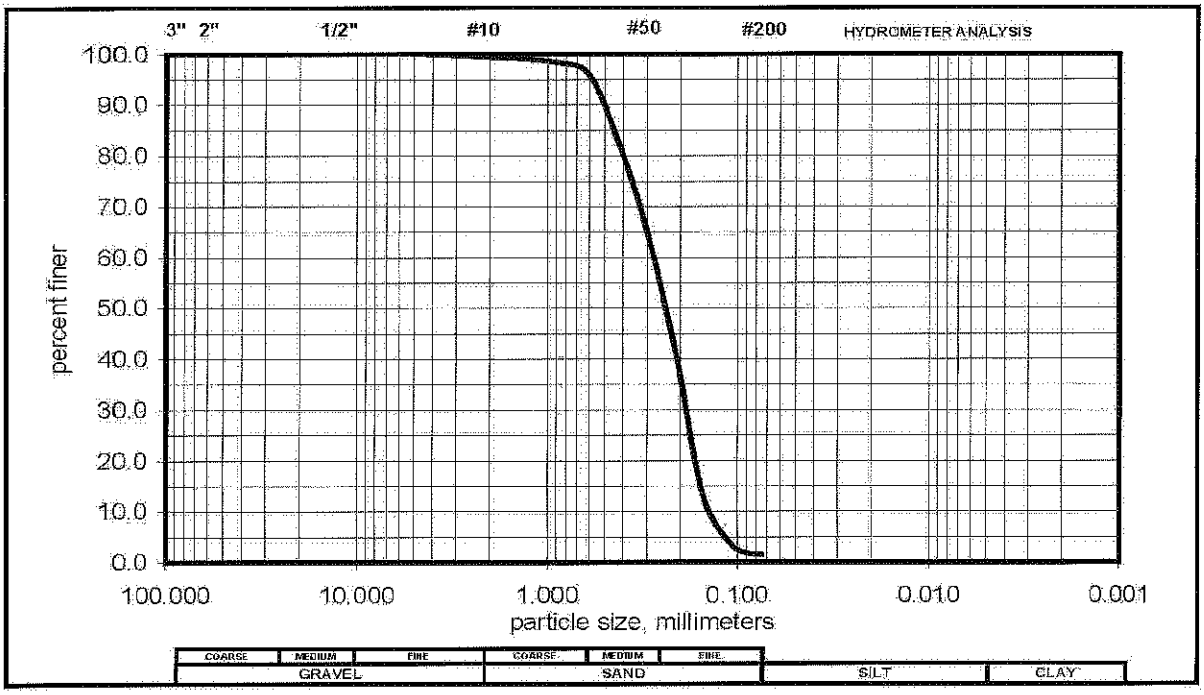
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.4
#20	0.850	98.3
#30	0.600	95.7
#40	0.425	82.8
#50	0.300	65.0
#70	0.212	41.4
#100	0.150	12.7
#140	0.106	3.2
#170	0.090	1.9
#200	0.075	1.5

Sample Identification

Sample No.: NJV-804
Lab No.: A07-432-61
Source/Location: 0'-5'
Description:
Dark Gray / L.Yel.Brown of SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.6 **% Sand** 97.9 **% Mud** 1.5

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

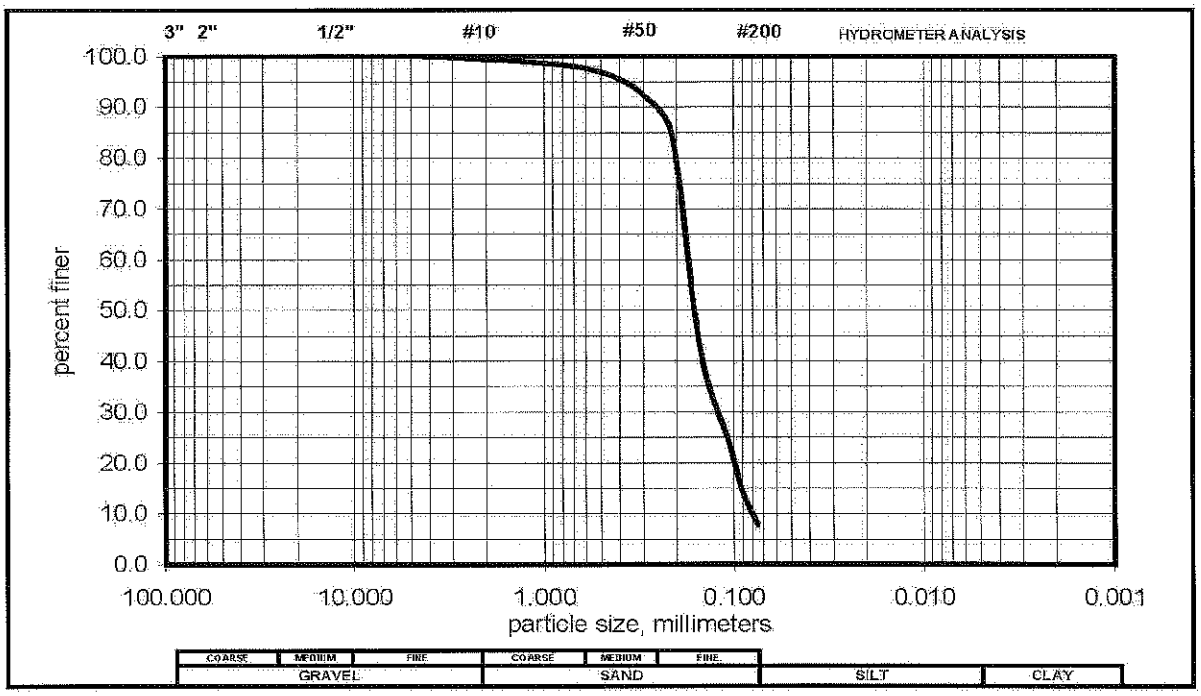
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.4
#20	0.850	98.4
#30	0.600	97.6
#40	0.425	95.9
#50	0.300	92.4
#70	0.212	84.9
#100	0.150	42.0
#140	0.106	24.0
#170	0.090	14.4
#200	0.075	7.8

Sample Identification

Sample No.: NJV-804
Lab No.: A07-432-62
Source/Location: 5'-7.1'
Description:
Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.6 % Sand 91.6 % Mud 7.8

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

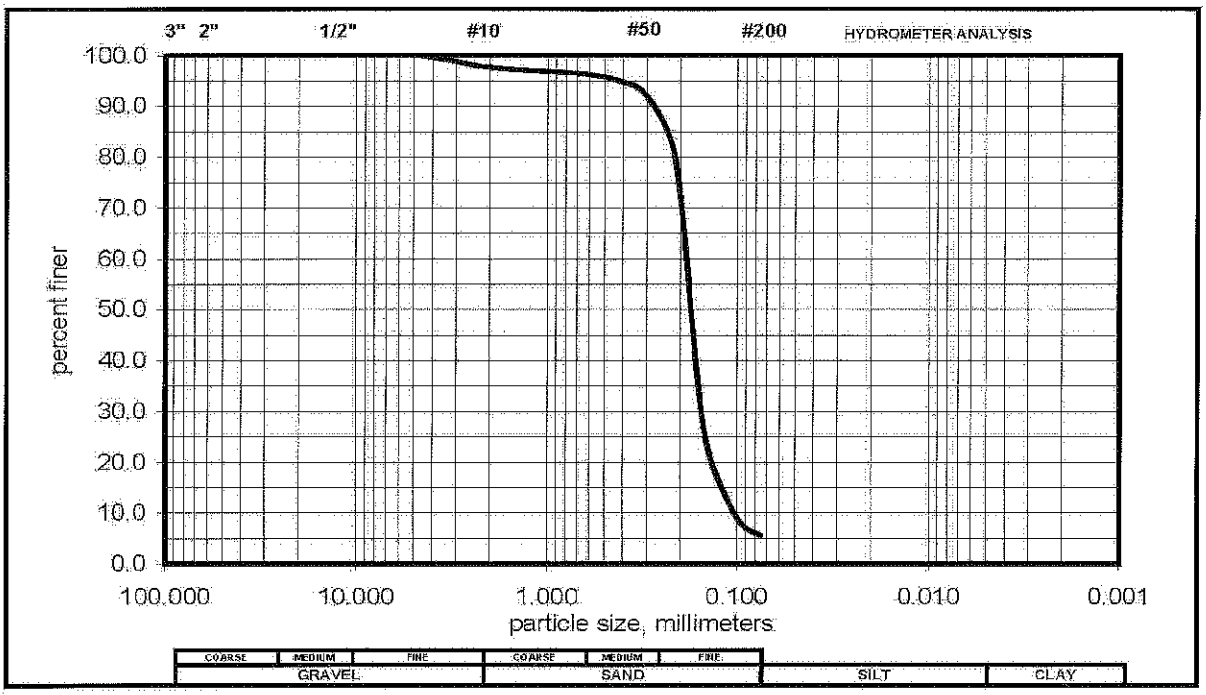
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	97.7
#20	0.850	96.8
#30	0.600	96.2
#40	0.425	95.1
#50	0.300	91.9
#70	0.212	79.4
#100	0.150	26.6
#140	0.106	10.6
#170	0.090	7.1
#200	0.075	5.5

Sample Identification

Sample No.: NJV-804
Lab No.: A07-432-63
Source/Location: 10.1'-15.5'
Description:
Gray cf SAND, trace Silt, trace fine Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 2.3 **% Sand** 92.1 **% Mud** 5.5

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

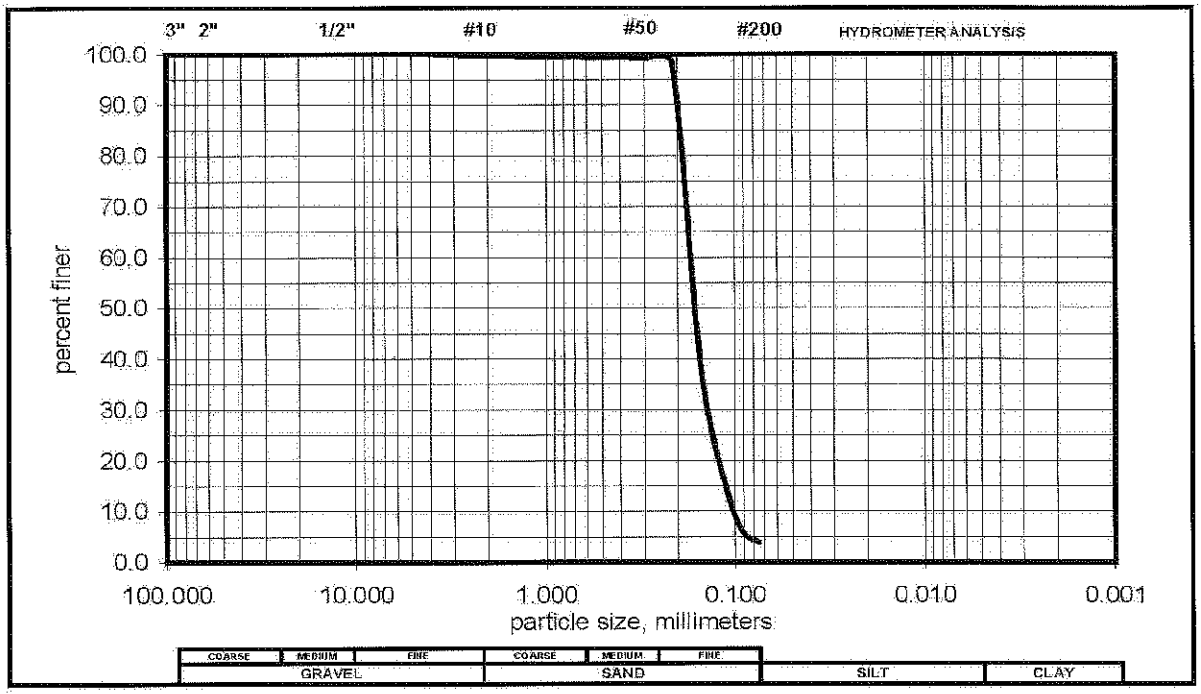
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.7
#20	0.850	99.5
#30	0.600	99.5
#40	0.425	99.4
#50	0.300	99.1
#70	0.212	98.3
#100	0.150	36.8
#140	0.106	11.7
#170	0.090	5.7
#200	0.075	3.9

Sample Identification

Sample No.: NJV-805
Lab No.: A07-432-64
Source/Location: 0'-3.5' & 4'-5'
Description: Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.3 **% Sand** 95.8 **% Mud** 3.9

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

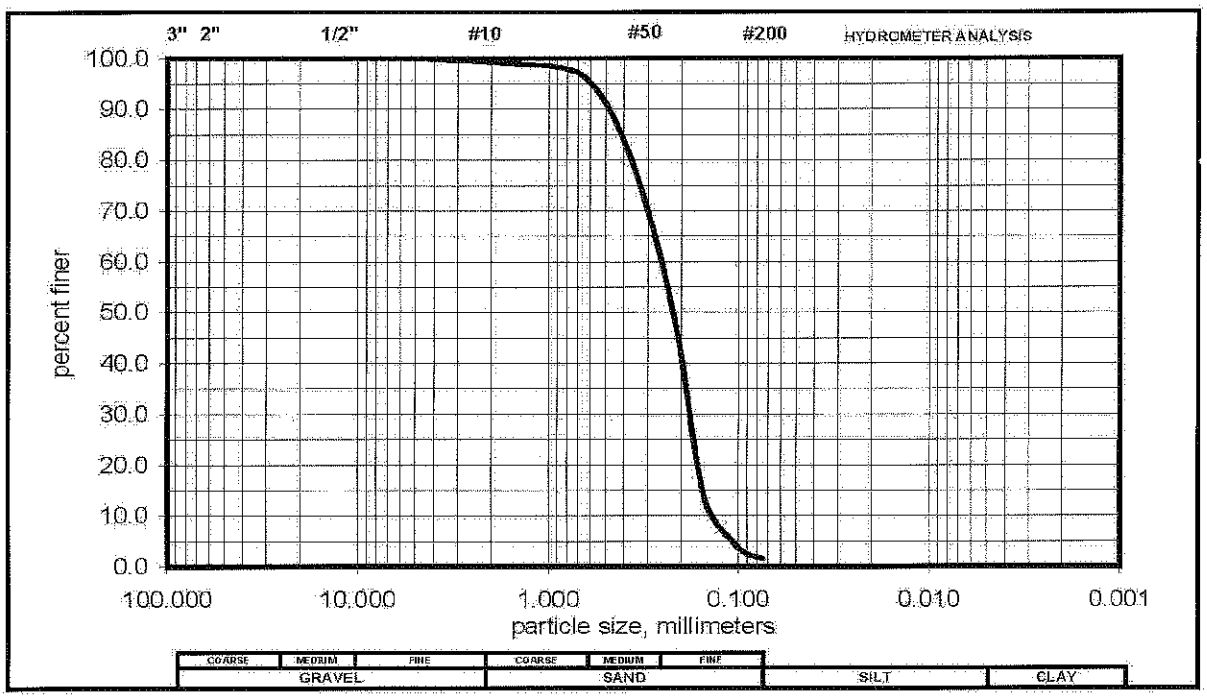
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.2
#20	0.850	98.1
#30	0.600	95.1
#40	0.425	86.0
#50	0.300	69.8
#70	0.212	46.8
#100	0.150	13.2
#140	0.106	4.7
#170	0.090	2.5
#200	0.075	1.5

Sample Identification

Sample No.: NJV-606
Lab No.: A07-432-65
Source/Location: 0-5'
Description:
Gray / L.Yel.Brown cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.8 **% Sand** 97.7 **% Mud** 1.5

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

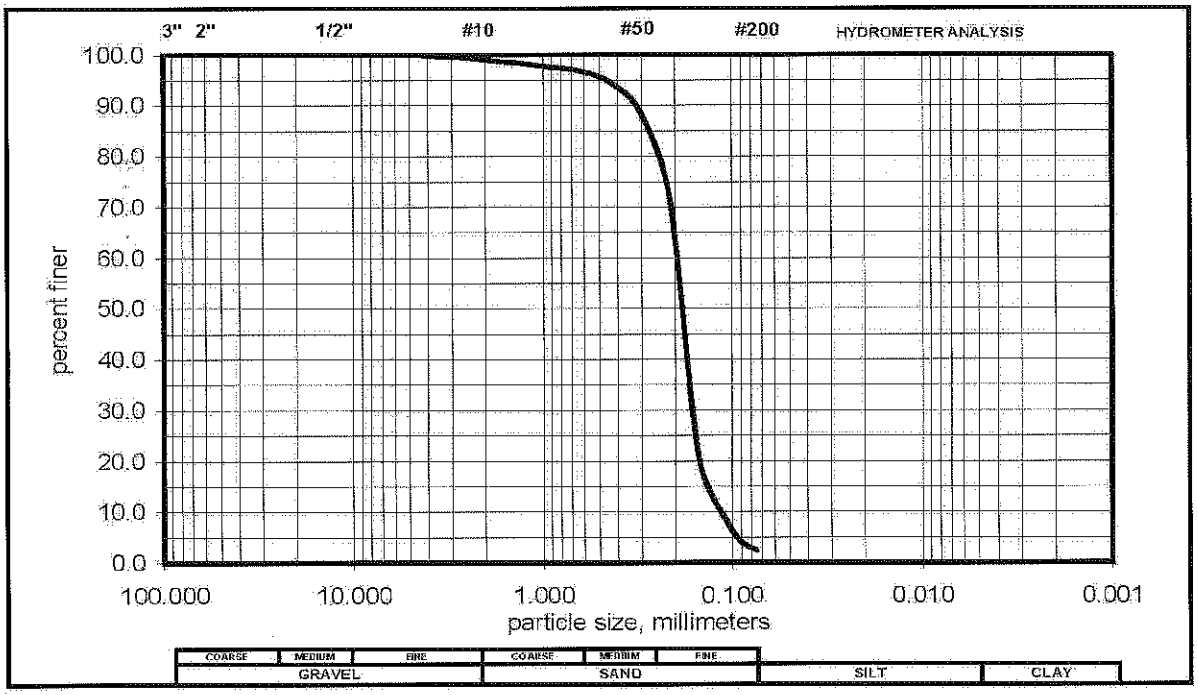
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.0
#20	0.850	97.5
#30	0.600	96.6
#40	0.425	94.3
#50	0.300	88.3
#70	0.212	71.2
#100	0.150	20.9
#140	0.106	7.8
#170	0.090	4.1
#200	0.075	2.4

Sample Identification

Sample No.: NJV-806
Lab No.: A07-432-66
Source/Location: 5'-10'
Description:
Dark Gray of SAND, trace Silt, trace fine Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 1.0 **% Sand** 96.7 **% Mud** 2.4

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

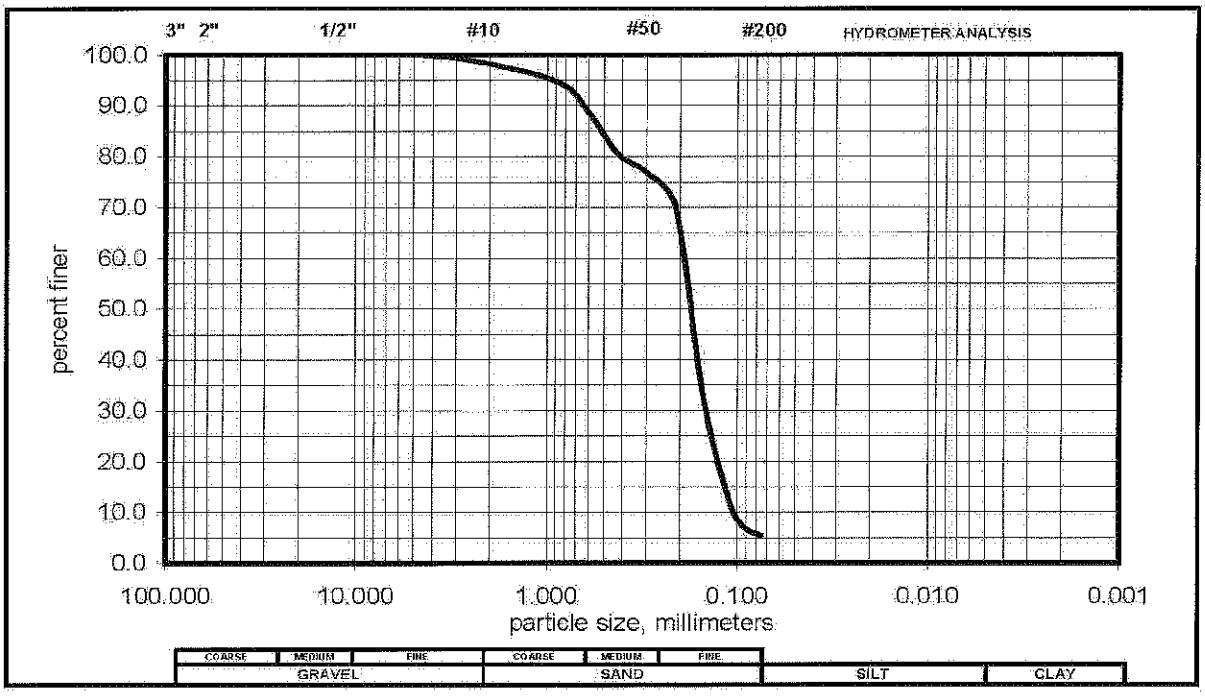
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	98.2
#20	0.850	94.4
#30	0.600	88.5
#40	0.425	80.5
#50	0.300	76.8
#70	0.212	70.1
#100	0.150	31.9
#140	0.106	10.5
#170	0.090	6.8
#200	0.075	5.4

Sample Identification

Sample No.: NJV-806
Lab No.: A07-432-67
Source/Location: 10'-12.3' & 12.5'-15'
Description:
Dark Gray of SAND, trace Silt, trace fine Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 1.8 **% Sand** 92.8 **% Mud** 5.4

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

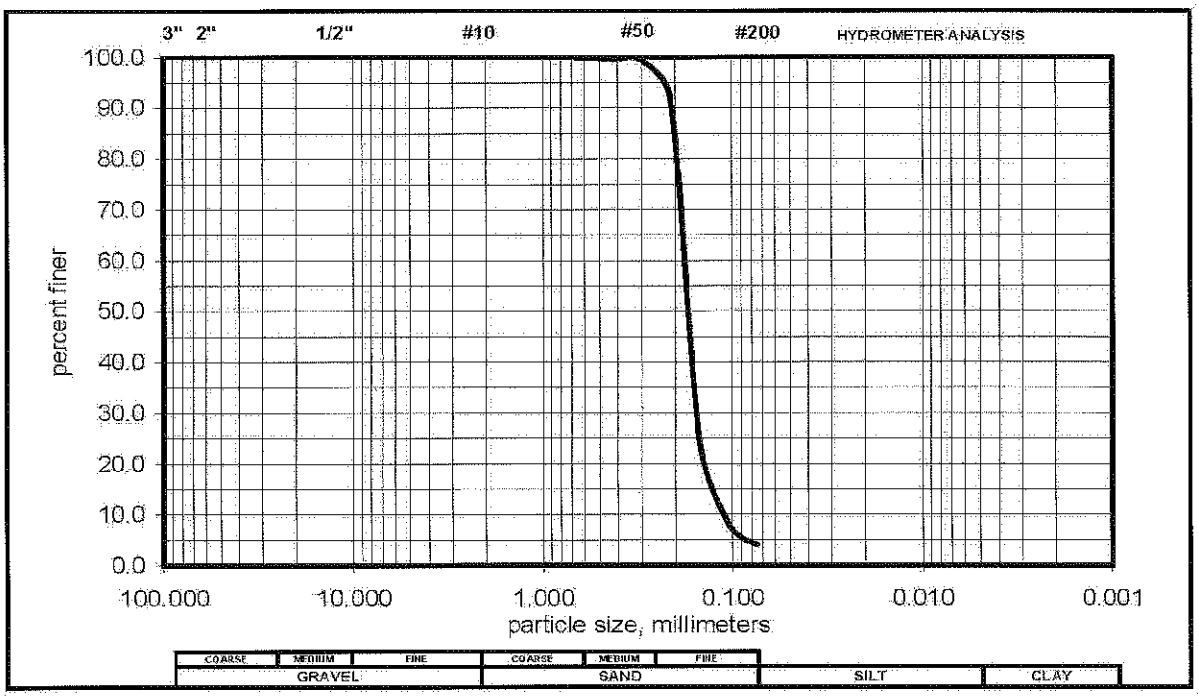
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	
#6	3.35	
#8	2.36	
#10	2.00	
#20	0.850	100.0
#30	0.600	99.9
#40	0.425	99.6
#50	0.300	99.4
#70	0.212	92.2
#100	0.150	24.6
#140	0.106	8.4
#170	0.090	5.4
#200	0.075	3.9

Sample Identification

Sample No.: NJV-806
Lab No.: A07-432-68
Source/Location: 15'-19.5'
Description:
Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.0 **% Sand** 96.1 **% Mud** 3.9

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

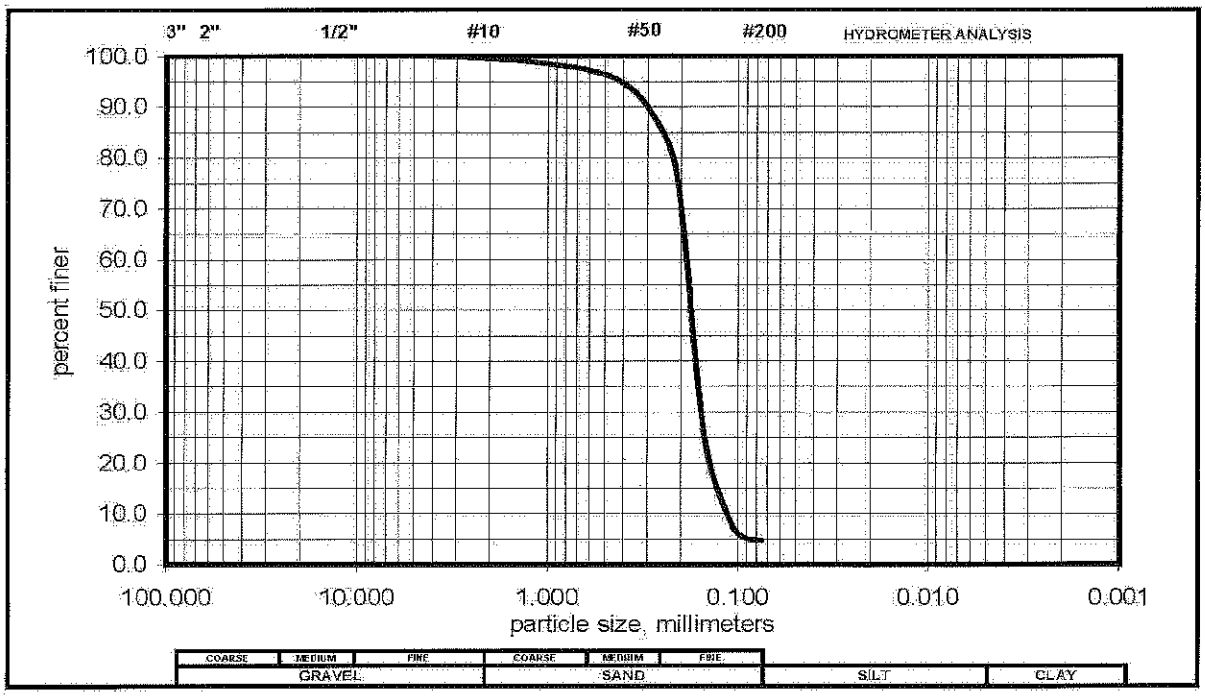
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	
5/16"	8.00	
1/4"	6.30	
#4	4.75	100.0
#6	3.35	
#8	2.36	
#10	2.00	99.6
#20	0.850	98.2
#30	0.600	97.1
#40	0.425	95.2
#50	0.300	89.9
#70	0.212	77.2
#100	0.150	24.8
#140	0.106	7.3
#170	0.090	5.1
#200	0.075	4.6

Sample Identification

Sample No.: NJV-807
Lab No.: A07-432-69
Source/Location: 0'-5'
Description:
Dark Gray cf SAND, trace Silt

sample description in accordance with Burmister System

Classification:
USCS: [SP]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 0.4 **% Sand** 95.0 **% Mud** 4.6

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

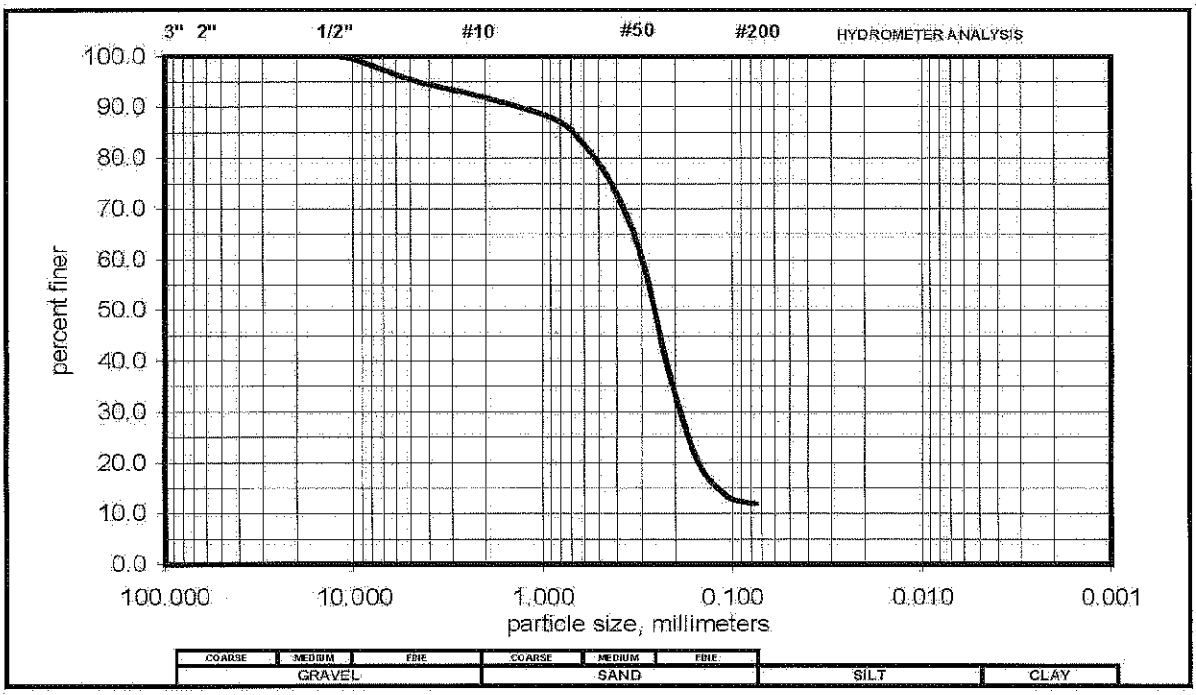
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	100.0
3/8"	9.50	99.2
5/16"	8.00	
1/4"	6.30	
#4	4.75	95.2
#6	3.35	
#8	2.36	
#10	2.00	91.9
#20	0.850	87.5
#30	0.600	82.6
#40	0.425	74.7
#50	0.300	60.5
#70	0.212	36.7
#100	0.150	19.8
#140	0.106	13.3
#170	0.090	12.4
#200	0.075	11.9

Sample Identification

Sample No.: NJV-807
Lab No.: A07-432-70
Source/Location: 5'-9.3'
Description:
Dark Gray of SAND, little Silt, trace mf Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SW-SM]
AASHTO:

Remarks:
Sample received in lab on December 22, 2008

% Gravel 8.1 **% Sand** 79.9 **% Mud** 11.9

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

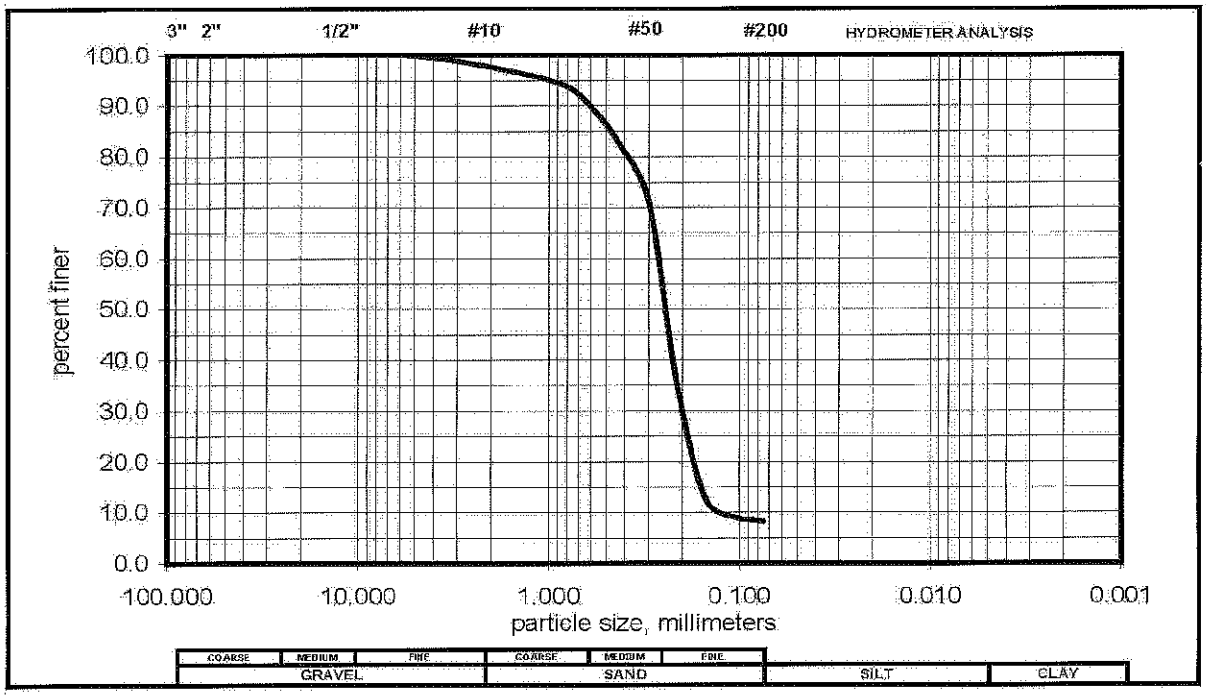
VIBRACORE SAMPLING
ABSECON INLET, NEW JERSEY

CH2M HILL

SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009
Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

PARTICLE SIZE DISTRIBUTION TEST REPORT



Sieve Size	Sieve (mm)	% Finer
3"	75.00	
2 1/2"	63.00	
2"	50.00	
1 1/2"	38.10	
1"	25.00	
3/4"	19.00	
5/8"	16.00	
1/2"	12.50	
3/8"	9.50	100.0
5/16"	8.00	
1/4"	6.30	
#4	4.75	99.8
#6	3.35	
#8	2.36	
#10	2.00	97.6
#20	0.850	94.2
#30	0.600	89.7
#40	0.425	82.3
#50	0.300	71.1
#70	0.212	34.8
#100	0.150	12.5
#140	0.106	9.1
#170	0.090	8.6
#200	0.075	8.3

Sample Identification

Sample No.: NJV-807
Lab No.: A07-432-71
Source/Location: 9.8'-14.9'
Description:
Dark Gray of SAND, trace Silt, trace fine Gravel

sample description in accordance with Burmister System

Classification:
USCS: [SP-SM]
AASHTO:

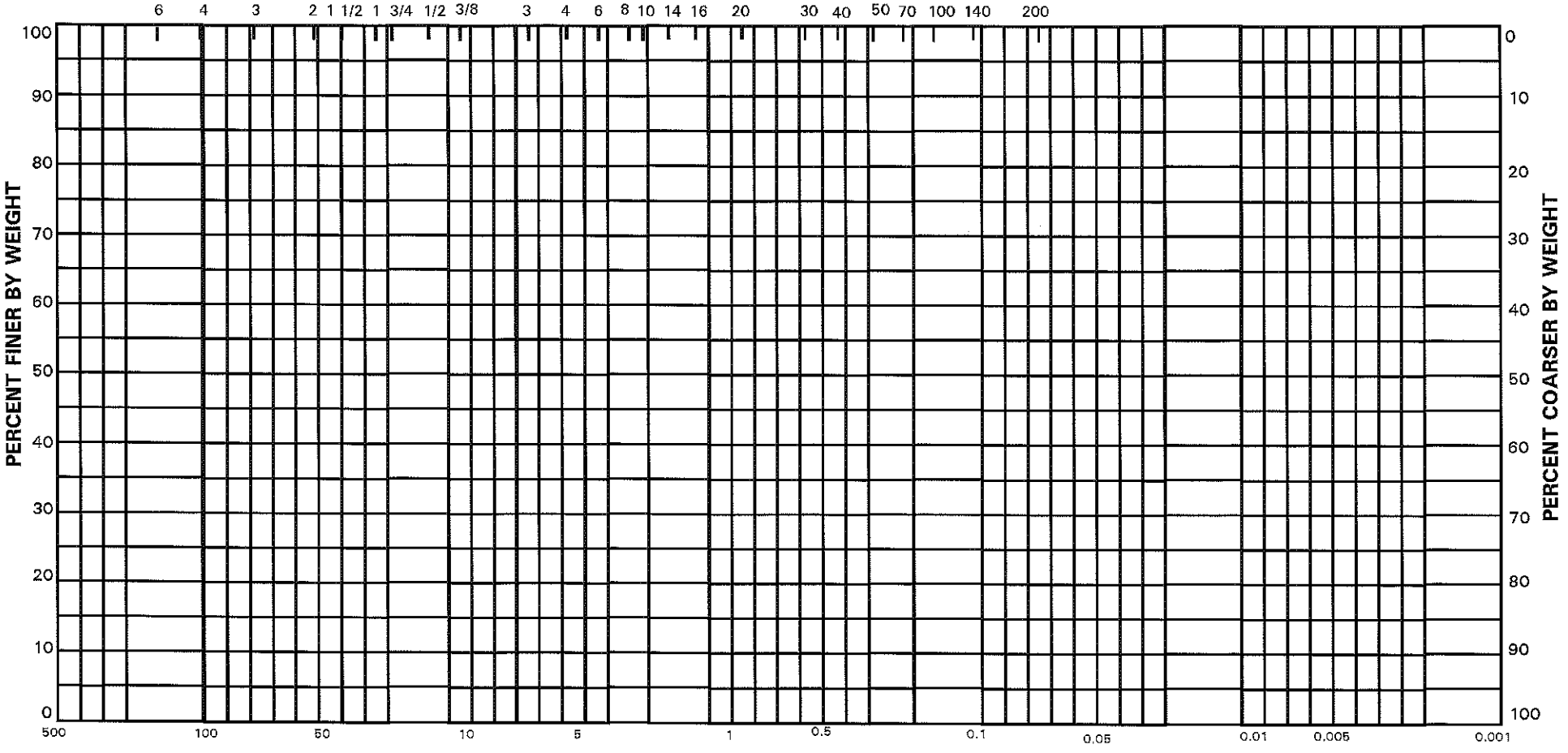
Remarks:
Sample received in lab on December 22, 2008

% Gravel 2.4 **% Sand** 89.3 **% Mud** 8.3

Client: Alpine Ocean Seismic Survey, Inc.
Project: Vibrational Coaring along the Delaware and NJ Coast
Date: 8-Jan-09
Job No.: 08-596 **Report No.:** 09-64

SECTION 00 73 90

GRADATION CURVE WORKSHEET



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Elev or Depth	Classification	Nat w %	LL	PL	PI

GRADATION CURVES

Project

Area

Boring

Date

PROJECT TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

01 11 00	SUMMARY OF WORK
01 32 01	PROJECT SCHEDULE
01 32 33	CONSTRUCTION PHOTOGRAPHY
01 33 00	SUBMITTAL PROCEDURES
01 35 26	GOVERNMENTAL SAFETY REQUIREMENTS
01 35 30	MUNITIONS AND EXPLOSIVES OF CONCERN (MEC) CONSTRUCTION SUPPORT
01 35 43	AIR EMISSIONS REQUIREMENTS
01 35 50	DIVING SERVICES
01 42 00	SOURCES FOR REFERENCE PUBLICATIONS
01 45 00	QUALITY CONTROL
01 45 05	QUALITY CONTROL SYSTEM (QCS)
01 50 00	TEMPORARY CONSTRUCTION
01 57 20	ENVIRONMENTAL PROTECTION
01 57 23	TEMPORARY STORM WATER POLLUTION CONTROL
01 71 23	SURVEY REQUIREMENTS
01 76 00	STRUCTURES MONITORING
01 78 39	AS-BUILT DRAWINGS

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 13 33	OUTFALL PIPE SUPPORTS

DIVISION 31 - EARTHWORK

31 05 19	GEOTEXTILE

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 15 00	DUNE CROSSOVERS
32 92 00	SAND FENCE AND DUNE GRASS

DIVISION 33 - UTILITIES

33 40 00	STORMWATER OUTFALL PIPES

DIVISION 35 - WATERWAY AND MARINE CONSTRUCTION

35 20 23	HOPPER DREDGE SILENT INSPECTOR
35 31 00	BEACHFILL

-- End of Project Table of Contents --

This page was intentionally left blank for duplex printing.

SECTION 01 11 00

SUMMARY OF WORK

PART 1 GENERAL

1.1 SCOPE OF SECTION

This section presents a general description of the work to be accomplished under this contract on Absecon Island, between Absecon Inlet and Great Egg Harbor Inlet, located in Atlantic County, New Jersey.

1.2 DESCRIPTION OF WORK

1.2.1 General

The contract work consists of a Base Bid to place approximately 1,000,000 cubic yards of beachfill material from Station 267+44 to Station 355+50 in Margate City, and approximately 1,000,000 cubic yards of beachfill from Station 355+50 to Station 429+33 in Longport Borough, New Jersey. The contract work also consists of a Base Bid to place approximately 22,000 cubic yards of beachfill material to construct a new dune from Station 267+44 to Station 243+75 in Ventnor City, New Jersey.

Pre-placement condition surveys, as specified in Section 01 71 23 SURVEY REQUIREMENTS, will determine the exact location and quantity of beachfill material required within the limits indicated, and will be a determining factor in the award of Options for additional quantities of beachfill. Where Options for additional beachfill are awarded, the additional beachfill material shall be placed immediately after the initial Base Bid quantity has been placed in the area(s) to be covered by the awarded Option. The intent is to complete the beachfill template in a given Base-plus-Option area, before proceeding with work further along the construction baseline.

The Base Bid work includes, in addition to beachfill: the extension of stormwater outfalls including pipe support systems; the construction of pedestrian, vehicle, and handicap dune crossovers; planting dune grass; providing sand fence, split rail fence, and post and rail fence; and, the relocation of various existing structures to accommodate the new beachfill and dunes.

All beachfill work---Base Bid and Options---shall include the requirements for structures monitoring as specified in the contract package.

1.2.2 Borrow Area

The approved borrow area for beachfill material is Area H, which is located approximately 2 to 3 miles from the project location. See the contract drawings for the exact location. All material for beachfill work performed under this contract shall be obtained from this offshore borrow area. Beachfill material from any other source, including trucking from upland sources, will not be considered under this contract.

1.3 WORK AREA ACCESS

Access to the work areas is available only in the locations indicated on the drawings. Contractor work area access in Longport Borough is confined to 35th and 11th Avenues only, as indicated. Any transfer of material and

personnel from land to water or water to land, shall not occur along the Bayside within the Longport Borough Limits. Access to the approved borrow area is by water only. Contractor work area access in Margate City is confined to Granville Avenue only, as shown.

1.4 WORK HOURS

The Contractor may work 24 hours per day, 7 days per week, to complete the contract work. However, the Contractor shall be required to comply with local codes regarding noise at all times during the contract period. The Contractor shall be required to equip his land-based equipment with noise suppression equipment if so directed by the COR.

1.5 EXISTING WORK

In addition to "FAR 52.236-9, Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements":

a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Contracting Officer.

1.6 EXISTING UTILITIES

The existing utility locations shown on the drawings are approximate and not complete. The Contractor is responsible for field verifying all existing utility locations, including those not shown on the drawings.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION 01 32 01

PROJECT SCHEDULE

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.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11	(1995) Progress, Schedules, and Network Analysis Systems

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 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Project Schedule; G,COR

1.3 SCHEDULE PREPARER

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating (activity status) and preparation of reports. The authorized representative shall be experienced in scheduling projects similar in nature to this project and shall be experienced in the use of the scheduling software that meets the requirements of this specification.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS. Show in the schedule the sequence in which the Contractor proposes to perform the work and dates on which the Contractor contemplates starting and completing all schedule activities. The scheduling of the entire project is required. The scheduling of construction is 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 Project Schedule. The schedule must be a forward planning as well as a project monitoring tool.

3.1.1 Approved Project Schedule

Use the approved Project Schedule to measure the progress of the work and to aid in evaluating time extensions. Make the schedule cost loaded and activity coded. The schedule will provide the basis for all progress payments. If the Contractor fails to submit any schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

3.1.2 Schedule Status Reports

Provide a Schedule Status Report on at least a monthly basis. 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 as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

3.1.3 Default Terms

Failure of the Contractor to comply with the requirements of the Contracting Officer 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 the contract.

3.2 BASIS FOR PAYMENT AND COST LOADING

Use the schedule as the basis for determining contract earnings during each update period and therefore the amount of each progress payment. Lack of an approved schedule update or qualified scheduling personnel will result in an inability of the Contracting Officer to evaluate contract earned value for the purposes of payment. Failure of the Contractor to provide all required information will result in the disapproval of the initial and subsequent schedule updates. In the event schedule revisions are directed by the Contracting Officer and those revisions have not been included in subsequent revisions or updates, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until such revisions to the Project Schedule have been made. Activity cost loading shall be reasonable, as determined by the Contracting Officer. The aggregate value of all activities coded to a Contract Line Item (CLIN) shall equal the value of the CLIN on the Schedule.

3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

The computer software system utilized to produce and update the Project Schedule shall be capable of meeting all requirements of this specification. Failure of the Contractor to meet the requirements of this specification will result in the disapproval of the schedule.

3.3.1 Critical Path Method

Use the Critical Path Method (CPM) of network calculation to generate the

Project Schedule. Prepare the Project Schedule using the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

Develop the Project Schedule to an appropriate level of detail. Failure to develop the Project Schedule to an appropriate level of detail, as determined by the Contracting Officer, will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

3.3.2.1 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than 2 percent of all non-procurement activities shall have Original Durations (OD) greater than 20 work days or 30 calendar days. Procurement activities are defined herein.

3.3.2.2 Procurement Activities

The schedule must include activities associated with the submittal, approval, procurement, fabrication and delivery of long lead materials, equipment, fabricated assemblies and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days. A typical procurement sequence includes the string of activities: submit, approve, procure, fabricate, and deliver.

3.3.2.3 Mandatory Tasks

At a minimum, the following tasks must be included and properly scheduled:

a. Preconstruction submittals.

b. Mobilization.

c. Pre-Placement condition surveys.

d. Before-dredging survey of borrow area.

e. Provision of Government field office.

f. Beachfill operations and sequence.

g. Crossover repair/construction operations and sequence.

h. Installation of sand fence.

i. Outfall extension repair/construction operations and sequence.

j. After-dredging survey of borrow area.

k. Post-placement condition surveys.

l. Planting of dune grass.

m. Submission and approval of as-built drawings.

n. Contractor's pre-final inspection.

o. Correction of punchlist from Contractor's pre-final inspection.

p. Government's pre-final inspection.

q. Correction of punch list from Government's pre-final inspection.

r. Final inspection.

s. Demobilization.

Tasks that are site specific shall be clearly indicated as such.

3.3.2.4 Government Activities

Show Government and other agency activities that could impact progress. 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 Activity Responsibility Coding (RESP)

Assign responsibility Code for all activities to the Prime Contractor, Subcontractor or Government agency responsible for performing the activity. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, Government design reviews, environmental permit approvals by State regulators, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements. Code all activities not coded with a Government Responsibility Code to the Prime Contractor or Subcontractor responsible to perform the work. Activities shall not have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and GOVT (for USACE). Unacceptable code values are abbreviations of the names of subcontractors.

3.3.2.6 Activity Work Area Coding

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew, from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities shall not have more than one Work Area Code. Not all activities are required to be Work Area coded. A lack of Work Area coding will indicate the activity is not resource or space constrained.

3.3.2.7 Contract Changes/Requests for Equitable Adjustment (REA) Coding (MODF)

Assign Activity code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by the Contracting Officer, with a Contract Changes/REA Code. Key all Code values to the Government's modification numbering system. Any activity or sequence of activities added to the schedule as a result of alleged constructive changes made by the Government may be added to a copy of the current schedule, subject to the approval of the Contracting Officer.

Assign Activity codes for these activities with a Contract Changes/REA Code. Key the code values to the Contractor's numbering system. Approval to add these activities does not necessarily mean the Government accepts responsibility and therefore liability for such activities and any associated impacts to the schedule, but rather the Government recognizes such activities are appropriately added to the schedule for the purposes of maintaining a realistic and meaningful schedule. Such activities shall not be Responsibility Coded to the Government unless approved. An activity shall not have more than one Contract Changes/REA Code.

3.3.2.8 Contract Line Item (CLIN) Coding (BIDI)

Code all activities to the CLIN on the Contract Line Item Schedule to which the activity belongs. An activity shall not contain more than one CLIN Item Code. CLIN Item code all activities, even when an activity is not cost loaded.

3.3.2.9 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities based upon the phase of work in which the activity occurs. Code activities to a Construction Phase. Code fast track construction phases proposed by the Contractor to allow filtering and organizing the schedule by fast track design and construction packages. If the contract specifies construction phasing with separately defined performance periods, identify a Construction Phase Code to allow filtering and organizing the schedule accordingly. Each activity shall be identified with a single project phase and have only one Phase of Work code.

3.3.2.10 Category of Work Coding (CATW)

Assign Category of Work Code to all Activities based upon the category of work to which the activity belongs. Category of Work Code must include, but is not limited to: construction submittal approvals, Acceptance, Procurement, Fabrication, Delivery, Weather Sensitive Installation, Non-Weather Sensitive Installation, Start-Up, Test and Turnover. Assign a Category of Work Code to each activity. Each activity shall have only one Category of Work Code.

3.3.2.11 Definable Features of Work Coding (FOW1, FOW2, FOW3)

Assign a Definable Feature of Work Code to appropriate activities based on the definable feature of work to which the activity belongs. Definable Feature of Work is defined in Specification Section 01 45 00 QUALITY CONTROL. An activity shall not have more than one Definable Feature of Work Code. Not all activities are required to be Definable Feature of Work Coded.

3.3.3 Scheduled Project Completion and Activity Calendars

The schedule interval shall extend from NTP date to the required contract completion date. The contract completion activity (End Project) shall finish based on the required contract duration in the accepted contract proposal, as adjusted for any approved contract time extensions. The first scheduled work period shall be the day after NTP is acknowledged by the Contractor. Schedule activities on a calendar to which the activity logically belongs. Activities may be assigned to a 7 day calendar when the contract assigns calendar day durations for the activity such as a Government Acceptance activity. If the Contractor intends to perform physical work less than seven days per week, schedule the associated activities on a calendar with non-work periods identified including

weekends and holidays. Assign the Category of Work Code - Weather Sensitive Installation to those activities that are weather sensitive. Original durations must account for anticipated normal adverse weather. The Government will interpret all work periods not identified as non-work periods on each calendar as meaning the Contractor intends to perform work during those periods.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. Include as the first activity in the project schedule an activity called "Start Project"(or NTP). 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 Schedule Constraints and Open Ended Logic

Constrain completion of the last activity in the schedule by the contract completion date. Schedule calculations shall result in a negative float when the calculated early finish date of the last activity is later than the contract completion date. Include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the contract completion date for the project, and with a zero day duration or by using the "project must finish by" date in the scheduling software. The schedule shall have no constrained dates other than those specified in the contract. The use of artificial float constraints such as "zero fee float" or "zero total float" are typically prohibited. There shall only be 2 open ended activities: Start Project (or NTP) with no predecessor logic and End Project with no successor logic.

3.3.3.3 Early Project Completion

In the event the Initial project schedule calculates an early completion date of the last activity prior to the contract completion date, the Contractor shall identify those activities that it intends to accelerate and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. The last activity shall have a late finish constraint equal to the contract completion date and the schedule will calculate positive float. The Government will not approve an early completion schedule with zero float on the longest path. The Government is under no obligation to accelerate activities for which it is responsible to support a proposed early contract completion.

3.3.4 Default Progress Data Disallowed

Do not automatically update Actual Start and Finish dates with default mechanisms that may be included in the scheduling software. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the AS and AF 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 updated 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. Disable program features which calculate one of these parameters from the other.

3.3.5 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Correct out of sequence progress that continues for more than two update cycles by logic revision, as approved by the Contracting Officer.

3.3.6 Negative Lags and Start to Finish Relationships

Lag durations contained in the project schedule shall not have a negative value. Do not use Start to Finish (SF) relationships.

3.3.7 Calculation Mode

Schedule calculations shall retain the logic between predecessors and successors even when the successor activity starts and the predecessor activity has not finished. Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") will not be allowed.

3.3.8 Milestones

The schedule must include milestone activities for each significant project event including but not limited to: milestone activities for each fast track design package released for construction; design complete; foundation/substructure construction complete; superstructure construction complete; building dry-in or enclosure complete to allow the initiation of finish activities; permanent power complete; and building systems commissioning complete.

3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data CD, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval at the preconstruction meeting. The schedule shall demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. The Initial Schedule shall be at a reasonable level of detail as determined by the Contracting Officer.

3.4.2 Periodic Schedule Updates

Based on the result of the meeting, specified in Paragraph "PERIODIC SCHEDULE UPDATE MEETINGS", submit periodic schedule updates. These submissions will enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgement of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor will be deemed not to have provided an estimate upon which progress payment may be made.

3.4.3 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used. A template SDEF compatible schedule backup file (sdef.prx) is available on the QCS website: www.rmssupport.com http://rms.usace.army.mil/. The SDEF format is as follows:

SDEF Format			
Field	Activity Code	Length	Description
1	WRKP	3	Workers per Day
2	RESP	4	Responsible Party (e.g. GC, subcontractor, USACE)
3	AREA	4	Area of Work
4	MODF	6	Modification or REA number
5	BIDI	6	Bid Item (CLIN)
6	PHAS	2	Phase of Work
7	CATW	1	Category of Work
8	FOW1	10	Feature of Work (used up to 10 characters in length)
9	FOW2	10	Feature of Work (used up to 20 characters in length)
10	FOW3	10	Feature of Work (used up to 30 characters in length)

3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

3.5.1 Data CD's

Provide two sets of data CD's containing the project schedule in the backup format. Each CD shall also contain all previous update backup files. File medium shall be CD. Label each CD indicating the type of schedule (Initial, Update), full contract number, Data Date and file name. Each schedule shall have a unique file name as determined by the Contractor.

3.5.2 Narrative Report

Provide a Narrative Report with the Initial, and each Periodic Update of the project schedule, as the basis of the progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths where the total float is less than or equal to 20 work days, 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 communicate 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. Identify and explain why any activities that, based their calculated late dates, should have either started or finished during the update period but did not.

3.5.3 Approved Changes Verification

Include only those project schedule changes in the schedule submission that have been previously approved by the Contracting Officer. 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, filtering, organizing and sorting for each schedule report shall be as directed by the Contracting Officer. Typically reports 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 Date, Actual Finish Date, and Percent Complete. The following lists typical reports that will be requested. One or all of these reports may be requested for each schedule submission.

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 detailed predecessor and successor activities for every activity in ascending order by activity number.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.

3.5.4.4 Earnings Report by CLIN

A compilation of the Contractor's Total Earnings on the project from the NTP to the data date. This report shall reflect the earnings of specific activities based on the agreements made in the schedule update meeting defined herein. Provided that the Contractor has furnished a complete schedule update, this report shall serve as the basis of determining progress payments. Group activities by CLIN item number and sort by activity number. This report shall: sum all activities coded to a particular CLIN and provide a CLIN item percent earned value; and complete and sum CLIN 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 is required for the Initial and Periodic Updates. 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. Show the activity number, description, duration, and estimated earned value on the diagram.

3.5.5.2 Project Milestone Dates

Show dates on the diagram for start of project, any contract required interim completion dates and contract completion dates.

3.5.5.3 Critical Path

Clearly show the critical path.

3.5.5.4 Banding

Organize activities as directed 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 SCHEDULE UPDATE MEETINGS

Contracting Officer's Representative may conduct periodic schedule update meetings for the purposes of reviewing the Contractor's proposed out of sequence corrections, determining causes for delay, correcting logic, maintaining schedule accuracy and determining earned value. Meetings shall occur at least monthly within five days of the proposed schedule data date and after the Contractor has updated the schedule with Government concurrence respecting actual start dates, actual finish dates, remaining durations and percent complete for each activity. Provide a computer with the scheduling software loaded and a projector during the meeting which allows all meeting participants to view the proposed schedule update during the meeting. The meeting and resultant approvable schedule update shall be a condition precedent to a formal submission of the update as described in paragraph "SUBMISSION REQUIREMENTS" and to the submission of an invoice for payment. The meeting will be a working interactive exchange which will allow the Government and the Contractor the opportunity to review the updated schedule on a real time and interactive basis. The Contractor's authorized scheduling representative will organize, sort, filter and schedule the update as requested by the Government. The meeting will last no longer than 8 hours. A rough draft of the proposed activity logic corrections and narrative report shall be provided to the Government 48 hours in advance of the meeting. The Contractor's Project Manager and Authorized Scheduler shall attend the meeting with the Authorized Representative of the Contracting Officer.

3.6.1 Update Submission Following Progress Meeting

Submit a complete update of the project schedule containing all approved

progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 working days after the periodic schedule update meeting, reflecting only those changes made during the previous update meeting.

3.6.2 Status of Activities

Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be subject to the approval of the Government prior to the meeting. As a minimum, address the following items on an activity by activity basis during each progress meeting.

3.6.2.1 Start and Finish Dates

Accurately show the status of the AS and/or AF dates for each activity currently in-progress or completed since the last update. The Government may allow an AF date to be assigned with the percent complete less than 100% to account for the value of work remaining but not restraining successor activities. Only assign AS dates when actual progress occurs on an activity.

3.6.2.2 Remaining Duration

Update the estimated RD for all incomplete activities independent of Percent Complete. Remaining Durations may exceed the activity OD or may exceed the activity's prior update RD if the Government considers the current OD or RD to be understated based on current progress, insufficient work crews actually manning the job, unrealistic OD or deficiencies that must be corrected that restrain successor activities.

3.6.2.3 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete. To allow for proper schedule management, cost load the correction of punch list from Government pre-final inspection activity(ies) not less than 1 percent of the total contract value, which activity(ies) may be declared 100 percent complete upon completion and correction of all punch list work identified during Government pre-final inspection(s).

3.6.2.4 Logic Changes

Specifically identify and discuss 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, and other changes that have been made pursuant to contract provisions. The Government will only approve logic revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.

3.6.2.5 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 that does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor believes it is entitled to an extension of the contract performance period, completion date, or any interim milestone date, furnish the following for a determination by the Contracting Officer: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of excusable delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is a condition precedent to any approvals by the Government. In response to each Request For Proposal issued by the Government, the Contractor shall submit a schedule impact analysis demonstrating whether or not the change contemplated by the Government impacts the critical path.

3.7.1 Justification of Delay

The project 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 project 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 a calculated schedule delay, will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

3.7.2 Submission Requirements

Submit a justification for each request for a change in the contract completion date of less than 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 project 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.

Identify activities impacted in each justification for change by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

The Contracting Officer may request an interim update with revised activities for any requested time extension of over 2 weeks. 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,

submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The Contracting Officer will approve proposed revisions to the schedule prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. Include these revisions in the project 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, 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 WEEKLY PROGRESS MEETINGS

a. The Government and the Contractor shall meet weekly (or as otherwise mutually agreed to) between the meetings described in paragraph PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. The then current and approved schedule update shall be used for the purposes of this meeting and for the production and review of reports. The Contractor's Project Manager and the Authorized Representative of the Contracting Officer shall attend. The weekly progress meeting will address the status of RFI's, RFP's and Submittals.

b. Provide a bar chart produced by the scheduling software, organized by Total Float and Sorted by Early Start Date, and a two week "look-ahead" schedule by filtering all schedule activities to show only current ongoing activities and activities schedule to start during the upcoming two weeks, organized by Work Area Code (AREA) and sorted by Early Start Date.

c. The Government and the Contractor shall jointly review the reports. If it appears that activities on the longest path(s) which are currently driving the calculated completion date (driving activities), are not progressing satisfactorily and therefore could jeopardize timely project completion, corrective action must be taken immediately. Corrective action includes but is not limited to: increasing the number of work crews; increasing the number of work shifts; increasing the number of hours worked per shift; and determining if Government responsibility coded activities require Government corrective action.

3.10 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.

3.11 TRANSFER OF SCHEDULE DATA INTO RMS/QCS

The Contractor shall download and upload the schedule data into the Resident Management System (RMS) prior to RMS databases being transferred to the Government and is considered to be additional supporting data in a

form and detail required by the Contracting Officer pursuant to FAR 52.232-5 - Payments under Fixed-Price Construction Contracts. The receipt of a proper payment request pursuant to FAR 52.232-27 - Prompt Payment for Construction Contracts is contingent upon the Government receiving both acceptable and approvable hard copies and electronic export from QCS of the application for progress payment.

3.12 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

SECTION 01 32 33

CONSTRUCTION PHOTOGRAPHY

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section includes construction photographs consisting of prints, and digital image files, showing the pre-construction condition, post-construction condition, and progress of each definable feature of work during the contract period, including personnel, work methods, and equipment utilized, and includes aerial obliques.

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 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Photography Plan; G,COR

Pre-Construction Photographs; G,COR

Email digital images of pre-construction photographs to the COR within 24 hours of when taken. After approval of email, submit prints of photographs within 10 calendar days. Submit approved digital images on compact disk (CD) upon completion of work.

Aerial Photographer Qualifications; G,DO

Submit aerial photographer qualifications prior to commencing aerial photography. Include aerial photography examples.

SD-07 Certificates

Construction Photographs; G,COR

Email digital images of construction photographs to the COR within 24 hours of when taken. After approval of email, submit construction prints and digital images, within 10 calendar days.

Post-Construction Photographs; G,COR

Email digital images of post-construction photographs to the COR within 24 hours of when taken. After approval of email, submit post-construction prints and digital images, within 10 calendar days.

Aerial Obliques; G, DO

Submit aerial obliques digital images within 10 days of when they are taken.

1.3 QUALITY ASSURANCE

Aerial photography shall be performed by an independent aerial photography company, that has a minimum of 5 years documented experience in aerial photography, similar in nature to the aerial photography required under this Contract.

1.4 PHOTOGRAPHY PLAN

Prepare a photography plan which includes the following information: items to be photographed locations, and the time the images are to be taken.

1.5 GENERAL REQUIREMENTS

1.5.1 Prints

Prints shall be 8 inches x 10 inches, color, on single weight paper with smooth surface, glossy finish. Include the following identification information on a label on the back of each print: name and location of project, item/action being photographed, General Contractor, contract number, orientation of view, date and time of exposure, and name and address of photographer. A sample label is attached to this section. Provide 3-inch, 3-ring binders and plastic print-holder pages for the size of prints submitted.

1.5.2 Digital Images

Take digital images with a high quality digital camera using a minimum of 6,000,000 pixels (6 Megapixels). Identify images by number, and referenced to a printed listing containing the same identification information as used for the prints.

1.5.3 Quantities

a. Submit 2 sets of all prints to the COR.

b. Submit 1 set of all digital images, including aerial obliques, to the following address:

U.S. Army Corps of Engineers
Philadelphia District
Design Branch (CENAP-EC-EC)
ATTN: Mr. T. Heary
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390

c. Submit 1 set of digital images, including aerial obliques, to the following address:

U.S. Army Corps of Engineers
Philadelphia District
Public Affairs Office (CENAP-PA)
ATTN: Mr. E. Voigt
Wanamaker Building
100 Penn Square East

Philadelphia, PA 19107-3390

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 PHOTOGRAPHY

Photograph personnel, material, work methods, and equipment utilized during the entire contract period, as follows:

a. Prior to commencement of work, take a minimum of 25 photographs of pre-construction existing conditions, including beach structures, groins, outfall piping, supporting cribbage, timber support piles, Contractor access points, and lay down area. Take photographs as close as possible to the beginning of the work and with sufficient detail to accurately depict existing site conditions.

b. During the progress of work, take a minimum of 15 photographs monthly of each defineable feature of work (defineable "feature of work" is defined in Section 01 45 05 QUALITY CONTROL SYSTEM (QCS)). Photographs shall be of working personnel and equipment, depicting the work methods being utilized, taken during normal working hours.

c. After completion of work, take a minimum of 25 photographs from the same pre-construction and progress construction locations. Photography shall be taken immediately after the end of construction work.

d. Submit a reference plan sheet or map with the weekly construction photos, showing the locations of the photographs.

e. Photograph special events throughout the contract period as directed by the Contracting Officer.

3.2 PHOTOGRAPHIC DOCUMENTATION OF SURVEYS

The photographs specified in Section 01 71 23 SURVEY REQUIREMENTS and Section 01 76 00 STRUCTURES MONITORING, are in addition to those required in this section.

3.3 AERIAL OBLIQUES

Obtain aerial oblique photos of the entire project length prior to commencement of beachfill work, during the progress of work (monthly), and after completion of beachfill work. Take aerial photos with overlapping views to accurately record details of the project work. The photos shall exhibit good critical focus. An aerial oblique photo example is attached to this section. This example represents the altitude at which the photos should be taken (approximately 300 - 400 feet) as well as the level of detail and quality of those photos. In general, the horizon shall be approximately 1/5 down from the top of the frame with about a 2/3 land and a 1/3 water split, horizontally.

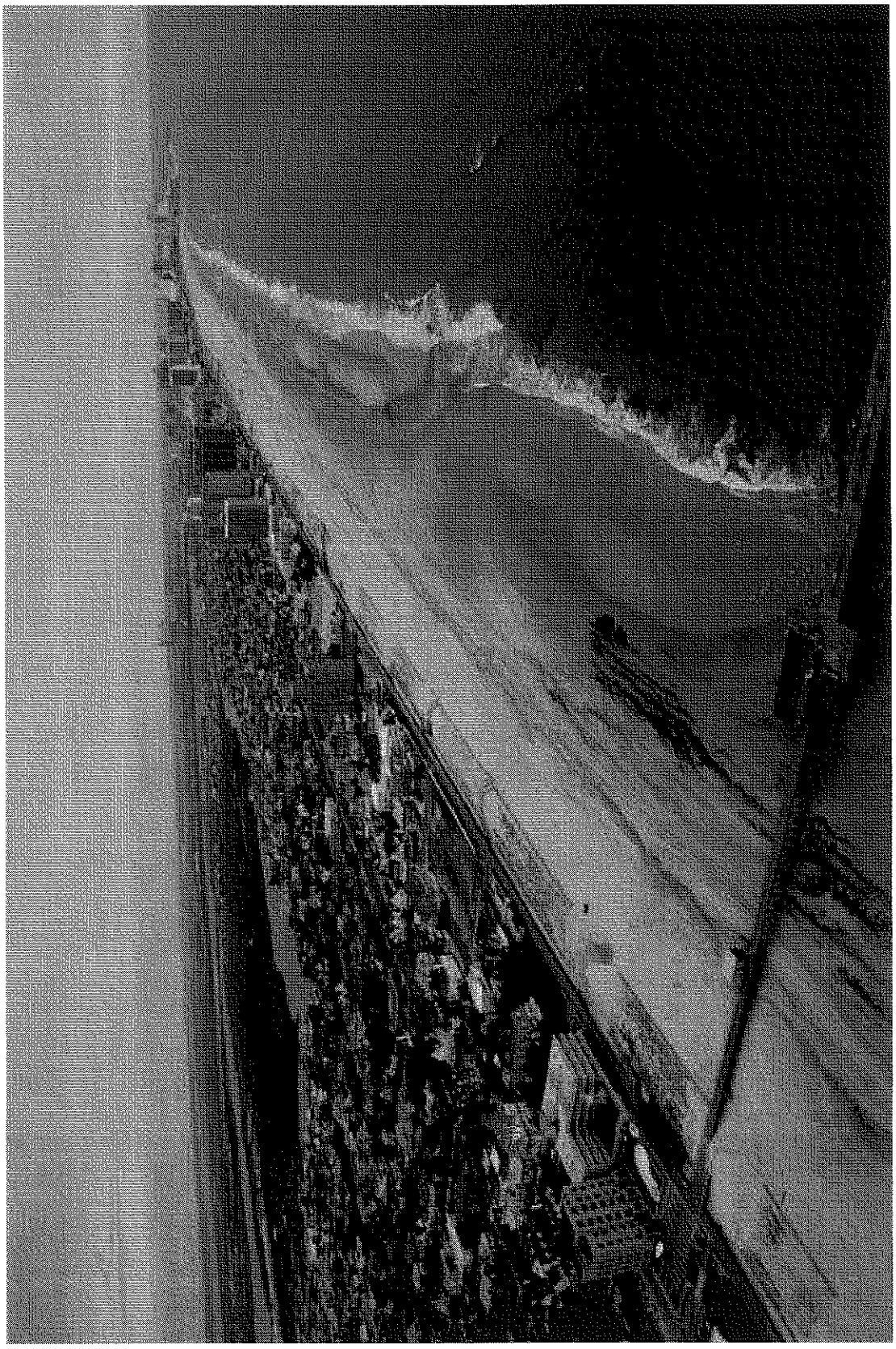
3.4 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the

the cost of all the bid items.

-- End of Section --

Aerial Oblique Example



SAMPLE PHOTO LABEL

ABC Photography Inc.
123 1st Ave, Anywhere, DE 08000
(302) 555-1212

Name & Location of Project:
Flood Control and Coastal Emergency Repair
Delaware Coast from Cape
Henlopen to Fenwick Island,
Delaware

Contract Number: W912BU-12-C-0053
General Contractor: Fritzinger Construction Co.
Item/Action Photographed: Handicap Crossover Repair
Orientation: East
Date Taken: 06/01/2012 **Time:** 10:00am **Photo#:** 123

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

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 are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's Quality Control (CQC) System Manager to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals 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 are to be scheduled and made prior to the acquisition of the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.2 DEFINITIONS

1.2.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals which are required prior to or the start of the next major phase of the construction on a multi-phase contract, includes schedules, tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

Certificates of insurance

Surety bonds

List of proposed Subcontractors

List of proposed products

Construction progress schedule

Network Analysis Schedule (NAS)

Submittal register

Schedule of prices

Accident Prevention Plan (APP)

Work plan

Quality Control (QC) plan

Environmental protection plan

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-04 Samples

Fabricated or unfabricated physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or

system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily logs and checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

Text of posted operating instructions.

SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and (MSDS)concerning impedances, hazards and safety precautions.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

Interim "DD Form 1354" with cost breakout for all assets 30 days prior to facility turnover.

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, except those SD-01 Pre-Construction Submittals noted above, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

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 the following in accordance with this section.

SD-01 Preconstruction Submittals

Submittal Register; G,COR

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.4.1 Government Approved (G)

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 titled, "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.4.2 For Information Only (FIO)

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.

1.5 PREPARATION

1.5.1 Transmittal Form

Use the attached sample transmittal form (ENG Form 4025-R) for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms are included in the QCS software that the Contractor is required to use for this contract. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

1.6 QUANTITY OF SUBMITTALS

The Contractor shall be responsible for all costs incurred in transmitting the required information for review in the submittal process. Submit all submittals (except SD-04 Samples) to the COR electronically by email in PDF format. If files are too large for email, utilize a file transfer site provided by the Government. In addition, submit hard copies of all submittals in the quantities as specified in the paragraphs below.

Maintain hard copies of approved submittals at the field locations (field office, site facilities, dredge, etc.) for use by Contractor and Government personnel. Email addresses, maximum email file size and file transfer site addresses will be provided at the preconstruction conference. Submittal tracking and transmittal documents (Eng Form 4025-R) will continue to utilize RMS/QCS as specified in Section 01 45 05 QUALITY CONTROL SYSTEM (QCS).

1.6.1 Number of Copies of SD-02 Shop Drawings

Submit 2 copies to the Contracting Officer Representative of shop drawings requiring review and approval.

1.6.2 Number of Copies of SD-03 Product Data and SD-08 Manufacturer's Instructions

Submit in compliance with quantity requirements specified for shop drawings.

1.6.3 Number of Samples SD-04 Samples

a. Submit two samples, or two sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by approving authority and one will be returned to Contractor.

b. Submit one sample panel or provide one sample installation where directed. Include components listed in technical section or as directed.

c. Submit one sample installation, where directed.

d. Submit one sample of non-solid materials.

1.6.4 Number of Copies SD-05 Design Data and SD-07 Certificates

Submit in compliance with quantity requirements specified for shop drawings.

1.6.5 Number of Copies SD-06 Test Reports and SD-09 Manufacturer's Field Reports

Submit in compliance with quantity and quality requirements specified for shop drawings other than field test results that will be submitted with QC reports.

1.6.6 Number of Copies of SD-10 Operation and Maintenance Data

Submit five copies of O&M Data to the Contracting Officer for review and approval.

1.6.7 Number of Copies of SD-01 Preconstruction Submittals and SD-11 Closeout Submittals

Submit in compliance with quantity requirements specified for shop drawings.

1.7 FOR 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.

1.8 VARIATIONS

Variations from contract requirements require Government approval pursuant to contract Clause FAR 52.236-21 and will be considered where advantageous to Government.

1.8.1 Considering Variations

Discussion with Contracting Officer prior to submission, will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.8.2 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

Check the column "variation" of ENG Form 4025-R for submittals which include proposed deviations requested by the Contractor. 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.

1.8.3 Warranting That Variations Are Compatible

When delivering a variation for approval, Contractor, warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.8.4 Review Schedule Is Modified

In addition to normal submittal review period, a period of 10 working days will be allowed for consideration by the Government of submittals with variations.

1.9 SUBMITTAL REGISTER

Prepare and maintain submittal register, as the work progresses. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by Government; retain data which is output in columns (a), (g), (h), and

(i) as approved. A submittal register showing items of equipment and materials for which submittals are required by the specifications is provided as an attachment. This list may not be all inclusive and additional submittals may be required. Maintain a submittal register for the project as specified herein and in accordance with Section 01 45 05 QUALITY CONTROL SYSTEM (QCS). The Government will provide the initial submittal register in electronic format with the following fields completed, to the extent that will be required by the Government during subsequent usage.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns, including dates on which submittals are received and returned by the Government.

1.9.1 Use of Submittal Register

Submit submittal register. Submit with QC plan and project schedule. Verify that all submittals required for project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

Column (g) Contractor Submit Date: Scheduled date for approving authority to receive submittals.

Column (h) Contractor Approval Date: Date Contractor needs approval of submittal.

1.9.2 Contractor Use of Submittal Register

Update the following fields with each submittal throughout contract.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.

Column (l) List date of submittal transmission.

Column (q) List date approval received.

1.9.3 Approving Authority Use of Submittal Register

Update the following fields.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (l) List date of submittal receipt.

Column (m) through (p) List Date related to review actions.

Column (q) List date returned to Contractor.

1.9.4 Copies Delivered to the Government

Deliver one copy of submittal register updated by Contractor to Government with each invoice request.

1.10 SCHEDULING

Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. No delay damages or time extensions will be allowed for time lost in late submittals.

a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.

b. Submittals called for by the contract documents will be listed on the register. If a submittal is called for but does not pertain to the contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the register or marked "N/A."

c. Re-submit register and annotate monthly by the Contractor with actual submission and approval dates. When all items on the register have been fully approved, no further re-submittal is required.

d. Carefully control procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register".

e. Period of review for each resubmittal is the same as for initial submittal.

1.11 GOVERNMENT APPROVING AUTHORITY

When approving authority is Contracting Officer, the Government will:

a. Note date on which submittal was received.

b. Review submittals for approval within scheduling period specified and only for conformance with project design concepts and compliance with contract documents.

c. Identify returned submittals with one of the actions defined in paragraph titled, "Review Notations", of this section and with markings appropriate for action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date approved submittals. Electronic email will be sent from the Government to the Contractor with the Review Notation, as specified below.

Hard copies of submittals will not be returned. If the Government performs a conformance review of other Designer of Record approved submittals, the submittals will be so identified and returned, as described above.

1.11.1 Review Notations

Government review will be completed within 14 calendar days after date of receipt of submission by the Government. Submittals will be returned to the Contractor with the following notations:

a. Submittals marked "approved" or "accepted" authorize the Contractor to proceed with the work covered.

b. Submittals marked "approved as noted" "or approved except as noted, resubmittal not required," authorize the Contractor to proceed with the work covered provided he takes no exception to the corrections.

c. Submittals marked "not approved" or "disapproved," or "revise and resubmit," indicate noncompliance with the contract requirements or design concept, or that submittal is incomplete. Resubmit with appropriate changes. No work shall proceed for this item until resubmittal is approved.

d. Submittals marked "not reviewed" will indicate submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.

1.12 DISAPPROVED SUBMITTALS

Contractor shall make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications; notice as required under the clause titled, "Changes," is to be given to the Contracting Officer. Contractor is responsible for the dimensions and design of connection details and construction of work. Failure to point out deviations may result in the Government requiring rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, the Contractor shall make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

The Contractor shall pay an administrative fee to the Government in the amount of $500 for each Contractor resubmittal required in excess of the initial submittal and one resubmittal for required corrections. The Contracting Officer will deduct any assessed administrative fees from the progress payments due the Contractor.

1.13 APPROVED SUBMITTALS

The Contracting Officer's approval or acceptance of submittals is not to be construed as a complete check, and indicates only that the general method of construction, materials, detailing and other information are satisfactory.

Approval or acceptance 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 or accepted 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.

1.14 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor shall ensure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not approved will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of his responsibilities under the contract.

1.15 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.16 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements is to 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 --

This page was intentionally left blank for duplex printing.

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.)* *b.*	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

ENG FORM 4025-R, MAR 95 (NAP01) *(ER 415-1-10)*

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 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.

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		00 70 00	SD-01 Preconstruction Submittals																
			Payroll Basic Records &		FIO														
			Statements of Compliance																
			Affirmative Action Compliance		FIO														
			Plan																
			Dredging Progress Schedule		FIO														
			Certificate of Insurance		FIO														
		00 73 00	SD-01 Preconstruction Submittals																
			Copy of Request to USCG for		FIO														
			Notice to Mariners																
			Copy of Request to USCG for		FIO														
			Movement of Navigation Aids																
			Copy of Request to USCG for		FIO														
			Placing Submerged Pipelines																
			Across Channel																
			Evidence of Insurance		FIO														
		01 32 01	SD-01 Preconstruction Submittals																
			Project Schedule	3.4	G COR														
		01 32 33	SD-01 Preconstruction Submittals																
			Photography Plan	1.4	G COR														
			Pre-Construction Photographs		G COR														
			Aerial Photographer		G DO														
			Qualifications																
			SD-07 Certificates																
			Construction Photographs		G COR														
			Post-Construction Photographs		G COR														

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		01 32 33	Aerial Obliques		G	DO													
		01 33 00	SD-01 Preconstruction Submittals																
			Submittal Register	1.9	G	COR													
		01 35 26	SD-01 Preconstruction Submittals																
			Qualifications of Safety		G	DO													
			Personnel																
			Accident Prevention Plan (APP)	1.6	G	DO													
			Contractor Accident Prevention	1.6	G	DO													
			Plan (APP) Checklist																
			Activity Hazard Analysis (AHA)	1.7	G	DO													
			Crane Critical Lift Plan	1.6.1	G	DO													
			Crane Operators	1.5.1.3	G	DO													
			SD-06 Test Reports																
			Notifications and Reports	1.13	FIO														
			Accident Reports	1.13.2	FIO														
			OSHA 300 Log	1.13.3	FIO														
			Monthly Record of Work-Related		FIO														
			Injuries/Illnesses & Exposure																
			Crane Reports	1.13.5	FIO														
			SD-07 Certificates																
			Confined Space Entry Permit	1.9	FIO														
			Hot work permit	1.9	FIO														
			License Certificates	1.15	FIO														
			Certificate of Compliance	1.13.6	FIO														
			Floating Plant Inspection		G	DO													
		01 35 30	SD-01 Preconstruction Submittals																

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		01 35 30	MEC Safety and Work Plan	1.5	G	DO													
			SD-04 Samples																
			Discharge End Screening Device	3.1.1	G	COR													
		01 35 43	SD-06 Test Reports																
			Initial 24-hour Data Log	3.1	G	COR													
			Full Monthly Engine Data	3.1	G	COR													
			Engine Information	3.1	G	COR													
			Support Vessels and Land Equipment	3.2	G	COR													
		01 35 50	SD-07 Certificates																
			Diving Plan	1.5	G	DO													
			Activity Hazard Analysis Plan	1.6	G	DO													
			Emergency Management Plan	1.7	G	DO													
			Diving Operations Manual	1.8	G	DO													
			Dive Personnel Qualifications	1.9	G	DO													
			Air Quality Certifications	1.10	G	DO													
			Daily Logs	1.11	G	DO													
		01 45 00	SD-01 Preconstruction Submittals																
			Qualifications		G	DO													
			Quality Control Plan	3.2	G	DO													
			SD-06 Test Reports																
			Reports		G	COR													
		01 50 00	SD-01 Preconstruction Submittals																
			Traffic control plan	3.4.1	G	COR													
			SD-07 Certificates																
			Temporary Facilities Layout		G	COR													

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG# PARAGRAPH	CLASSIFICATION GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY						REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 57 20	SD-01 Preconstruction Submittals														
			Environmental Protection Plan	1.7	G DO												
			Piping Plover Protection	3.7.2	G DO												
			SD-07 Certificates														
			Qualifications	3.7.2.2	G COR												
			Reports	3.7.2.6	FIO												
			SD-11 Closeout Submittals														
			Records	3.7.2.7	FIO												
		01 57 23	SD-07 Certificates														
			Mill Certificate or Affidavit	2.1.3	FIO												
		01 71 23	SD-01 Preconstruction Submittals														
			Qualifications	1.8	G DO												
			Surveying Procedures and		G DO												
			Equipment														
			SD-07 Certificates														
			Pre-Placement Condition		G DO												
			Surveys														
			Before-Dredging Borrow Area		G DO												
			Surveys														
			After-Dredging Borrow Area		G DO												
			Surveys														
			Before-Beachfill Surveys		G DO												
			After-Beachfill Surveys		G DO												
			Survey Logs	3.3	FIO												
			DGPS Positioning		FIO												

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		01 71 23	Post-Placement Condition		G	DO													
			Surveys																
			Photographic Documentation of	3.5.7	FIO														
			Surveys																
			Metadata	3.10	G	DO													
		01 76 00	SD-01 Preconstruction Submittals																
			Qualifications		G	DO													
			Letter to Owners		G	DO													
			Structure Monitoring Plan		G	DO													
			SD-07 Certificates																
			Monitoring Report		G	DO													
		01 78 39	SD-07 Certificates																
			Progress Prints		G	COR													
			SD-11 Closeout Submittals																
			As-Built Drawings		G	COR													
		06 13 33	SD-01 Preconstruction Submittals																
			Detailed Work Plan		G	DO													
			SD-02 Shop Drawings																
			Installation Drawings		G	DO													
			Spliced Timber Strut Connections	1.7	G	DO													
			Pile shoes		G	DO													
			SD-07 Certificates																
			Preservative Treated Timber	1.5.1	G	DO													
			MSDS and CIS	1.5.2	G	DO													
			Pesticide Applicator	1.5.3	G	DO													
			Equipment Description		G	DO													

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		06 13 33	Hardware	2.1.3	G	DO													
			SD-11 Closeout Submittals																
			Pile Installation Record	3.3.5	G	DO													
			Pile Installation Drawings	1.8	G	DO													
		31 05 19	SD-03 Product Data																
			Thread	2.1.2	G	DO													
			Manufacturing Quality Control	2.2	G	DO													
			Sampling and Testing																
			SD-07 Certificates																
			Geotextile	2.1.1	G	DO													
		32 15 00	SD-01 Preconstruction Submittals																
			Work Plans		G	DO													
			SD-03 Product Data																
			Crossover Materials		G	DO													
			Post and Rail Fence	2.2	G	DO													
			Split Rail Fence	2.2	G	DO													
			Source for I-5 Material		G	COR													
			Stabilization Mats	2.5	G	DO													
			SD-04 Samples																
			I-5 Material		G	DO													
			Stabilization Mat Sample		G	DO													
			SD-06 Test Reports																
			Grain Size Distribution Curves		G	DO													
			Testing Results		G	DO													
			SD-07 Certificates																
			MSDS and CIS	1.4.2	G	DO													

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		32 15 00	Pesticide Applicator		G	DO													
			Best Management Practices	1.4.3	G	DO													
			(BMPs)																
			Nuclear Gauge		G	DO													
			SD-08 Manufacturer's Instructions																
			Stabilization Mat Installation and Maintenance		FIO														
		32 92 00	SD-07 Certificates																
			Sand Fence		FIO														
			Dune Grass Plants		FIO														
		33 40 00	SD-01 Preconstruction Submittals																
			Detailed Work Plan		G	DO													
			Shoring and Sheeting Work Plan		G	DO													
			SD-02 Shop Drawings																
			Outfall Pipe Modifications		G	DO													
			SD-03 Product Data																
			Ductile Iron Pipe and Fittings	2.1.1	G	DO													
			Universal Flexible Pipe Coupling	2.1.3	G	DO													
			Elastomeric Sealant		G	DO													
			Rubber Gaskets		G	DO													
			SD-07 Certificates																
			Ductile Iron Pipe and Fittings	2.1.1	G	DO													
			Universal Flexible Pipe Coupling	2.1.3	G	DO													
			Elastomeric Sealant		G	DO													
			Rubber Gaskets		G	COR													
			Outfall Pipe Repairs		FIO														

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
BRIGANTINE INLET TO GREAT EGG HARBOR-MARGATE AND LONGPORT

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		35 20 23	SD-01 Preconstruction Submittals															
			Dredge Plant Instrumentation		G	SAM												
			Plan															
			SD-07 Certificates															
			Letter of Silent Inspector		G	OP												
			Certification															
		35 31 00	SD-01 Preconstruction Submittals															
			Borrow Areas		G	DO												
			Debris Prevention Plan		G	COR												
			Work Plan		G	DO												
			Pumpout Plan		G	COR												
			Accident Prevention Plan		G	DO												
			Grade Stake Recovery Plan		G	COR												
			SD-06 Test Reports															
			Test Reports		G	DO												
			SD-07 Certificates															
			Daily Report of Operations		G	COR												
			Fuel Usage		F	IO												
			Request to Adjust Construction		G	DO												
			Template															
			Daily Dredge Location		G	DO												
			Maps of Dredge Position		G	DO												

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

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 OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.32	(2012) Fall Protection
ASSE/SAFE A10.34	(2001; R 2012) Protection of the Public on or Adjacent to Construction Sites
ASSE/SAFE Z359.1	(2007) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME B30.22	(2010) Articulating Boom Cranes
ASME B30.3	(2012) Tower Cranes
ASME B30.5	(2011) Mobile and Locomotive Cranes
ASME B30.8	(2010) Floating Cranes and Floating Derricks

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	(2013) Standard for Portable Fire Extinguishers
NFPA 51B	(2009; TIA 09-1) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
NFPA 70E	(2012; Errata 2012) Standard for Electrical Safety in the Workplace

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011; Change 7 2012) Safety and Health Requirements Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

10 CFR 20	Standards for Protection Against Radiation
29 CFR 1910	Occupational Safety and Health Standards

29 CFR 1910.146	Permit-required Confined Spaces
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 1926.1400	Cranes & Derricks in Construction
29 CFR 1926.16	Rules of Construction
29 CFR 1926.500	Fall Protection
CPL 2.100	(1995) Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146

1.2 DEFINITIONS

a. High Visibility Accident. Any mishap which may generate publicity or high visibility.

b. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.

c. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:

(1) Death, regardless of the time between the injury and death, or the length of the illness;

(2) Days away from work (any time lost after day of injury/illness onset);

(3) Restricted work;

(4) Transfer to another job;

(5) Medical treatment beyond first aid;

(6) Loss of consciousness; or

(7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

d. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

e. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the eight elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; or collision, including unplanned contact between the load, crane, or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to

material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.) Any mishap meeting the criteria described above shall be documented in both the Contractor Significant Incident Report (CSIR) submitted within five days both as provided by the Contracting Officer.

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" are submittals required to be submitted to, and approved by, the office indicated prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," shall be submitted to, and approved or reviewed by the office indicated, prior to commencing the particular task to which the submittal is associated.

SD-01 Preconstruction Submittals

Qualifications of Safety Personnel; G,DO

Submit names and qualifications of the Contractor's proposed safety representatives. This includes Site Safety and Health Officer (SSHO), alternate SSHO, and Designated Representatives.

Accident Prevention Plan (APP); G,DO

Contractor Accident Prevention Plan (APP) Checklist; G,DO

Submit checklist with Accident Prevention Plan

Activity Hazard Analysis (AHA); G,DO

Crane Critical Lift Plan; G,DO

Proof of qualification for Crane Operators; G,DO

SD-06 Test Reports

Notifications and Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph, "Notifications and Reports."

Accident Reports

OSHA 300 Log

Monthly Record of Work-Related Injuries/Illnesses & Exposure

Crane Reports

SD-07 Certificates

Confined Space Entry Permit

Hot work permit

License Certificates

Certificate of Compliance (Crane)

Floating Plant Inspection; G,DO

Submit a copy of the annual inspection of all plants not subject to Coast Guard inspection, prior to start of work.

1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, comply with the most recent edition of USACE EM 385-1-1, and federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.5 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.5.1 Personnel Qualifications

1.5.1.1 Site Safety and Health Officer (SSHO)

The SSHO must meet the requirements of EM 385-1-1 section 1 and ensure that the requirements of 29 CFR 1926.16 are met for the project. Provide a Safety oversight team that includes a minimum of 1 person to function as the Site Safety and Health Officer (SSHO). The SSHO or an equally-qualified Designated Representative/alternate shall be at each work site at all times to implement and administer the Contractor's safety program and government-accepted Accident Prevention Plan. The SSHO's training, experience, and qualifications shall be as required by EM 385-1-1 paragraph 01.A.17, titled SITE SAFETY AND HEALTH OFFICER (SSHO), and all associated sub-paragraphs.

A Competent Person shall be provided for each of the hazards identified in the Contractor's Safety and Health Program, in accordance with the accepted Accident Prevention Plan, and shall be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed. Provide the credentials of the Competent Persons(s) to the Contracting Officer for acceptance in consultation with the Safety Office.

1.5.1.1.1 Contractor Quality Control System Manager (CQCSM):

The Contractor Quality Control System Manager cannot be the SSHO on this project, even though the QC has safety inspection responsibilities as part of the QC duties.

1.5.1.2 USACE Dredging Contract Requirements

1.5.1.2.1 SSHO Staffing for USACE Dredging Contracts

a. Dredging contracts may include several project sites; this contract

will require a minimum of one full time SSHO(s) assigned for the project.

1.5.1.2.2 SSHO Requirements for Dredging

a. In addition to requirements stated elsewhere in this specification, the SSHO shall be present at the project site, located so they have full mobility and reasonable access to all major work operations, for at least one shift in each 24 hour period when work is being done. The SSHO, or an Alternate SSHO, shall be available and on-site during all shifts for immediate verbal consultation and notification, either by phone or radio. The SSHO shall be a full-time, dedicated position, except as noted above. The SSHO shall report to a senior corporate official.

b. The SSHO or alternate shall inspect all work areas and operations during initial set-up and at least monthly observe and provide personal oversight on each shift during dredging operations for projects with many work sites, more often for those with less work sites.

c. For projects with multiple shifts or when SSHO is temporarily off-site, an Alternate SSHO shall be assigned and on-site to ensure SSHO coverage for the project at all times work activities are conducted. The Alternate SSHO must meet the same requirements and assume the responsibilities of the project SSHO. The Alternate SSHO position may be a collateral duty.

1.5.1.2.3 Designated Representative (DR) Requirements for Dredging

a. Designated Representatives (DR) are collateral duty safety personnel, with safety duties in addition to their full-time occupation, and support and supplement the SSHO efforts in managing, implementing and enforcing the Contractor's Safety and Health Program. DRs shall be individual(s) with work oversight responsibilities, such as masters, mates, fill foremen, and superintendents. DRs should not be positions requiring continuous mechanical or equipment operations, such as equipment operators.

b. A DR shall be appointed for each work location. Example of one work location is reflected in each of the following: dredge and other floating plant, dredged material placement sites, towing and scow operations, and other operations.

c. The DRs shall perform safety program tasks as designated by the SSHO and report safety findings to the SSHO / Alternate SSHO. The SSHO shall document results of safety findings and provide information for inclusion in the CQC reports to the Government Representative.

Note: DRs shall be assigned to ensure coverage at each individual site location (beach, dredge, floating plant etc.) to ensure continuous 24/7 safety coverage.

1.5.1.2.4 Safety Personnel Training Requirements for Dredging

a. The SSHO, Alternate SSHO, and Designated Representatives for dredging contracts shall take either the OSHA 30-hour Construction Safety Course or an equivalent 30 hours of formal safety and health training covering the subjects of the OSHA 30-hour Course (see EM 385-1-1 Appendix A, paragraph 4.b) applicable to dredging work and given by qualified instructors.

b. The SSHO and Alternate SSHO shall also have taken 24 hours each of formal classroom or online safety and health related coursework each in the past 4 years. Hours spent as an instructor in such courses will be considered the same as attending them, but each course only gets credit once (ie. Instructing a 1-hour asbestos awareness course 5 times in the past 4 years provides one hour credit for training).

c. The SSHO, Alternate SSHO, and Designated Representatives shall each have a minimum of three years' continuous experience within the past 5 years in supervising/ managing dredging, marine or land-based construction, work managing safety programs or processes, or conducting hazard analyses and developing controls in activities or environments with similar hazards. This is in lieu of the construction experience required by paragraph 01.A.17.b, EM 385-1-1.

1.5.1.3 Crane Operators

Meet the crane operators requirements in USACE EM 385-1-1, Section 16 and Appendix I. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacitates of 50,000 pounds or greater, designate crane operators as qualified by a source that qualifies crane operators (i.e., union, a government agency, or an organization that tests and qualifies crane operators). Provide proof of current qualification.

1.5.2 Personnel Duties

1.5.2.1 Site Safety and Health Officer (SSHO) / Alternate SSHO

The SSHO / Alternate SSHO shall:

a. Conduct daily safety and occupational health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily quality control report.

b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

c. Maintain applicable safety reference material on the job site.

d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, initial phase meeting and periodic in-progress meetings.

e. Implement and enforce accepted APPs and AHAs.

f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. Post a list of unresolved safety and health deficiencies on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

h. Maintain a list of hazardous chemicals on site and their material safety data sheets.

Failure to perform the above duties will result in dismissal of the

superintendent, QC Manager, and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

1.5.3 Meetings

1.5.3.1 Preconstruction Safety Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction Safety conference. This includes the project superintendent, site safety and health officer, quality control system manager, and any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).

b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.

c. Deficiencies in the submitted APP will be brought to the attention of the Contractor, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

1.5.3.2 Safety Meetings

Conduct and document meetings as required by EM 385-1-1. Attach minutes showing contract title, signatures of attendees and a list of topics discussed to the contractor's daily quality control report.

1.6 ACCIDENT PREVENTION PLAN (APP)

Use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Complete and submit with the APP the CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST, which is attached to the end of this section. Specific requirements for some of the APP elements are described below. The APP shall be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the

person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated Site Safety and Health Officer, the Contractor Quality Control System Manager, and any designated CSP or CIH.

Submit the APP to the Contracting Officer 15 work days prior to the date of the preconstruction safety conference for acceptance. Submit APP in electronic format (CD ROM/PDF) and hard copy. Work cannot proceed without an accepted APP.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and CQCSM. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34,) and the environment.

Copies of the accepted plan shall be maintained at the Contractor's construction field office and any applicable remote sites (dredge, etc.), and at the job site. Continuously review and amend the APP, as necessary, throughout the life of the contract. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered.

1.6.1 EM 385-1-1 Contents

In addition to the requirements outlined in Appendix A of USACE EM 385-1-1, the following is required:

a. Crane Critical Lift Plan.
Prepare and sign weight handling critical lift plans for lifts that meet the criteria listed in EM 385-1-1, paragraph 16.H. Submit 15 work days prior to on-site work and include the requirements of USACE EM 385-1-1, paragraph 16.H. and the following:

(1) For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1400.

(2) For barge mounted mobile cranes, barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. The amount of list and trim shall be within the crane manufacturer's requirements.

1.7 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, Section 1. Submit the AHA for review at least 15 work days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the

Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

1.8 OSHA INSPECTIONS

Immediately notify the Contracting Officer when an OSHA Compliance Official (Federal or State representative) presents credentials and informs the Contractor that the workplace will be inspected for OSHA compliance. The Contractor shall also notify the Contracting Officer upon determination that an exit interview will take place upon completion of the OSHA inspection.

1.9 DISPLAY OF SAFETY INFORMATION

Within 1 calendar day after commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, shall be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, section 01.A.06. Additional items required to be posted include:

a. Confined space entry permit.

b. Hot work permit.

1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.11 EMERGENCY MEDICAL TREATMENT

Contractors shall arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.12 ACCIDENT INVESTIGATION

Chargeable lost time accidents are to be investigated by both the Contractor and the Contracting Officer. In addition to the accident reporting and recordkeeping requirements specified in EM 385-1-1, all accidents shall be investigated in depth to identify all causes and to recommend hazard control measures.

1.13 NOTIFICATIONS and REPORTS

1.13.1 Accident Notification

Verbally notify the Contracting Officer or Contracting Officer's Representative (COR) of all minor accidents as soon as reasonably possible, but not later than 24 hours after occurrence. Notify the Contracting

Officer as soon as practical, but no more than four hours after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000, or any weight handling equipment accident. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.13.2 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses, for Medical Treatment defined in paragraph DEFINITIONS, property damage accidents resulting in at least $20,000 in damages, and near misses as defined in EM 385-1-1, to establish the root cause(s) of the accident. Complete the applicable USACE Accident Report Form 3394, and provide the report to the Contracting Officer within 1 calendar day of the accident. The Contracting Officer will provide copies of any required or special forms.

b. Conduct an accident investigation for any weight handling equipment accident (including rigging gear accidents) to establish the root cause(s) of the accident, complete the WHE Accident Report (Crane and Rigging Gear) form and provide the report to the Contracting Officer within 30 calendar days of the accident. Do not proceed with crane operations until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer. The Contracting Officer will provide a blank copy of the accident report form.

EM 385-1-1 and the Contract Clause titled ACCIDENT PREVENTION are supplemented as follows: The prime Contractor shall report on ENG FORM 3394, provided by the Contracting Officer's Representative, all injuries to employees or to subcontractor employee, and all damage to property and/or equipment. A written report utilizing ENG FORM 3394 shall be submitted to the Contracting Officer within 24 hours following such accidents. The report shall include the following:

a. A description of the circumstances leading up to the accident, the cause of the accident, and corrective measures taken to prevent recurrence.

b. A description of the injury and name and location of the medical facility rendering examination and treatment.

c. A statement as to whether or not the employee was permitted to return to work after examination and treatment by the medical facility, and if not, an estimate or statement of the number of days lost from work. If there have been days lost from work, the employee must be re-examined and declared fit to resume work as of the date of the report.

1.13.3 OSHA 300 Log

Submit a copy of the OSHA 300 Log of Injuries on a monthly basis.

1.13.4 Monthly Record of Work-Related Injuries/Illnesses & Exposure

Submit a record of work-related injuries/illnesses and exposure on a monthly basis. That form is attached to this section.

1.13.5 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix I and as specified herein with Daily Reports of Inspections.

1.13.6 Certificate of Compliance

Provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). State within the certificate that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR 1926 and USACE EM 385-1-1 Section 16 and Appendix I. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. Also certify that all crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices). Post certifications on the crane.

1.14 HOT WORK

Submit and obtain a written permit prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, from the Fire Division. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. Provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" performed under this contract. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 30 minutes after completion of the task or as specified on the hot work permit.

When starting work, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Department phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DEPARTMENT IMMEDIATELY.

Obtain services from a NFPA Certified Marine Chemist for "HOT WORK" within or around flammable materials (such as fuel systems, welding/cutting on fuel pipes) or confined spaces (such as sewer wet wells, manholes, vaults, etc.) that have the potential for flammable or explosive atmospheres.

1.15 RADIATION SAFETY REQUIREMENTS

License Certificates for radiation materials and equipment shall be submitted to the Contracting Officer and Radiation Safety Office (RSO) for all specialized and licensed material and equipment that could cause fatal harm to construction personnel or to the construction project.

Workers shall be protected from radiation exposure in accordance with 10 CFR 20.

Loss of radioactive material shall be reported immediately to the

Contracting Officer.

In instances where radiography is scheduled near or adjacent to buildings or areas having limited access or one-way doors, no assumptions shall be made as to building occupancy. Where necessary, the Contracting Officer will direct the Contractor to conduct an actual building entry, search, and alert. Where removal of personnel from such a building cannot be accomplished and it is otherwise safe to proceed with the radiography, a fully instructed employee shall be positioned inside such building or area to prevent exiting while external radiographic operations are in process. Transportation of Regulated Amounts of Radioactive Material will comply with 49 CFR, Subchapter C, Hazardous Material Regulations. Local Fire authorities and the site Radiation Safety officer (RSO) shall be notified of any Radioactive Material use.

Transmitter Requirements: The base policy concerning the use of transmitters such as radios, cell phones, etc., must be adhered to by all contractor personnel. They must also obey Emissions control (EMCON) restrictions.

1.16 FACILITY OCCUPANCY CLOSURE

Streets, walks, and other facilities occupied and used by the Government shall not be closed or obstructed without written permission from the Contracting Officer.

1.17 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

a. Secure outside equipment and materials and place materials that could be damaged in protected areas.

b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.

c. Ensure that temporary erosion controls are adequate.

1.18 CONFINED SPACE ENTRY REQUIREMENTS.

Contractors entering and working in confined spaces while performing general industry work are required to follow the requirements of OSHA 29 CFR 1926 and comply with the requirements in Section 34 of EM 385-1-1, OSHA 29 CFR 1910, and OSHA 29 CFR 1910.146.

1.19 CRANE / WEIGHT HANDLING EQUIPMENT: NOTIFICATION

Notify the Contracting Officer 24-hours in advance of any crane or hoisting equipment entering the site (prior to inspection/tests) so that observation of the Contractor's inspection process and spot checks may be conducted.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

3.1.1 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocynates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. Low mercury lamps used within fluorescent lighting fixtures are allowed as an exception without further Contracting Officer approval. Notify the Radiation Safety Officer (RSO) prior to excepted items of radioactive material and devices being brought on base.

3.1.2 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e. 29 CFR Part 1910.1000). If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

3.2 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Ensure that each employee is familiar with and complies with these procedures and USACE EM 385-1-1, Section 12, Control of Hazardous Energy.

3.3 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

Establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

3.3.1 Training

Institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, provide training for each employee who might be exposed to fall hazards. Provide training by a competent person for fall protection in accordance with USACE EM 385-1-1, Section 21.B.

3.3.2 Fall Protection Equipment and Systems

Enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan

and/or AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, Paragraphs 21.N through 21.N.04. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with 29 CFR 1926.500, Subpart M, USACE EM 385-1-1 and ASSE/SAFE A10.32.

3.3.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ASSE/SAFE Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabineers shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 6 feet. The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

3.3.3 Horizontal Lifelines

Design, install, certify and use under the supervision of a qualified person horizontal lifelines for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500).

3.3.4 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1 and 29 CFR 1926 Subpart M.

3.3.5 Rescue and Evacuation Procedures

When personal fall arrest systems are used, ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the Accident Prevention Plan (APP).

3.4 EQUIPMENT

3.4.1 Material Handling Equipment

a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.

c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

3.4.2 Weight Handling Equipment

a. Equip cranes and derricks as specified in EM 385-1-1, section 16.

b. Comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.

c. Comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes, and ASME B30.8 for floating cranes and floating derricks.

d. Under no circumstance shall a Contractor make a lift at or above 90 percent of the cranes rated capacity in any configuration.

e. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and follow the requirements of USACE EM 385-1-1 Section 11 and ASME B30.5 or ASME B30.22 as applicable.

f. Do not crane suspended personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane.

g. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.

h. All employees must keep clear of loads about to be lifted and of suspended loads.

i. Use cribbing when performing lifts on outriggers.

j. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

k. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.

l. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available

for review by Contracting Officer personnel.

m. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

n. Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

3.4.3 USE OF EXPLOSIVES

Explosives shall not be used or brought to the project site without prior written approval from the Contracting Officer. Such approval shall not relieve the Contractor of responsibility for injury to persons or for damage to property due to blasting operations.

3.5 EXCAVATIONS

Soil classification must be performed by a competent person in accordance with 29 CFR 1926 and EM 385-1-1.

3.5.1 Utility Locations

All underground utilities in the work area must be positively identified by a third party, independent, private utility locating company in addition to any station locating service and coordinated with the station utility department.

3.5.2 Utility Location Verification

Physically verify underground utility locations, including utility depth, by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system.

3.5.3 Utilities Within and Under Concrete, Bituminous Asphalt, and Other Impervious Surfaces

Utilities located within and under concrete slabs or pier structures, bridges, parking areas, and the like, are extremely difficult to identify. Whenever contract work involves chipping, saw cutting, or core drilling through concrete, bituminous asphalt or other impervious surfaces, the existing utility location must be coordinated with station utility departments in addition to location and depth verification by a third party, independent, private locating company. The third party, independent, private locating company shall locate utility depth by use of Ground Penetrating Radar (GPR), X-ray, bore scope, or ultrasound prior to the start of demolition and construction. Outages to isolate utility systems must be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

3.6 ELECTRICAL

3.6.1 Portable Extension Cords

Size portable extension cords in accordance with manufacturer ratings for the tool to be powered and protected from damage. Immediately remove from service all damaged extension cords. Portable extension cords shall meet

the requirements of EM 385-1-1, NFPA 70E, and OSHA electrical standards.

3.7 WORK IN CONFINED SPACES

Comply with the requirements in Section 34 of USACE EM 385-1-1, OSHA 29 CFR 1910, OSHA 29 CFR 1910.146, OSHA Directive CPL 2.100 and OSHA 29 CFR 1926. Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedures. Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. (See Section 34 of USACE EM 385-1-1 for entry procedures.) All hazards pertaining to the space shall be reviewed with each employee during review of the AHA.

b. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

c. Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

3.8 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

This page was intentionally left blank for duplex printing.

USACE PRIME CONTRACTOR
Monthly Record of Work-Related Injuries/Illnesses & Exposure

US Army Corps of Engineers

Month _____
Year _____

In accordance with the provisions of EM 385-1-1, Section 01 Program Management, Paragraph 01.D Accident Reporting and Recording, sub-paragraphs 01.D.05, you (the Prime Contractor) shall provide a monthly record of all exposure and accident experience incidental to the work (this includes exposure and accident experience of the Prime Contractor and its sub-contractor(s). As a minimum , these records shall include exposure work hours and a record of occupational injuries and illnesses that include the data elements listed below. Definitional criteria for each data element is found in 29 CFR Part 1904. If the maintenance of OSHA 300 Logs are required by OSHA, most of this information can be obtained from those logs. If data on log provided below is revised after it is submitted to USACE, Contractor shall provide a revised report to the GDA. You must complete the USACE ENG Form 3394, Report of Accident Investigation Report for all recordable accidents. If you're not sure whether a case is recordable, call your local Safety and Occupational Health Office for help.

USACE Command	
Contractor Name	
Contract Number	
Project Title	
City	State
USACE Office Overseeing Work:	

Identify the person				Describe The Case			Classify the case											
(A)		(B1)	(B2)	(B3)	(C)	(D)	(E)	(F)	Using these categories, check ONLY the most serious result for each case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
															(M)					
Company Name	Prime or Sub (P or S)	Age	Gender	Date Employee Began Work on Job Covered by Contract	Job Title (e.g., Welder)	Date of injury or onset of illness (mo./day)	Where the event occurred (e.g. Loading dock north end)	Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death	Days away from work	Remained at work		On job transfer or restriction (days)	Away from work (days)	Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other Illnesses
											Job transfer or restriction	Other record-able cases								
									(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
									0	0	0	0	0	0	0	0	0	0	0	0

For Government Use Only

TYPE OF WORK ACTIVITY (Choose One):				Type of Contract (Choose One):	
Construction		Environmental Remed.			
Opn & Main.		Superfund		Civil Works	
Eng. Services		FUDS		Military Programs	
Dredging		IRP		Other	
Rsch. & Dev.		FUSRAP			
Emerg. Opns.		Ordnance/Expl. Cleanup			
Other		Environmental Other			

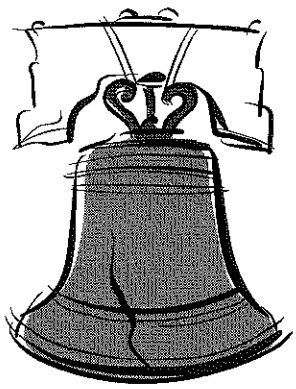
Exposure Hours	
Month	
Year to Date	

Certification of Record	
Name of Person Submit. Record	
Signature	
Date	

Page ___ of ___

IFB W912BU-14-B-0002

This page was intentionally left blank for duplex printing.



Philadelphia District
Safety and Occupational Health

Accident Prevention Plan (APP) Checklist
(EM 385-1-1, Appendix A, 15 September 2008)

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE:_____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
ALL CHECKLIST ITEMS SHALL BE COMPLETED!				
1. SIGNATURE SHEET. Title, signature, and phone number of the following:				
a. Plan ***Preparer*** (qualified person, Competent Person such as corporate safety staff person, QC).				
b. Plan ***Approval*** by company/corporate officers authorized to obligate the company (e.g. owner company president, regional vice president etc.)				
c. Plan ***Concurrence*** (e.g. Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional, project QC). Provide concurrence of other applicable corporate and project personnel (Contractor).				
2. BACKGROUND INFORMATION. List the following:				
a. Contractor;				
b. Contract number;				
c. Project name;				
d. Brief (detailed is preferred to facilitate the review process) project description, description of work to be performed, and location; phases of work anticipated (these will require an AHA).				
3. STATEMENT OF SAFETY AND HEALTH POLICY. Provide a copy of your current corporate/company Safety & Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. The Contractor's written safety program goals, objectives, and accident experience goals for this contract should be provided.				
4. RESPONSIBILITIES AND LINES OF AUTHORITIES. Provide the following:				
a. A statement of the employer's ultimate responsibility for the implementation of his SOH program;				
b. Identification and accountability of personnel responsible for safety at both corporate and project level. Contracts specifically requiring safety or industrial hygiene personnel shall include a copy of their resumes. Qualifications shall include the OSHA 30-hour course or equivalent course areas as listed here:				
(1) OSH Act/General Duty Clause;				
(2) 29 CFR 1904, Recordkeeping;				
(3) Subpart C: General Safety and Health Provisions, Competent Person				
(4) Subpart D: Occupational Health and Environmental Controls, Citations and Safety Programs;				
(5) Subpart E: PPE, types and requirements for use;				

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE:_____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
(6) Subpart F: understanding fire protection in the workplace;				
(7) Subpart K: Electrical;				
(8)Subpart M: Fall Protection;				
(9) Rigging, welding and cutting, scaffolding, excavations, concrete and masonry, demolition; health hazards in construction, materials handling, storage and disposal, hand and power tools, motor vehicles, mechanized equipment, marine operations, steel erection, stairways and ladders, confined spaces or any others that are applicable to the work being performed.				
c. The names of Competent and/or Qualified Person(s) and proof of competency/qualification to meet specific OSHA Competent/Qualified Person(s) requirements must be attached. The District SOHO will review the qualifications for acceptance;				
d. Requirements that no work shall be performed unless a designated competent person is present on the job site;				
e. Requirements for pre-task safety and health analysis;				
f. Lines of authority;				
g. Policies and procedures regarding noncompliance with safety requirements (to include disciplinary actions for violation of safety requirements) should be identified;				
h. Provide written company procedures for holding managers and supervisors accountable for safety.				
5. SUBCONTRACTORS AND SUPPLIERS. If applicable, provide procedures for coordinating SOH activities with other employers on the job site:				
a. Identification of subcontractors and suppliers (if known);				
b. Safety responsibilities of subcontractors and suppliers.				
6. TRAINING.				
a. Requirements for new hire SOH orientation training at the time of initial hire of each new employee.				
b. Requirements for mandatory training and certifications that are applicable to this project (e.g., explosive actuated tools, confined space entry, crane operator, diver, vehicle operator, HAZWOPER training and certification, PPE) and any requirements for periodic retraining/recertification.				
c. Procedures for periodic safety and health training for supervisors and employees.				
d. Requirements for emergency response training. > See 9.b. below for a list of requirements that may require emergency response training.				

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE: _____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
7. SAFETY AND HEALTH INSPECTIONS.				
a. Specific assignment of responsibilities for a minimum daily job site safety and health inspection during periods of work activity: Who will conduct (e.g., SSHO, PM, safety professional, QC, supervisors, employees – depends on level of technical proficiency needed to perform said inspections), proof of inspector's training/qualifications, when inspections will be conducted, procedures for documentation, deficiency tracking system, and follow-up procedures;				
b. Any external inspections/certifications that may be required (e.g., USCG).				
8. ACCIDENT REPORTING. The Contractor shall identify person(s) responsible to provide the following:				
a. Exposure data (man-hours worked);				
b. Accident investigations, reports, and logs: Report all accidents as soon as possible but not more than 24 hours afterwards to the Contracting Officer/Representative (CO/COR). The contractor shall thoroughly investigate the accident and submit the findings of the investigation along with appropriate corrective actions to the CO/COR in the prescribed format as soon as possible but no later than five (5) working days following the accident. Implement corrective actions as soon as reasonably possible;				
c. The following require immediate accident notification:				
(1) A fatal injury;				
(2) A permanent total disability;				
(3) A permanent partial disability;				
(4) The hospitalization of three or more people resulting from a single occurrence;				
(5) Property damage of $200,000 or more.				
9. PLANS (PROGRAMS, PROCEDURES) REQUIRED BY THE SAFETY MANUAL. Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the Contractor shall address all applicable occupational risks and compliance plans. Using the EM 385-1-1 as a guide, plans may include but not be limited to:				
a. Layout plans (04.A.01);				
b. Emergency response plans:				
(1) Procedures and tests (01.E.01);				
(2) Spill plans (01.E.01, 06.A.02);				
(3) Firefighting plan (01.E.01, Section 19);				

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE:_____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
(4) Posting of emergency telephone numbers (01.E.05);				
(5) Man overboard/abandon ship (Section19.A.04);				
(6) Medical Support. Outline on-site medical support and offsite medical arrangements including rescue and medical duties for those employees who are to perform them, and the name(s) of on-site Contractor personnel trained in first aid and CPR. A minimum of two employees shall be certified in CPR and first aid per shift/site (Section 03.A.02; 03.D);				
c. Plan for prevention of alcohol and drug abuse (01.C.02);				
d. Site sanitation plan (Section 02);				
e. Access and haul road plan (4.B);				
f. Respiratory protection plan (05.G);				
g. Health hazard control program (06.A);				
h. Hazard communication program (06.B.01);				
I. Process Safety Management Plan (06.B.04);				
j. Lead abatement plan (06.B.05 & specifications);				
k. Asbestos abatement plan (06.B.05 & specifications);				
l. Radiation Safety Program (06.E.03.a);				
m. Abrasive blasting (06.H.01);				
n. Heat/Cold Stress Monitoring Plan (06.I.02)				
o. Crystalline Silica Monitoring Plan (Assessment) (06.M) ;				
p. Night operations lighting plan (07.A.08);				
q. Fire Prevention Plan (09.A);				
r. Wild Land Fire Management Plan (09.K);				
s. Hazardous energy control plan (12.A.01);				
t. Critical lift Plan (16.H);				
u. Contingency plan for Floating Plants for severe weather (19.A.03);				
v. Float Plan (19.F.04);				
w. Site-Specific Fall Protection & Prevention Plan (21.C);				
x. Demolition plan (to include engineering survey) (23.A.01);				
y. Excavation/trenching plan (25.A.01);				
z. Emergency rescue (tunneling) (26.A.);				
aa. Underground construction fire prevention and protection plan (26.D.01);				

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE:_____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
bb. Compressed air plan (26.I.01);				
cc. Formwork and shoring erection and removal plans (27.C);				
dd. PreCast Concrete Plan (27.D);				
ee. Lift slab plans (27.E);				
ff. Steel erection plan (27.F.01);				
gg. Site Safety and Health Plan for HTRW work (28.B);				
hh. Blasting Safety Plan (29.A.01);				
ii. Diving plan (30.A.13);				
jj. Confined space Program (34.A).				
10. RISK MANAGEMENT PROCESSES. Detailed project-specific hazards and controls shall be provided by an **Activity Hazard Analysis** (01.A.13) for each major phase/activity of work.				
11. ABBREVIATED APP for LIMITED-SCOPE SERVICE, SUPPLY AND R&D CONTRACTS. If service, supply and R&D contracts with limited scopes are awarded, the contractor may submit an abbreviated Accident Prevention Plan. This APP shall address the following areas at a minimum. If other areas of the EM 385-1-1 are pertinent to the contract, the contractor must assure these areas are addressed as well.				
a. Title, signature, and phone number of the plan preparer.				
b. Background Information to include: Contractor; Contract number; Project name; Brief project description, description of work to be performed, and location (map); The project description shall provide a means to evaluate the work being done (see AHA requirements in 01.A.13) and associated hazards involved. Contractor's APP shall address the identified hazards involved and the control measures to be taken.				
c. Statement of Safety and Health Policy detailing their commitment to providing a safe and healthful workplace for all employees.				
d. Responsibilities and Lines of Authorities -- to include a statement of the employer's ultimate responsibility for the implementation of his SOH program; Identification and accountability of personnel responsible for safety at all levels to include designated site safety and health officer (SSHO) and associated qualifications. The District SOHO will review the qualifications for acceptance.				
e. Training - new hire SOH orientation training at the time of initial hire of each new employee and any periodic retraining/recertification requirements.				
f. Procedures for job site inspections - assignment of responsibilities and frequency.				

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE: _____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
g. Procedures for reporting man-hours worked and reporting and investigating any accidents as soon as possible but not more than 24 hours afterwards to the Contracting Officer/Representative (CO/COR). An accident that results in a fatal injury, permanent partial or permanent total disability shall be immediately reported to the Contracting Officer.				
h. Emergency Planning. Employees working alone shall be provided an effective means of emergency communication. This may be cellular phone, two-way radio or other acceptable means. The selected means of communication must be readily available and must be in working condition.				
i. Drinking Water provisions, toilet and washing facilities.				
j. First Aid and CPR training (at least two employees on each shift shall be qualified/certified to administer first aid and CPR) and provision of first aid kit (types/size).				
k. Personal Protective Equipment.				
(1) WORK CLOTHING - Minimum Requirements. Employees shall wear clothing suitable for the weather however minimum requirements for work shall be short-sleeve shirt, long pants (excessively long or baggy pants are prohibited) and leather work shoes. If analysis determines that safety-toed (or other protective) footwear is necessary (i.e., mowing, weed eating, chain saw use, etc), they shall be worn.				
(2) Eye and Face Protection. Eye and face protection shall be worn as determined by an analysis of the operations being performed HOWEVER, all involved in chain saw use, chipping, stump grinding, pruning operations, grass mowing, weed eating and blowing operations shall be provided safety eyewear (Z87.1) as a minimum.				
(3) Hearing Protection. Hearing protection must be worn by all those exposed to high noise activities (to include grass mowing and trimming, chainsaw operations, tree chipping, stump grinding and pruning).				
(4) Head Protection. Hard hats shall comply with ANSI Z89.1 and shall be worn by all workers when a head hazard exists. At a minimum, hard hats shall be worn when performing activities identified in (2) above.				
(5) High Visibility Apparel shall comply with ANSI/ISEA 107, Class 2 requirements at a minimum and shall be worn by all workers exposed to vehicular or equipment traffic.				
(6) Protective Leg chaps shall be worn by all chainsaw operators.				
(7) Gloves of the proper type shall be worn by persons involved in activities that expose the hands to cuts, abrasions, punctures, burns and chemical irritants.				
(8) If work is being performed around water and drowning is a hazard, PFDs must be provided and worn as appropriate.				
l. Machine Guards and safety devices. Lawn maintenance equipment must have appropriate guards and safety devices in place and operational.				

CONTRACTOR ACCIDENT PREVENTION PLAN (APP) CHECKLIST (EM 385-1-1, Appendix - A, dated: 15 Sept. 08)

Minimum Basic Outline for Accident Prevention Plan

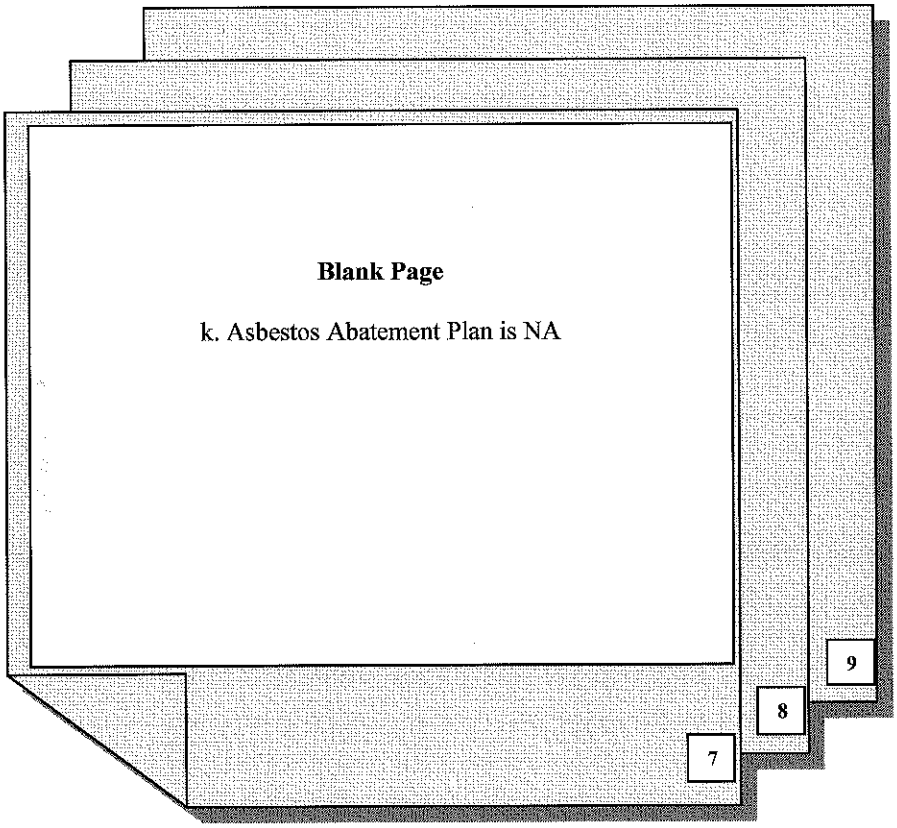
The APP is the Contractor Safety and Health Program Document. The following Site Specific Areas will be addressed:

NOTE: 1. Contractor SHALL complete this checklist and submit it with their APP (an APP will not be reviewed w/o it).
NOTE: 2. Contractor APP SHALL be submitted legibly in the format below.
NOTE: 3. Safety Office will review Contractor APP and return to PM / COR.
NOTE: 4. APP's are found Acceptable or Not Acceptable.

Safety Office Review: ACCEPTED DATE: _____ NOT ACCEPTED DATE:_____

Contractor Name: **Contract No:**

Project Title & Location:	Included?			Location:
	Yes	No	N/A	Page(s)
m. Hazardous Substances. When any hazardous substances are procured, used, stored or disposed, a hazard communication program must be in effect and MSDSs shall be available at the worksite. Employees shall have received training in hazardous substances being used. When the eyes or body of any person may be exposed to corrosives, irritants or toxic chemicals, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within 10 seconds of the worksite.				
n. Traffic control shall be accomplished in accordance with DOT's MUTCD.				
o. Control of Hazardous Energy (Lockout/Tagout). Before an employee performs any servicing or maintenance on any equipment where the unexpected energizing or startup of the equipment could occur, procedures must be in place to ensure adequate control of this energy.				
p. Driving, working on (i.e., working with equipment/mowers) while on slopes, working from/in boats/skiffs, etc shall also be considered and dealt with accordingly.				



NOTE: 5. When an APP plan, program, or procedure is not applicable (NA), indicate that in chronological order with the respective page number in the following manner. In the middle of a blank page, note for example:

Blank Page
"j. Lead Abatement Plan is NA"

"k. Asbestos Abatement Plan is NA"

"v. Float Plan is NA"

NOTE: 6. If an Activity Hazard Analysis (AHA) is being submitted in a Non-RMS format, contact the Safety and Occupational Health Office for the required Non-RMS template. No others will be accepted.

This page was intentionally left blank for duplex printing.

Section 01 35 30

MUNITIONS AND EXPLOSIVES OF CONCERN (MEC) CONSTRUCTION SUPPORT

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work required under this Section involves safety support and avoidance of potential unexploded ordnance and exploded ordnance, inert ordnance, and ordnance fragments and similar explosives debris material (defined and identified in these specifications as "Munitions and Explosives of Concern" (MEC)), within the dredging prism of the borrow area during performance of dredging activities.

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 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

MEC Safety and Work Plan; G, DO

Prior to commencement of any work, including delivery of any plant, equipment or construction materials to the site, submit a MEC Safety and Work Plan for MEC safety support and avoidance. The MEC Safety and Work Plan shall consist of the items as specified herein.

SD-04 Samples

Discharge End Screening Device; G,COR

Prior to commencement of any beachfill work, provide a working demonstration that discharge end screening devices operate as designed, subject to approval by Contracting Officer.

1.3 MEC IN BORROW AREAS

The borrow area for this project is located in the vicinity of known World War II era firing ranges.

1.4 GOVERNMENT-PROVIDED MEC SPECIALIST

1.4.1 General

The Corps of Engineers Military Munitions Design Center will provide an Ordnance and Explosives Safety Specialist(s) (OESS) to oversee overall MEC safety and training. The OESS will be on-site or in the vicinity (within a 15 minute response time after notification) during the duration of the placement of beachfill for this project. Contact the OESS in the event that an MEC or MEC-like item is located. The OESS will provide guidance and coordinate emergency response. Stop dredging work immediately upon notification by the OESS of the need for inspection of intake and discharge

screening devices during material placement operations to prevent MEC from being dredged and placed on the beach.

1.4.2 Pre-Construction Meeting

The OESS will attend the preconstruction meeting to answer any of the Contractor's questions concerning MEC.

1.4.3 MEC Safety and Work Plan Review

The OESS will review the Contractor's MEC Safety and Work Plan to ensure MEC aspects are adequately addressed. The Contractor's MEC Safety and Work Plan shall communicate the Contractor's understanding of his role and responsiblity in the management of dredging and dredged material placement operations to prevent MEC from being dredged and placed on the beach.

1.4.4 Worker Education

The OESS will conduct MEC safety / awareness / recognition training for the Contractor's dredging vessel and shore based workers, as well as Corps personnel. This training will be provided prior to the start of work on site, and to all newly reporting personnel assigned to the project who have not attended MEC training in the previous twelve months. MEC Training is required once per 12 month period..

1.4.5 Quality Assurance (QA)

The OESS will monitor the beachfill operations on a periodic basis and will be on-site, or on-call in the vicinity, to address problems as they arise. Upon notification by the OESS that either the intake screening system, or the discharge screening system, has degraded or is not functioning as intended, the Contractor shall stop work and correct the deficiency to prevent MEC from being dredged and/or placed on the beach during material placement operations.

1.5 MEC SAFETY AND WORK PLAN REQUIREMENTS

Include the following in the MEC Safety and Work Plan:

a. Shop drawings and detailed descriptions of the required screening devices on the dredge intake and at the discharge end of the pipeline. Also include the materials, equipment, procedures and personnel to be used in the construction, operations and oversight of such devices.

b. Personnel, equipment, and procedures to be used to perform visual inspections at the discharge end of the pipeline on the beach.

c. The measures to be followed if oversized material is discovered in the screening devices.

d. The measures to be followed if oversized material is identified as deposited on the beach.

e. The measures to be followed if MEC is discovered in the screening devices.

f. The measures to be followed if MEC is identified as deposited on the beach.

Coordinate the plan with the Job Hazard Analysis and the project Accident Prevention Plan to ensure worker safety and safety of the public is addressed at all times during the contract.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 SCREENING DEVICES

3.1.1 General

Prevent MEC from being placed on the beach by: 1) a screening device placed on the dredge intake or in pipeline section prior to reaching the dredge pump, and; 2) at the discharge end of the pipeline on the beach. The required screening devices shall meet the following requirements:

a. The screening device on the dredge intake shall prevent the passage of any material greater than 1.25 inches in diameter. The openings on the screening device may have one dimension greater than the other. The maximum allowable opening is 1.25 inches x 6 inches.

b. Design the Discharge End Screening Device to retain all items 0.75 inches in diameter and larger. The openings on the screening device shall be of uniform dimension (i.e. a grid or a series of round holes; slotted openings will not be permitted).

c. Construct the screening devices using rugged steel or composite material, one-piece or welded members. The devices shall cover the entire cross sectional area, except where basket type devices are used on the discharge end. Relief windows in basket type devices will be permitted only to the side opposite the inflow and at least 12 inches from the bottom of the basket, or as directed by the OESS. Size and locate windows to prevent large items, and MEC items from escaping the basket during pumping operations. Keep basket type devices in a level and horizontal position when using relief windows, during pumping operations.

d. The screening devices shall be removable for easy replacement if damaged. Ensure screening devices provide a production rate that allows completion of all dredging and beachfill placement within the contract duration.

e. Demonstrate on-site, subject to approval of the Contracting Officer, the screening devices meet all requirements specified herein.

f. Maintain adequate replacement parts and additional screening devices on site to insure production for the work does not stop due to damaged devices, or delays in the inspection process.

Provide minor adjustments to the beach screening baskets as directed by the OESS to accommodate varying types and amounts of material being screened at the beach, at no additional cost to the Government. As an example, relief windows, other than the required screen apertures, sometimes need to be enlarged, reduced, or relocated to minimize residual biological debris in the basket during the inflow process and for postflow MEC inspection of residual material.

3.1.2 Dredge Cutterhead Screening Device

If a cutterhead dredge is used, provide an intake screening device for the cutterhead that meets the screen requirements specified above.

3.1.3 Draghead Modifications

If a hopper dredge is used, dragheads shall be designed to prevent projectile shaped objects greater than 3 inches in diameter from being trapped between draghead teeth or between the draghead teeth and the dredge intake screening device. Make adjustments as necessary in the event projectile shaped objects become trapped in these areas, at no additional cost to the Government. Adjustments shall be completed and approved by the Contracting Officer or OESS prior to resuming dredging operations.

3.1.4 Inspection of Oversized Material

Design a method for inspection of all oversized material collected during beachfill pumping operations. Every effort shall be made to flush all sand out of the residual material to allow for 100 percent inspection. Spread all oversized material to a one thickness layer for inspection by the OESS. Spread the material either inside the discharge end screening device, in secondary containment, or on the beach on top of a liner, in a location above the high water line.

a. Design any system that involves inspection of the oversized material inside the discharge end screening device with the following requirements:

1) allow unrestricted entry or exit during times of inspector access, and

2) of sufficient size to allow the inspector to move around and rake through the material to inspect for MEC in the screening device.

b. Ensure no loss of oversized material from any system that involves the movement of the screening device, or removing or rehandling of the oversized material to another location for inspection. Minimize the shock of the contents during the transfer to a secondary basket (in the event MEC is present). In addition, move all oversized material removed for inspection from the current operation area, and relocate to a remote area of the project site within the Contractor Work Limits for inspection. Keep uninspected material separate from previously inspected material.

c. Design any system that involves inspection of the oversized material inside a secondary basket with the following requirements:

1) allow unrestricted entry or exit during times of inspector access, and

2) of sufficient size to allow the inspector to move around and rake through the material to inspect for MEC in the screening device, and

3) The amount of material placed in the secondary basket awaiting inspection shall not be more than 2 to 3 inches deep, or other

amount as directed by the OESS to enable material to be spread to a one layer thickness to allow for 100 percent inspection.

Upon inspection of the material by the OESS, dispose of all oversized material off-site.

3.2 VISUAL INSPECTION OF PIPELINE DISCHARGE END

Visual inspections, by the Contractor's personnel (who have been trained and approved by the OESS), shall be performed during all times that material is being placed on the beach. Perform visual inspections of the interior and exterior of the discharge-end screening device after each in-flow cycle for the presence of MEC. Perform visual inspections of the interior and exterior of the discharge-end screening device after each in-flow cycle for the presence of MEC. Perform visual inspections from outside the screening device during pumping of beachfill material. Do not enter a screening device containing material until the screening device has been inspected and cleared by the OESS. Under no circumstances shall a screening device be emptied until inspected and cleared, unless the material is being relocated to a secondary basket, or appropriate area of the beach on a liner for later inspection. After material has been inspected and cleared, remove all debris collected in the screening device from the work site. The debris may be temporarily stored on-site in a dumpster or roll-off box. Do not bury any debris collected in the screening device in or on the beach.

3.3 INSPECTION OF INTAKE SCREEN

Inspect the intake or pipeline screening device a minimum of every 8 hours for hydraulic pipeline dredging, and every load for hopper dredging to ensure its effectiveness.

3.4 DETECTION OF MEC

Stop work immediately upon notification by the OESS or the Contractor's inspector, that MEC larger than 1.25 inches (in it's largest diameter) is detected in a screening device, or any size MEC is detected on the beach. When MEC, as specified in the preceding sentence, is detected, implement the following procedures:

a. All personnel shall withdraw 200 feet from the area where the MEC is detected.

b. Stop dredging and beachfill work.

c. Notify the OESS.

d. Report the incident to the COR.

e. Do not resume Beachfill and/or dredging work until notification from the Contracting Officer.

3.4.1 Contractor Support

Provide assistance as required by the emergency response agency. This will be coordinated by the OESS and may consist of such activities as digging holes with equipment for detonation of MEC items, and/or providing extra perimeter security during emergency response activities. The Contractor will not be required or expected to place site workers in hazardous

situations during emergency responses to MEC at the project site.

3.5 DETECTION AND REMOVAL OF OVERSIZED MATERIAL

Stop work immediately and implement the following procedures when any item that physically should not be able to pass through the intake screening opening, and/or the discharge screening opening is detected in the discharge screening device or on the beach:

a. Stop dredging and beachfill work.

b. Report the incident to the COR.

c. Repair the intake and/or discharge screening devices if necessary. Take digital photo's to document damaged screening device(s) and effected repairs. Submit photo's to the COR with daily reports.

d. Beachfill and/or dredging work shall not resume until such cause is positively identified and steps taken to prevent recurrence, and upon subsequent notification from the Contracting Officer.

3.6 MEASUREMENT AND PAYMENT

The work specified in this section will not be measured for payment and all costs in connection therewith shall be included in the contract unit price per cubic yard for the Base Bid Items titled "Beachfill".

All costs in connection with any additional MEC modifications and monitoring required in connection with Option Bid Items titled "Beachfill", shall be included in the contract unit price per cubic yard for the respective option Bid Items titled "Beachfill". All costs associated with any non-production time (down time) related to the work specified in this section will be considered incidental to these bid items.

-- End of Section --

SECTION 01 35 43

AIR EMISSIONS REQUIREMENTS

PART 1 GENERAL

1.1 BACKGROUND

The work covered by this section consists of the measuring and recording of data related to the air emissions produced by the combustion of fossil fuels.

1.2 DEFINITIONS

3 Nautical Mile Line: The 3 mile maritime limit as established by NOAA's Office of Coast Survey.

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-06 Test Reports

Initial 24-hour Data Log; G,COR
Full Monthly Engine Data; G,COR

Submittals shall be in one of the following file formats: (1) text format, either comma or tab delimited or (2) Microsoft Excel. Submittals will be rejected that require proprietary software for access. Include monthly operating hours for support vessels and land equipment.

Engine Information; G,COR

Support Vessels and Land Equipment; G,COR

PART 2 PRODUCTS - (Not Applicable)

PART 3 EXECUTION

3.1 DREDGE OPERATIONAL MONITORING, RECORDKEEPING AND REPORTING

a. Measure and record the following parameters when operating diesel-powered engines onboard a dredge within the 3 Nautical Mile Line: date and time stamp, engine hours of operation, engine load, engine speed, engine temperature, and fuel use rates on all diesel-powered engines associated with actual dredging equipment and the auxiliary power generator s and pumps. Obtain this information from data downloaded from an electronic engine management control system that shall be installed and operational, prior to operating each diesel-powered engine within the area specified above.

b. Submit an initial 24-hour data log from the electronic engine management systems for each diesel-powered engine, as stated above, within 30 days of starting dredging work. Thereafter, submit full monthly engine data downloads each calendar quarter on the 10th day of the month following the end of the quarter. Additionally, for each applicable engine, submit engine information consisting of make, model, manufacturer, designation number, engine management system software name and version, year built, and engine horsepower rating. Provide access to the Government and its Contractors to check equipment, to view installation of equipment or repair work, and/or to observe the download of data from the engine management systems. The Contracting Officer may change the required reporting period for data downloads.

c. The Government reserves the right to require the Contractor to manually obtain daily records of engines when electronic engine management systems are not functioning properly.

d. An example of a daily recordkeeping log sheet is attached at end of this section.

3.2 SUPPORT VESSELS AND LAND EQUIPMENT REPORTING

Submit a list of all equipment with diesel engine make, model and size for the support vessels and land equipment. Record monthly operating hours for support vessels and land equipment.

3.3 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the the cost of all the bid items.

-- End of Section --

U.S. Army Corps of Engineers - Philadelphia District

Contract:

MONTH: _____
YEAR: 2014
Page: 1 of 1

Vessel Name:

	Engine Information				Activity Information			
Date	Engine Name	Engine Type (Propulsion, Auxiliary, etc.)	Daily Runtime (hours)	Daily Fuel Consumption (gallons)	# of Daily Trips to Offload	Average Transit Time Within 3-Nautical Mile Line (hours)	Average Loaded Speed (knots)	Average Unloaded Speed (knots)

This page was intentionally left blank for duplex printing.

SECTION 01 35 50

DIVING SERVICES

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section includes the development and enforcement of a diving services plan.

NOTE: Though diving services are not required as part of the general scope of work for this project, it is Philadelphia District policy to include a section covering commercial diving operations for all construction projects that are conducted on, or near, the water. The reasoning for this is the fact that unforeseen circumstances (such as lost equipment recovery, unknown sunken object investigation/removal, emergency floating plant repairs, etc.) may require the need for commercial diving services. In the event the need for this type of operation occurs, including a commercial diving section in the contract specifications helps to ensure that the Contractor is aware of the requirements for conducting commercial diving operations on USACE Philadelphia District projects.

1.2 GENERAL REQUIREMENTS

All diving performed under this contract shall be in strict accordance with the rules and regulations prescribed by the U.S. Navy Diving Manual: 0910-LP-106-0957; 29 CFR Part 1910, Subpart T; 29 CFR Part 1915; EM 385-1-1, Section 30; and ER 385-1-86, except as modified below. A Contracting Officer's Representative, will be designated by the Contracting Officer at the Post Award Conference, to act for the Contracting Officer for all submissions, directions and/or acceptance(s) required under the specifications. There will also be an individual designated as the District Dive Coordinator. Do not schedule or engage in any diving operations without the acceptance/approval of the Contracting Officer and the District Dive Coordinator. Contact the District Dive Coordinator, Marc Wallowicz, at 215-656-6792 (office) or 215-520-7045 (mobile), to obtain a list of emergency contact information for the Philadelphia District Dive Safety Program, prior to operations.

1.3 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. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011; Change 7 2012) Safety and Health Requirements Manual
ER 385-1-86	(2010) Engineer Regulation, Government Personnel Diving Operations

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR Part 1910	(Latest Rev) Occupational Safety and Health Standards
29 CFR Part 1915	(Latest Rev) Safety and Health Standards Applicable to Shipyard Employment

U.S. NAVAL SEA SYSTEMS COMMAND (NAVSEA)

0910-LP-106-0957	(2008, Change A 2011) U.S. Navy Diving Manual, Revision 6

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Diving Plan; G,DO

Activity Hazard Analysis Plan; G,DO

Emergency Management Plan; G,DO

Diving Operations Manual; G,DO

Dive Personnel Qualifications; G,DO

Air Quality Certifications; G,DO

Daily Logs; G,DO

1.5 DIVING PLAN

Submit for review, at least 10 days prior to operations, a General Project Diving Plan. Submit a Task Specific Diving Plan prior to performing any actual dive task or assignment. Each separate Diving Plan shall require review and acceptance by the Contracting Officer's Representative prior to commencing any diving required under this contract. The Contractor may prepare a form with the appropriate subject/item already listed with blank spaces to be filled in as required for each Diving Plan submitted. Include the following information as a minimum in a typical Diving Plan:

a. Diving Plan for project and specific tasks.

b. Name of Contractor (and at least 2 diving subcontractors if required).

c. Contract Number.

d. Date of Diving Plan submission.

e. Name of diving supervisor preparing the Diving Plan.

f. Description of proposed work and diving mission.

g. Names and duties of dive team members, including diving supervisor.

h. Approximate time, date, duration, and location of dive operations.

i. Listing of diving equipment to be used.

j. Name or type of diving platform to be used.

k. Planned depth of dive and maximum depth to bottom.

l. Maximum single dive bottom time for the planned depth of dive for each diver.

m. Surface and underwater conditions, to include visibility, temperature, currents, vessel traffic, heavy equipment operating in the vicinity, etc.

n. Listing of special tools or equipment to be used.

o. Materials to be handled or installed.

p. Listing by name each person directly involved in topside assistance/support to the dive team (i.e., diving support vessel personnel, crane operator, dam operator, etc.).

q. Means of direct communication between the dive site and the Contractor's project office, the District Diving Coordinator, the Contracting Officer's Representative, and the USACE Project Manager.

r. The Diving Plan shall contain the following statement: "If for any reason the diving plan, as accepted, is altered in scope of mission, depth, personnel, or equipment, contact the Philadelphia District Diving Coordinator for review and acceptance of the proposed diving plan revision, a minimum of 24 hours prior to the actual diving operation."

1.6 ACTIVITY HAZARD ANALYSIS PLAN

Submit at least 10 days prior to diving operations, an Activity Hazard Analysis Plan, which shall identify and mitigate or prevent hazards before each phase of work under this contract. The Activity Hazard Analysis Plan will be reviewed by the Contracting Officer's Representative prior to commencing any diving operations under this contract. The Activity Hazard Analysis Plan shall address the hazards for each activity performed and shall present the procedures and safeguards necessary to eliminate the hazards or reduce the risk to an acceptable level. The suggested format for the analysis is contained in Figure 1-2 of EM 385-1-1. Attach a copy of any clearances to be issued that deal with identified hazards, to the Activity Hazards Analysis Plan.

1.7 EMERGENCY MANAGEMENT PLAN

Submit at least 10 days prior to diving operations, an Emergency Management Plan, which includes information and procedures developed to deal with accidents after they occur. The Emergency Management Plan will be reviewed by the Contracting Officer's Representative prior to commencement of any diving operations under this contract. Include the following information

as a minimum in the Emergency Management Plan:

a. Emergency Information:

(1) Description of an emergency victim transport plan including phone numbers of appropriate emergency transport services.

(2) Procedures and phone numbers, or other means of communication, to activate emergency services at the facility where the work is being performed.

(3) Location and phone number of nearest operational recompression chamber if not located at the dive site and the Divers Alert Network (DAN) phone number (919-684-9111).

(4) Locations, directions to, and phone numbers of nearest hospital(s) or available physician(s) capable of treating dive injuries.

(5) Location and phone number of nearest USCG Rescue Coordination Center.

b. Procedures to deal with entrapped or fouled diver including fouled umbilical (suction and entanglement/debris).

c. Actions upon loss of vital support equipment.

d. Actions upon loss of gas supply.

e. Action upon loss of communication.

f. Lost diver procedure.

g. Injured diver procedures to include dealing with diver loss of consciousness, traumatic injury, near drowning, air embolism, decompression sickness, breathing gas disorders, pulmonary overinflation syndromes, strangulation, various types of barotraumas, mechanical injury, overexertion/exhaustion, thermal stress, electrocution, and diver blow up/over rapid ascent to surface.

h. Actions upon discovery of fire.

i. Actions upon injury/illness of member of surface crew with diver in the water.

NOTE: The Philadelphia District Diving Coordinator has a list of pre-qualified diving companies that have most, or all, of the following submittals on file with the District Office. Contact the District Diving Coordinator's Office to obtain the most recent version of this list.

1.8 DIVING OPERATIONS MANUAL

Submit for review, at least 15 days prior to operations, a Diving Operations Manual, which depicts the general plan for accomplishing the diving operations required under this contract. The Diving Operations Manual will be reviewed by the Contracting Officer's Representative prior to commencement of any diving operations under this contract. Include the following information as a minimum in the Diving Operations Manual:

a. An outline of administrative and record-keeping procedures. As a minimum, the outline shall contain (by title of position) job responsibilities, the chain of command, daily briefing and diving safety orientation procedures, log and diving-related record-keeping responsibilities, equipment maintenance and pre-dive equipment checklist, etc.

b. An outline of equipment certifications, maintenance procedures, inspection requirements and checklists for the diving equipment to be used under this contract. As a minimum, indicate the method of testing, frequency, and repair methods used in the equipment maintenance procedures.

c. A General Activity Hazard Analysis section, setting forth potential hazards, means of prevention, and actions to be taken should an accident involving the potential hazard occur. Minimum coverage in the General Activity Hazard Analysis section shall include: means of prevention and procedures for dealing with fire, equipment failure, adverse environmental conditions, diver loss of consciousness, entrapment, fouling or entanglement, traumatic injury, near drowning, air embolism, decompression sickness, breathing gas disorders, strangulation, pulmonary overinflation syndromes, various types of barotraumas, mechanical injury, overexertion/exhaustion, thermal stress, electrocution, diver blow up/over rapid ascent to surface, and currents caused by hydraulic differential through the structure.

d. A complete copy of 29 CFR Part 1910, Subpart T, and the proposed method of complying with each of its pertinent parts.

e. U. S. Navy Standard Air Decompression Table.

f. A sample of the Diving Log sheets to be used under this contract.

g. A sample of the Repetitive Dive Worksheets or equivalent (dive profile method) to be used under this contract.

h. U. S. Navy Table of No-Decompression Limits and Repetitive Group Designation for No-Decompression Air Dives.

i. U. S. Navy Residual Nitrogen Timetable for Repetitive Air Dives.

j. An outline of emergency communications between the dive site and the Contractor's project office.

k. Emergency assistance information, including location, telephone numbers, and names of nearest doctor, hospital, emergency ground and air transportation, recompression facilities, and other appropriate medical and emergency assistance.

l. An outline of pre-dive briefings and equipment checkout procedures for daily diving activities under this contract.

m. An outline of qualifications, assignments, responsibilities, and experience requirements for the dive team members, required under this contract.

n. An outline of the medical qualifications required for divers to be employed under this contract. As a minimum, each diver shall meet the certification requirements specified in 29 CFR Part 1910, Subpart T,

and EM 385-1-1, Section 30.

1.9 DIVE PERSONNEL QUALIFICATIONS

Submit for review, at least 10 days prior to any diving operations, evidence that each dive team member has training and experience consistent with the performance requirements addressed in the scope of work for this contract. Dive Personnel Qualifications will be reviewed by the Contracting Officer's Representative prior to commencing of any diving operations under this contract. Submit the following documentation, for each dive team member, as a minimum:

a. Training documentation from a commercial diving school within a particular State, military school, Federal school (e.g., USACE), an Association of Commercial Diving Educators (ACDE) accredited school, or a valid "Association of Diving Contractors International (ADCI) Commercial Diver Certification Card" for the appropriate training level.

b. Resumes demonstrating that each dive team member has at least 1 year of commercial experience in the applicable position. Divers shall have completed at least 4 working dives to the depths required by this contract, using the particular diving techniques and equipment to be used under this contract.

c. Current certificates for CPR, first aid, and use of emergency oxygen systems.

d. Certification, signed by a licensed physician, stating that each diver has been medically examined within the previous 12 months and has been determined fit and approved to dive.

e. Copies of diving logs demonstrating that at least 1 of the 4 qualification dives was performed in the last 6 months prior to the contract award date.

1.10 AIR QUALITY CERTIFICATIONS

Submit at least 10 days prior to any diving operations, Air Quality Certifications from an accredited testing laboratory for accomplishing the diving operations required under this contract.

Diving air supply compressors' output air shall be in conformance with the following limits: oxygen - 20 to 22 percent by volume, carbon dioxide - 1,000 ppm maximum, carbon monoxide - 10 ppm maximum, total hydrocarbons - 25 ppm maximum, particulates - 5 mg/cubic meter maximum, and have no objectionable odor.

The Air Quality Certifications will be reviewed by the Contracting Officer's Representative prior to commencing of any diving operations under this contract.

1.11 DAILY LOGS

Submit each day, to the Contracting Officer/District Dive Coordinator fully completed copies of the previous day's Diving Log Sheets and any other work sheets prepared in conjunction with the Diving Log Sheets. For each diver and dive, the following dive log information, as a minimum, shall be recorded and maintained at the dive location:

a. Full name;

b. Date, time and location of dive;

c. Maximum depth and bottom time;

d. Surface interval between dives;

e. Breathing medium and type of equipment used;

f. Group classification at the beginning and end of each interval and repetitive dive worksheet;

g. Underwater and surface conditions;

h. Depth(s) and duration(s) of any decompression stops;

i. Date and time of last previous dive if it occurred in the last 48 hours;

j. Name of Dive Supervisor(s) during dive;

k. General description of work performed; AND

l. For dives outside the no-decompression limits, deeper than 100 (30.5m) feet salt water (fsw), or using mixed-gas, include depth-time and breathing-gas profiles and decompression tables (including any modifications).

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 RESTRICTIONS

Only surface air-supplied diving within the No-Decompression Limits, using the previously cited U. S. Navy Diving Tables, will be permitted under this contract, unless otherwise accepted by the Contracting Officer. Submit any deviation from or modification to the U. S. Navy Diving Tables, at the time the Diving Operations Manual is submitted, with any such deviation or modification clearly identified for review purposes.

3.2 DOCUMENTS AVAILABILITY

One copy of the accepted Diving Operations Manual will be kept in the District Office. One copy of the appropriate accepted Diving Plan, one copy of the accepted Activity Hazard Analysis, and one copy of the accepted Emergency Management Plan shall be available at the dive site while diving operations are underway.

3.3 COORDINATION

Conduct all diving activities with the full knowledge and close coordination with the Contracting Officer and District Dive Coordinator. Divers shall not enter the water or move from prescribed location without the acceptance of the assigned Dive Inspector or District Dive Coordinator.

3.4 PRE-DIVE CHECK

Meet with the USACE diving inspector prior to the dive and at the scene of the dive, and ensure, as a minimum, the following pre-dive checks are performed:

a. Breathing air tanks contain sufficient air supply to perform the required work, (i.e., standby air tanks are on site and full to their capacity). Take a pressure reading to ensure that no less than 90 percent of tank capacity of breathing air is contained.

b. Check all diving equipment for proper function prior to diver entry.

c. All necessary safety equipment is on site and functioning properly.

d. When applicable, the dive supervisor or plant operator/captain has established communications with vessel traffic in the vicinity of the dive site.

e. When applicable, lockout/tagout procedures are followed and the diving supervisor is in possession of the key or keys.

f. When applicable, crane signals are reviewed and radio communications with the crane operator is functioning properly.

g. When applicable, welding or cutting procedures are clearly reviewed, the proper welder polarity is set and precautions have been taken to insure that electrocution will not occur.

h. When applicable, blasting procedures are clearly reviewed and precautions have been taken to ensure unplanned/unscheduled blasts will not occur.

i. A pre-dive briefing shall be given which includes but is not limited to, the diving plan, accident management plan, activity hazards analysis, equipment check list, diving logs, diving conditions, and diving procedures.

3.5 DIVE TEAM CREW REQUIREMENTS

The following dive team members are required as the minimum crew manning level:

Comply with EM 385-1-1, Appendix O, Table O-3.

3.5.1 Surface-Supplied Air Mode

Perform all working dives in surface-supplied air mode. The minimum crew manning level consists of the In-water Diver, Stand-by Diver, Diver Tender, and Dive Supervisor. For each additional In-water Diver, one Diver Tender shall be added to the team. A member of the crew shall be responsible for radio communications and timekeeping. Surface-supplied air gear shall include hardwire communications and a diver carried air reserve.

3.6 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the the cost of all the bid items.

-- End of Section --

This page was intentionally left blank for duplex printing.

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS

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 B564 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 SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)
1800 East Oakton Street
Des Plaines, IL 60018-2187
Ph: 847-699-2929
Fax: 847-768-3434
E-mail: customerservice@asse.org
Internet: http://www.asse.org

AMERICAN WATER WORKS ASSOCIATION (AWWA)
6666 West Quincy Avenue
Denver, CO 80235
Ph: 800-926-7337
Fax: 303-347-0804
E-mail: smorrison@awwa.org
Internet: http://www.awwa.org

AMERICAN WOOD PROTECTION ASSOCIATION (AWPA)
P.O. Box 361784
Birmingham, AL 35236-1784
Ph: 205-733-4077
Fax: 205-733-4075
E-mail: email@awpa.com
Internet: http://www.awpa.com

ASME INTERNATIONAL (ASME)
Three Park Avenue, M/S 10E
New York, NY 10016-5990
Ph: 800-854-7179 or 800-843-2763
Fax: 212-591-7674
E-mail: infocentral@asme.org

Internet: http://www.asme.org

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
E-mail: service@astm.org
Internet: http://www.astm.org

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA 02169-7471
Ph: 617-770-3000 or 800-344-3555
Fax: 617-770-0700
E-mail: webmaster@nfpa.org
Internet: http://www.nfpa.org

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)
David J. Goldberg Transportation Complex
P.O. Box 600
1035 Parkway Avenue
Trenton, NJ 08625
Ph: 609-530-2307
Internet: http://www.nj.gov/transportation/eng/

SOUTHERN PINE INSPECTION BUREAU (SPIB)
P.O. Box 10915
Pensacola, FL 32504-0915
Ph: 850-434-2611
Fax: 850-433-5594
E-mail: Fill out form at http://www.spib.org/contact.shtml
Internet: http://www.spib.org

THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)
40 24th Street, 6th Floor
Pittsburgh, PA 15222-4656
Ph: 412-281-2331
Fax: 412-281-9992
E-mail: info@sspc.org
Internet: http://www.sspc.org

U.S. ARMY CORPS OF ENGINEERS (USACE)
Order CRD-C DOCUMENTS from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services Branch, TIC
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
E-mail: MTC-INFO@erdc.usace.army.mil
Internet:
http://gsl.erdc.usace.army.mil/SL/MTC/handbook/handbook.htm
Order Other Documents from:
USACE Publications Depot
Attn: CEHEC-IM-PD
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081
Fax: 301-394-0084

E-mail: pubs-army@usace.army.mil
Internet: http://www.usace.army.mil/publications
or http://www.hnd.usace.army.mil/techinfo/engpubs.htm

U.S. DEPARTMENT OF DEFENSE (DOD)
Order DOD Documents from:
Room 3A750-The Pentagon
1400 Defense Pentagon
Washington, DC 20301-1400
Ph: 703-571-3343
FAX: 215-697-1462
E-mail: pia@hq.afis.asd.mil
Internet: http://www.dod.gov
Obtain Military Specifications, Standards and Related Publications from:
Acquisition Streamlining and Standardization Information System (ASSIST)
Department of Defense Single Stock Point (DODSSP)
Document Automation and Production Service (DAPS)
Building 4/D
700 Robbins Avenue
Philadelphia, PA 19111-5094
Ph: 215-697-6396 - for account/password issues
Internet: http://assist.daps.dla.mil/online/start/; account registration required
Obtain Unified Facilities Criteria (UFC) from:
Whole Building Design Guide (WBDG)
National Institute of Building Sciences (NIBS)
1090 Vermont Avenue NW, Suite 700
Washington, CD 20005
Ph: 202-289-7800
Fax: 202-289-1092
Internet: http://www.wbdg.org/references/docs_refs.php

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)
FHWA, Office of Safety
1200 New Jersey Ave., SE
Washington, DC 20590-
Ph: 202-366-0411
Fax: 202-366-2249
E-mail: contactcenter@gpo.gov
Internet: http://www.safety.fhwa.dot.gov
Order from:
Superintendent of Documents
U. S. Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: http://www.gpoaccess.gov

U.S. GENERAL SERVICES ADMINISTRATION (GSA)
General Services Administration
1800 F Street, NW
Washington, DC 20405
Ph: 202-501-0800
Internet: www.GSA.gov
Obtain documents from:

Acquisition Streamlining and Standardization Information System (ASSIST)
Department of Defense Single Stock Point (DODSSP)
Document Automation and Production Service (DAPS)
Building 4/D
700 Robbins Avenue
Philadelphia, PA 19111-5094
Ph: 215-697-6396 - for account/password issues
Internet: http://assist.daps.dla.mil/online/start/; account registration required

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph: 866-272-6272
Fax: 301-837-0483
E-mail: contactcenter@gpo.gov
Internet: http://www.archives.gov
Order documents from:
Superintendent of Documents
U.S.Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: http://www.gpoaccess.gov

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

-- End of Section --

SECTION 01 45 00

QUALITY CONTROL

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.

ASTM INTERNATIONAL (ASTM)

ASTM D3740	(2012a) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E329	(2011c) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 DEFINITIONS

Beachfill work is any activity of the project beyond dredging operations as established by the contract requirements.

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Qualifications of Quality Control Personnel; G,DO

Name and qualifications of the Contractor's proposed QC representatives.

Quality Control Plan; G,DO

SD-06 Test Reports

Reports; G,COR

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph titled, "Documentation".

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Establish and maintain an effective quality control (QC) system in compliance with the Contract Clause titled "Inspection of Construction". QC consists of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. Cover all construction operations, both onsite and offsite, and be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. In this context the highest level manager responsible for the overall construction activities at the site, including quality and production is the project superintendent. The project superintendent or designated alternate must maintain a physical presence at the site at all times and is responsible for all construction and related activities at the site, except as otherwise acceptable to the Contracting Officer.

3.2 QUALITY CONTROL PLAN

Submit no later than 10 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". Dredging, beachfill, construction work will be permitted to begin only after acceptance of the CQC Plan.

3.2.1 Content of the CQC Plan

Include, as a minimum, the following to cover all dredging, beachfill, and construction operations, both onsite and offsite, including work by subcontractors:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff will implement the three phase control system for all aspects of the work specified. Include a CQC System Manager who shall report directly to the corporate home office of the prime Contractor, and not be subordinate to the project superintendent or the project manager.

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. Letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities will be issued by the CQC System Manager. Copies

of these letters must 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 must be in accordance with Section 01 33 00 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 approved by the Contracting Officer must be used.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking dredging and beachfill deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work(DFOW). 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 dredging and beachfill operations. Acceptance is conditional and will be predicated on satisfactory performance during the beachfill. 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, 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 dredging and beachfill operations, and prior to acceptance by the Government of the final CQC Plan, meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details must 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 will be prepared by the Government, signed by both the Contractor and the Contracting Officer and will 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 Site Safety and Health Officer (SSHO) must 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 will be subject to acceptance by the Contracting Officer. Provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Promptly complete and furnish all letters, material submittals, shop drawing submittals, schedules and all other project documentation to the CQC organization. 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

Identify as CQC System Manager an individual within the onsite work organization who is responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager must be a construction person with a minimum of 5 years experience in related work, including a minimum experience of 1 year as a CQC System Manager on dredging and beachfill projects. The CQC System Manager is a full time day shift position. The CQC System Manager shall be on the site at all times during construction activities, be employed by the prime Contractor, and report directly to the corporate home office of the prime Contractor. The CQC System Manager shall be assigned no other duties. Identify in the plan an alternate to serve in the event of the CQC System Manager's absence. The requirements for the alternate are the same as the CQC System Manager.

3.4.3 CQC Designated Representative(CQC DR)

In addition to CQC personnel specified elsewhere in the contract, provide as part of the CQC organization, a sufficient number of qualified individual(s) to serve as the CQC System Manager's Designated Representative to cover construction activities at all individual site locations (beach, dredge, floating plant etc.) for continuous 24 hour coverage. These individuals may be employees of the prime or subcontractor and shall;

a. be responsible to the CQC System Manager;

b. be physically present at the project site when work is being performed;

c. be a construction person with a minimum of 2 years experience on construction similar to this contract.

d. perform CQC program tasks as designated by the CQCSM and report all findings to the CQCSM / Alternate CQCSM. The CQCSM shall document results of quality inspection findings and provide information for inclusion in the CQC reports.

These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan. Designated Representative(s) shall not be positions requiring continuous mechanical or equipment operations, such as equipment operators. The CQC Designated Representative shall not be the same person as the Safety Designated Representative.

3.4.4 Additional Requirement

In addition to the above experience and/or education requirements the CQC System Manager must have completed the course titled "Construction Quality Management For Contractors". This course is periodically offered by individual Corps of Engineer Districts.

3.4.5 Organizational Changes

Maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals shall comply with the requirements in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization is 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 work performed, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control must be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.6.1 Preparatory Phase

This phase is 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 includes:

a. A review of each paragraph of applicable specifications, reference codes, and standards. Make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by Government personnel until final acceptance of the work.

b. Review of the contract drawings.

c. 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. 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. 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. 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 must be notified at least 24 hours in advance of beginning the preparatory control phase. 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. Document the results of the preparatory phase actions by separate minutes prepared by the CQC System Manager and attach to the daily CQC report. Instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase is accomplished at the beginning of a definable feature of work, but after the preparatory control meeting for this DFOW. Accomplish the following:

a. Check 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 must be notified at least 24 hours in advance of beginning the initial phase. Prepare separate documentation of this phase by the CQC System Manager and attach to the daily CQC report. Indicate the exact location of initial phase 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

Perform daily checks to assure that control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. Record the checks in the CQC documentation. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work which may be affected by the deficient work. Do not build upon nor conceal non-conforming work. All work for the current definable feature of work shall meet the contract requirements prior to performing additional features of work which build upon this current DFOW.

3.6.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases 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

Perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. Procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. 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. Record results of all tests taken, both passing and failing on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the

test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility 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 must meet criteria detailed in ASTM D3740 and ASTM E329.

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of $1,500. to reimburse the Government for each succeeding 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.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Conduct an inspection of the work by the CQC Manager near the end of the work, or any increment of the work established by a time stated in the SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications. Prepare and include in the CQC documentation a punch list of items which do not conform to the approved drawings and specifications, as required by paragraph DOCUMENTATION. Include within the list of deficiencies the estimated date by which the deficiencies will be corrected. Make a second inspection by the CQC System Manager or staff to ascertain that all deficiencies have been corrected. Once this is accomplished, 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. 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. Correct any items noted on the Pre-Final inspection in a timely manner. These inspections and any deficiency corrections required by this paragraph must 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 must be in attendance at the final acceptance inspection. Additional Government personnel 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. Notify the Contracting Officer at least 14 days prior to the final acceptance inspection and 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

Maintain current records providing factual evidence that required quality control activities and/or tests have been performed. Include in these records the work of subcontractors and suppliers 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) 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. Identify the control phase (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.

Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. Cover both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. Furnish the original and one copy of these records in report form 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, prepare and submit one report for every 7 days of no work and on the last day of a no work period. All calendar days must be accounted for throughout the life of the contract. The first report following a day of no work will be for that day only. Reports must be signed and dated by the CQC System Manager. Include copies of test reports and copies of reports prepared by all subordinate quality control personnel within the CQC System Manager Report.

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. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, will 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 will be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.12 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

CONTRACTOR PRODUCTION REPORT

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE		
CONTRACT NO	TITLE AND LOCATION	REPORT NO
CONTRACTOR	SUPERINTENDENT	
AM WEATHER	PM WEATHER	MAX TEMP F / MIN TEMP F

WORK PERFORMED TODAY

Schedule Activity No.	WORK LOCATION AND DESCRIPTION	EMPLOYER	NUMBER	TRADE	HRS

JOB SAFETY

WAS A JOB SAFETY MEETING HELD THIS DATE? (If YES attach copy of the meeting minutes)	☐ YES ☐ NO	TOTAL WORK HOURS ON JOB SITE, THIS DATE, INCL CONT SHEETS
WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? (If YES attach copy of completed OSHA report)	☐ YES ☐ NO	CUMULATIVE TOTAL OF WORK HOURS FROM PREVIOUS REPORT
WAS CRANE/MANLIFT/TRENCHING/SCAFFOLD/HV ELEC/HIGH WORK/ HAZMAT WORK DONE? (If YES attach statement or checklist showing inspection performed.)	☐ YES ☐ NO	TOTAL WORK HOURS FROM START OF CONSTRUCTION
WAS HAZARDOUS MATERIAL/WASTE RELEASED INTO THE ENVIRONMENT? (If YES attach description of incident and proposed action.)	☐ YES ☐ NO	

Schedule Activity No.	LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED	☐ SAFETY REQUIREMENTS HAVE BEEN MET.

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB (INDICATE SCHEDULE ACTIVITY NUMBER)

Schedule Activity No.	Submittal #	Description of Equipment/Material Received

CONSTRUCTION AND PLANT EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED AND SCHEDULE ACTIVITY NUMBER.

Schedule Activity No.	Owner	Description of Construction Equipment Used Today (incl Make and Model)	Hours Used

Schedule Activity No.	REMARKS

CONTRACTOR/SUPERINTENDENT DATE

CONTRACTOR PRODUCTION REPORT

(CONTINUATION SHEET)

CONTRACT NO	TITLE AND LOCATION	DATE / REPORT NO

WORK PERFORMED TODAY

Schedule Activity No.	WORK LOCATION AND DESCRIPTION	EMPLOYER	NUMBER	TRADE	HRS

Schedule Activity No.	LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB (INDICATE SCHEDULE ACTIVITY NUMBER)

Schedule Activity No.	Submittal #	Description of Equipment/Material Received

CONSTRUCTION AND PLANT EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED AND SCHEDULE ACTIVITY NUMBER.

Schedule Activity No.	Owner	Description of Construction Equipment Used Today (Incl Make and Model)	Hours Used

Schedule Activity No.	REMARKS

INCLUDE ALL PERSONNEL WORK HOURS IN THE WORK PERFORMED SECTION ON THIS SHEET INTO THE FRONT CONTRACTOR PRODUCTION REPORT

4296/1A (9/98) SHEET OF

CONTRACTOR QUALITY CONTROL REPORT

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE

REPORT NO

PHASE | CONTRACT NO | CONTRACT TITLE

PREPARATORY

WAS PREPARATORY PHASE WORK PERFORMED TODAY? YES ☐ NO ☐

IF YES, FILL OUT AND ATTACH SUPPLEMENTAL PREPARATORY PHASE CHECKLIST.

Schedule Activity No.	Definable Feature of Work	Index #

INITIAL

WAS INITIAL PHASE WORK PERFORMED TODAY? YES ☐ NO ☐

IF YES, FILL OUT AND ATTACH SUPPLEMENTAL INITIAL PHASE CHECKLIST.

Schedule Activity No.	Definable Feature of Work	Index #

FOLLOW-UP

WORK COMPLIES WITH CONTRACT AS APPROVED DURING INITIAL PHASE? YES ☐ NO ☐

WORK COMPLIES WITH SAFETY REQUIREMENTS? YES ☐ NO ☐

Schedule Activity No.	Description of Work, Testing Performed & By Whom, Definable Feature of Work, Specification Section, Location and List of Personnel Present

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

Schedule Activity No.	Description

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

Schedule Activity No.	Description

REMARKS (Also Explain Any Follow-Up Phase Checklist Item From Above That Was Answered "NO"), Manuf. Rep On-Site, etc.

Schedule Activity No.	Description

On behalf of the contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

AUTHORIZED QC MANAGER AT SITE DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

(CONTINUATION SHEET)

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE

REPORT NO.

PHASE | CONTRACT NO | CONTRACT TITLE

FOLLOW-UP

WORK COMPLIES WITH CONTRACT AS APPROVED DURING INITIAL PHASE? YES ☐ NO ☐

WORK COMPLIES WITH SAFETY REQUIREMENTS? YES ☐ NO ☐

Schedule Activity No.	Description of Work, Testing Performed & By Whom, Definable Feature of Work, Specification Section, Location and List of Personnel Present

REMARKS (Also Explain Any Checklist Item From Above That Was Answered "NO"), Manuf. Rep. On-Site, etc.

Schedule Activity No.	Description

SECTION 01 45 05

QUALITY CONTROL SYSTEM (QCS)

PART 1 GENERAL

1.1 Contract Administration

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor must use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. The Contractor module, user manuals, updates, and training information can be downloaded from the RMS web site (www.rmssupport.com). 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 will 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 01 32 01 PROJECT SCHEDULE, Section 01 33 00 SUBMITTAL PROCEDURES, and Section 01 45 00 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 will 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 will 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 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 is the minimum system configuration that the Contractor must have to run QCS:

QCS and Quality Assurance System (QAS) System

Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor

256+ MB RAM for workstation / 512+ MB RAM for server

1 GB hard drive disk space for sole use by the QCS system

Compact Disk (CD) Reader 8x speed or higher

SVGA or higher resolution monitor (1024x768, 256 colors)

Mouse or other pointing device

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

Connection to the Internet, minimum 56k BPS

Software

MS Windows 2000, XP, Vista or Windows 7

QAS-Word Processing software: MS Word 2000 or newer

Latest version of: Netscape Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher

Electronic mail (E-mail) MAPI compatible

Virus protection software that is regularly upgraded with all issued manufacturer's updates

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, download instructions for the installation and use of QCS from the Government RMS Internet Website. 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 will 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 using the Government's SFTP repository built into QCS import/export function. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

Establish, maintain, and update data in the QCS database throughout the duration of the contract at the Contractor's site office. Submit data updates to the Government (e.g., daily reports, submittals, RFI's, schedule updates, payment requests, etc.) using the Government's SFTP repository built into QCS export function. If permitted by the Contracting Officer, CD-ROM or E-mail may be used to submit data updates (see Paragraph DATA SUBMISSION VIA CD-ROM). The QCS database typically includes current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

Contain within the database 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, deliver Contractor administrative data in electronic format.

1.6.1.2 Subcontractor Information

Contain within the database 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. Assign each subcontractor/trade a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, deliver subcontractor administrative data in electronic format.

1.6.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office with "H". Letters must 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

Contain within the Contractor's QCS database 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 Control checklists.

1.6.1.6 Request For Information (RFI)

Exchange all Requests For Information (RFI) using the Built-in RFI generator and tracker in QCS.

1.6.2 Finances

1.6.2.1 Pay Activity Data

Include within the QCS database a list of pay activities that the Contractor must develop in conjunction with the construction schedule. The sum of all pay activities must be equal to the total contract amount, including modifications. Group pay activities Contract Line Item Number (CLIN); the sum of the activities must equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

Prepare all progress payment requests using QCS. Complete the payment request worksheet, prompt payment certification, and payment invoice in QCS. Update the work completed under the contract, measured as percent or as specific quantities, at least monthly. After the update, generate a payment request report using QCS. Submit the payment request, prompt payment certification, and payment invoice with supporting data using the Government's SFTP repository built into QCS export function. If permitted by the Contracting Officer, e-mail or a CD-ROM may be used. A signed paper copy of the approved payment request is also required, which will 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. Maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. Provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01 45 00 CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, submit a QCS update 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 must be the Contractor's official report. Summarize data from any supplemental reports by the Contractor and consolidate onto the QCS-generated Daily CQC Report. Submit daily CQC Reports as required by Section 01 45 00 CONTRACTOR QUALITY CONTROL. Electronically submit reports to the Government within 24 hours after the date covered by the report. Also provide the Government a signed, printed copy of the daily CQC report.

1.6.3.2 Deficiency Tracking.

Use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. 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. Regularly update the correction status of both QC and QA punch list items.

1.6.3.3 QC Requirements

Develop and maintain a complete list of QC testing and required structural and life safety special inspections required by the International Code Council (ICC), transferred and installed property, and user training requirements in QCS. Update all data on these QC requirements as work progresses, and promptly provide this information to the Government via QCS.

1.6.3.4 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.5 Labor and Equipment Hours

Log labor and equipment exposure hours on a daily basis. This data will be rolled up into a monthly exposure report.

1.6.3.6 Accident/Safety Reporting

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. Regularly update the correction status of the safety comments. In addition, 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 300.

1.6.3.7 Features of Work

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.

1.6.3.8 Hazard Analysis

Use QCS to develop a hazard analysis for each feature of work included in the CQC Plan. Address any hazards, or potential hazards, that may be associated with the work.

1.6.4 Submittal Management

The Government will provide the initial submittal register in electronic format. Thereafter, 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. Use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update must be produced using QCS. QCS and 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

Develop a construction schedule consisting of pay activities, in accordance with Section 01 32 01 PROJECT SCHEDULE. Input and maintain in the QCS database this schedule either manually or by using the Standard Data Exchange Format (SDEF) (see Section 01 32 01 PROJECT SCHEDULE). Include with each pay request the updated schedule.

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 from RMS, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. 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 CD-ROM

The Government-preferred method for Contractor's submission of QCS data is by using the Government's SFTP repository built into QCS export function. Other data should be submitted using E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of CD-ROM for data transfer. Export data onto CDs using the QCS built-in export function. If used, submit CD-ROMs in accordance with the following:

1.8.1 File Medium

Submit in English required data on CD-ROM conforming to industry standards used in the United States.

1.8.2 CD-ROM Labels

Affix a permanent exterior label to each CD-ROM submitted. Indicate on the label 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 files will be automatically named by the QCS software. The naming convention established by the QCS software must not be altered.

1.9 MONTHLY COORDINATION MEETING

Update the QCS database each workday. At least monthly, 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, meet with the Government representative to review the planned progress payment data submission for errors and omissions.

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. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, will be deemed sufficient for the purpose of notification.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

This page was intentionally left blank for duplex printing.

SECTION 01 50 00

TEMPORARY CONSTRUCTION

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required for the construction of storage areas and service facilities needed for execution and completion of the work. Also included is the establishment of local contacts. Other work included in this section consists of providing Contractor and Government field offices, safety fence, security fence, and project and safety signs. All of the requirements specified herein apply to each of the project work sites. Therefore, there shall be two sets of signage, two Government field offices, including associatied support facilities, etc.

1.2 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.

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

NJDOT Specifications	(2007) Standard Specifications for Road and Bridge Construction

U.S. ARMY CORPS OF ENGINEERS (USACE)

EP 310-1-6a	(2006) Sign Standards Manual, VOL 1
EP 310-1-6b	(2006) Sign Standards Manual, VOL 2, Appendices

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD	(2009) Manual of Uniform Traffic Control Devices

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. See Section 01 33 00 SUBMITTAL PROCEDURES for all procedures related to the submission of submittals.

The following shall be submitted:

SD-01 Preconstruction Submittals

Traffic control plan; G,COR

SD-07 Certificates

Temporary Facilities Layout; G,COR

Prior to start of work, submit plans showing the layout of all temporary facilities including material storage areas, staging areas and the proposed alignment of all safety and security fencing to be used for this contract. The temporary facilities layout shall also show the locations of all Contractor access points to be used for the contract work.

1.4 CONTRACTOR ACCESS

Access to the work areas is only permitted at the locations shown. Materials required to establish or stabilize access points for vehicle use shall be provided and removed by the Contractor. Protect all existing structures from damage throughout the entire contract, and maintain all access points in accordance with Section 01 57 20 ENVIRONMENTAL PROTECTION. Any additional parking that the Contractor requires, outside the work limits, shall be coordinated directly with the appropriate local officials.

1.5 ACCESS RESTRICTIONS

Utilities and structures exist on the landward side of existing dunes throughout the project. The Contractor is prohibited from operating in these areas except where absolutely necessary to complete the contract work, e.g. for construction of crossovers. This access is subject to the approval of the COR. The COR may disapprove this access if deemed unnecessary to complete the contract work.

PART 2 PRODUCTS

2.1 GOVERNMENT FIELD OFFICE

Furnish a Government project office for the length of the contract. The office shall be a rented office, storefront or residence space with a minimum floor area of 550 square feet, with two separate offices, a conference room, and partitioned restroom facilities with flushing toilets and running water with prior approval by the Contracting Officer. The office shall have sufficient lighting to supply 150 foot-candles at the desk top level and shall be supplied with 110 volt and 220 volt electrical outlets as required for heating, air conditioning, lighting, water cooler, office equipment, and other accessories. Provide either a heater and air conditioner or a heat pump sufficient to maintain comfortable conditions. Provide a door with a cylinder lock and windows with locking hardware. The exterior of the office shall be equipped with flood lights to provide adequate security lighting during hours of darkness. Weekly janitorial services shall be supplied during normal working hours. The Contractor shall provide potable water (hot and cold), provide for treatment of sewage, and provide permanent electric service, all in accordance with applicable local municipal, county and State codes.

2.1.1 Trailer-Type Mobile Office

The Contractor may, at its option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and provide a minimum 10 foot wide by 60 foot long trailer, with the facilities specified above. If a trailer is provided, it shall be new or recently renovated to a like-new condition subject to the approval of the Contracting Officer.

Securely anchor the trailer to the ground at all four corners to guard against movement during high winds.

2.1.2 Office Equipment

The following office equipment shall be provided by the Contractor for the Government field office:

a. Two desks having 60-inch by 30-inch tops, with lockable drawers, two swivel chairs, and two tables with 60-inch by 30-inch laminated tops;

b. One 96-inch by 48-inch conference table with ten chairs;

c. One free-standing full-size drafting table, minimum 37-1/2 inch by 60 inch top, and drafting chair;

d. Two lockable, fire-resistant, letter-size, two-drawer 36 inch-wide steel lateral filing cabinets set up for side-by-side filing with ball-bearing suspensions for full-drawer extensions;

e. A magnet-compatible white dry erase board, minimum 2 feet high by 3 feet wide in size, whose surface does not require cleaners. In addition, the contractor shall provide 4 non-toxic dry erase chisel-tip markers in black, blue, red and green and appropriate eraser;

f. One battery-powered quartz round wall clock, 8-1/2 inch minimum diameter, constructed of a plastic case and lens, having a white dial with Arabic numbers and black hour, minute and second hands shall be provided in the conference area;

g. Shelf set, two shelves high, each measuring 12-inch deep by 3-feet long, one per desk;

h. Three waste baskets;

i. Electric water cooler;

j. Vertical filing plan rack for two sets of 28-inch by 40-inch plans each rack;

k. Two portable two-way marine radios with charges capable of operating on the Contractor's working frequencies;

l. Countertop microwave oven, with digital display, interior light, and a minimum 0.6 cubic feet capacity;

m. Compact refrigerator, with 1.58 cubic foot capacity, and ice tray;

n. The Contractor shall fabricate a large sign, minimum 3 feet in each dimension, made of stiff plastic or aluminum, to be attached to a free-standing post securely founded in the ground or attached directly to the Corps' trailer, as directed by the Contracting Officer. The sign shall provide the U. S. Army Corps of Engineers, Philadelphia District name and logo as shown on the attached sheets for the project signs; and

o. One plastic wall-mounted exterior mailbox with closing lid, (similar to that used by realtors at homes for sale to hold brochures)

and capable of holding several 8-1/2 inch by 11 inch sheets of paper vertically.

NOTE: All office equipment shall be in new or like new condition.

2.2 TEMPORARY TRAFFIC CONTROL

2.2.1 Barricades

Erect and maintain temporary barricades to limit public access to hazardous areas. Provide barricades whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Securely place barricades clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

2.3 TEMPORARY PROJECT SAFETY FENCE

Temporary safety fence shall be high density polyethylene grid or approved equal, minimum 4-foot high plastic fencing, high visibility orange colored, supported by and tightly secured to fence posts. Fence posts shall meet the requirements of Section 913.02.02 of the NJDOT Specifications, and all other required accessories as recommended by the fence manufacturer for a complete installation.

2.4 SECURITY FENCE

Security fence enclosing the Contractor`s project office, the Government field office if trailer is provided, and the Contractor's staging area, shall be 8-foot high chain-link fencing with steel or aluminum posts, top and bottom rails, locking gates, and all other required accessories as recommended by the fence manufacturer for a complete installation. Include plastic strip inserts, colored green or brown, so that visibility through the fence is obstructed.

2.5 PROJECT IDENTIFICATION AND SAFETY PERFORMANCE SIGNS

Provide and erect at locations designated by the Contracting Officer, the project identification and safety performance signs shown on the sketches attached to this section. Include the following on the project sign: "The State of New Jersey" as the project sponsors; and the Philadelphia District's website address.

2.5.1 Fabrication

Fabricate project identification and safety performance signs with the materials indicated on the sheets attached to this section. Layout of signs including coloring, lettering, and insignias shall be as shown on the attached sheets which includes excerpts from Section 16 of EP 310-1-6a. All letter and word spacing shall be in accordance with Appendix D of EP 310-1-6b.

PART 3 EXECUTION

3.1 STAGING AND STORAGE AREAS

Staging areas and material storage areas are limited to those shown on the contract drawings. Provide security fence as specified herein. Do not place or store trailers, materials, or equipment outside the fenced area. Trailers, equipment, or materials must not be open to public view with the exception of those items which are in support of ongoing work on any given day.

3.1.1 Maintenance of Staging and Storage Areas

Keep fencing in a state of good repair and proper alignment.

3.2 CONTRACTOR'S PROJECT OFFICE

Establish at the site of the work a project office equipped and staffed to efficiently conduct the work under this contract and provide essential information to the Contracting Officer or authorized representative. Keep at all times at its office a copy of all drawings, specifications, and other pertinent information, and shall at all times give the Contracting Officer access thereto. The Contractor's office shall be clean and equipped, at a minimum, with a conference table, twelve chairs, a desk and chair, copying machine, laser printer, and telephone facilities which shall be available for use by the Contracting Officer.

3.2.1 Security Provisions

Provide adequate outside security lighting at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

3.3 GOVERNMENT FIELD OFFICE

3.3.1 General

Provide and maintain a field office for the sole use of the Contracting Officer's representatives at the location indicated on the contract drawings or as directed by the Contracting Officer. The field office shall be complete and ready for occupancy not later than 15 days after receipt of notice to proceed, or prior to the transport of any equipment on site, with the exception of the equipment required to conduct the pre-placement condition surveys. The Government field office shall be available for use 24 hours per day, 7 days per week, and shall remain in place 30 days after the final demobilization.

3.3.2 Utilities

Provide hot and cold potable water, provide for treatment of sewage, and provide electric service, all in accordance with applicable local municipal, county and state codes. All utility costs arising from the use of the office shall be borne by the Contractor.

3.3.3 Janitorial Services

Provide all janitorial supplies and services for the office facilities to

include as a minimum, weekly sweeping, dusting, emptying of waste baskets, trash collection, servicing of toilets, mopping of all floors, sterilization of toilet seats and monthly waxing of all tile floors and washing of windows. The Contractor shall also provide for snow plowing of the parking area, shoveling of walkways, and major maintenance to the office and its utilities.

3.4 TRAFFIC PROVISIONS

3.4.1 Maintenance of Traffic

a. Conduct operations in a manner that will not close any thoroughfare or interfere in any way with traffic on railways or highways, except with written permission of the Contracting Officer at least 15 calendar days prior to the proposed modification date, and provide a Traffic Control Plan detailing the proposed controls to traffic movement for approval. The plan must be in accordance with State and local regulations and the MUTCD, Part VI. Contractor may move oversized and slow-moving vehicles to the worksite provided requirements of the highway authority have been met.

b. Conduct work so as to minimize obstruction of traffic, and maintain traffic on at least half of the roadway width at all times. Obtain approval from the Contracting Officer prior to starting any activity that will obstruct traffic.

c. Provide, erect, and maintain, at Contractor's expense, lights, barriers, signals, detours, and other items, that may be required by the Life Safety Signage, overhead protection authority having jurisdiction.

3.4.2 Protection of Traffic

Maintain and protect traffic on all affected roads and other vehicular access routes during the construction period, except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment during the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by the State and local authorities having jurisdiction. Protect the traveling public from damage to person and property. Minimize the interference with public traffic on roads selected for hauling material to and from the site. Investigate the adequacy of existing roads and their allowable load limit. Contractor is solely responsible for the repair of any damage to roads caused by construction operations.

3.4.3 Maintenance of Temporary Traffic Control Equipment

Keep temporary traffic control equipment in a state of good repair, proper alignment and adequate illumination.

3.5 SECURITY FENCE

Erect a security fence to enclose the Contractor`s project office, the Government field office if a trailer is used, and the Contractor's staging area(s). The Contractor's staging area(s) and shall be lighted during hours of darkness. This fence shall enclose and shall include appropriate gates with locks for both vehicles and employees. Posts shall be installed at maximum 10-foot intervals in the ground. Installation of all security fencing materials shall be in accordance with the fence manufacturer's

printed instructions.

3.6 TEMPORARY PROJECT SAFETY FENCE

Erect and maintain throughout the contract period a temporary safety fence to safeguard the public and prevent any public access to the work areas on the beach. This includes erecting safety fence around all material storage areas, beachfill outlet pipe work areas, and, equipment and pipelines left unattended at any time. Remove fencing and restore the area along the fence line to its original condition at the conclusion of construction operations. Maintain the safety fence during the life of the contract. Upon completion and acceptance of the work, the fencing will become the property of the Contractor and shall be removed from the work site.

3.7 PROJECT IDENTIFICATION AND SAFETY PERFORMANCE SIGNS

a. Provide and erect one project identification and one safety performance sign at the locations designated by the Contracting Officer. Fabricate and install signs in accordance with the material, design and mounting details shown on the pages attached to this section. Install signs within 15 calendar days after receipt of the Notice to Proceed.

b. Maintain signs in good condition throughout the contract period. The information contained on the face of the safety performance sign regarding the Contractor's safety record shall be updated on a daily basis throughout the contract period.

c. Remove and relocate the project and safety signs as the project progresses, if and where requested by the COR. Upon completion of the contract work, remove the signs from the work site and backfill all resulting holes.

3.8 REMOVAL AND RESTORATION

a. Upon completion of the project remove the bulletin board, signs, barricades, haul roads and all other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence that will become the property of the Contractor. Restore to the original or better condition, areas used by the Contractor, at no additional cost to the Government. Gravel, if used to traverse unpaved areas, shall be removed and the area restored to its original condition, including grading, topsoil, and seeding.

b. Staging areas and material storage areas scarred or damaged by the Contractor's equipment or operations shall be restored to its original condition, satisfactory to the Contracting Officer, which may include milling and repaving operations, concrete repair and seeding, at no additional cost to the Government.

c. Removal of all temporary construction and restoration of the work site and all access points upon completion of the contract, shall be as specified herein and in accordance with the requirements of Section 01 57 20 ENVIRONMENTAL PROTECTION.

d. Repair damage to haul roads due to Contractor operations, subject to the Contracting Officer's approval, at no additional cost to the Government.

3.9 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the the cost of all the bid items.

-- End of Section --

Below is the layout and wording of the construction project identification sign. The graphic format for this 4' x 6' sign panel follows the legend guidelines and layout as specified below. The large 4' x 4' section of the panel on the right is to be white with black legend.

The 2' x 4' section of the sign on the left with the full Corps Signature (reverse version) shall be screen printed Communications Red on the white background. The designation of a sponsor (if shown) shall be printed as shown. If no sponsor is shown the area shall be left blank.

the area should be left blank.

This sign is to be placed with the Safety Performance sign shown on the following page. Mounting and fabrication details are provided on page 16.4.

Special applications or situations not covered in these guidelines should be referred to the District/Division Sign Program Manager.

Legend Group 1: One- to two-line description of Corps relationship to project.
Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

Legend Group 2: Division or District Name (optional). Placed below 10.5" reverse Signature (6" Castle).
Color: White
Typeface: 1.25" Helvetica Regular

Legend Group 2a: One- to three-line identification of Military or Civil Works sponsor (optional). Place below Corps Signature to cross-align with Group 5a-b.
Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

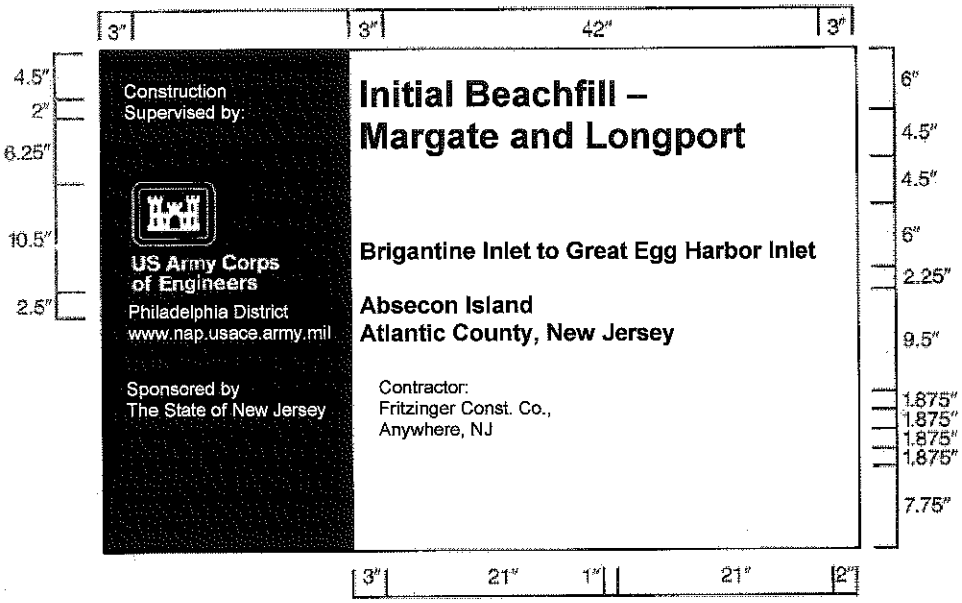
Legend Group 3: One- to three-line project title legend describes the work being done under this contract.
Color: Black
Typeface: 3" Helvetica Bold
Maximum line length: 42"

Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military).
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Cross-align the first line of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Groups 5a-b: One- to five-line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional.
Color: Black
Typeface: 1.25" Helvetica Regular
Maximum line length: 21"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-01	various	4'x 6'	4"x 4"	HDO-3	48"	WH-RD/BK

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the construction project identification sign specified on page 16.2.

The graphic format, color, size and type-faces used on the sign are to be reproduced exactly as specified below.

The title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

Safety record numbers are mounted on individual metal plates and are screw-mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the District/Division Sign Program Manager.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with (8" od.) Safety Green First Aid logo.
Color: To match PMS 347
Typeface: 3" Helvetica Bold
Color: Black

Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

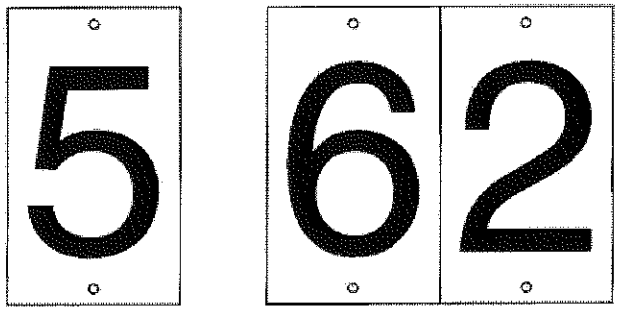
Legend Group 3: One- to two-line identification: name of prime contractor and city, state address.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Legend Group 4: Standard safety record captions as shown.
Color: Black
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.
Color: Black
Typeface: 3" Helvetica Regular
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter and word spacing to follow Corps standards as specified in Appendix D.

Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4'x 4'	4"x 4"	HDO-3	48"	WH/BK-SG



All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the Contracting Officer Representative and shall conform to the size, format, and typographic standards shown on pages 16.2-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

For additional information on the proper method to prepare sign panel graphics, contact the District/Division Sign Program Manager.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white non-reflective vinyl film with positionable adhesive backing.

All graphics except for the Communications Red background with Corps signature on the project sign are to be die-cut or computer-cut non-reflective vinyl, pre-spaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16.2-3.

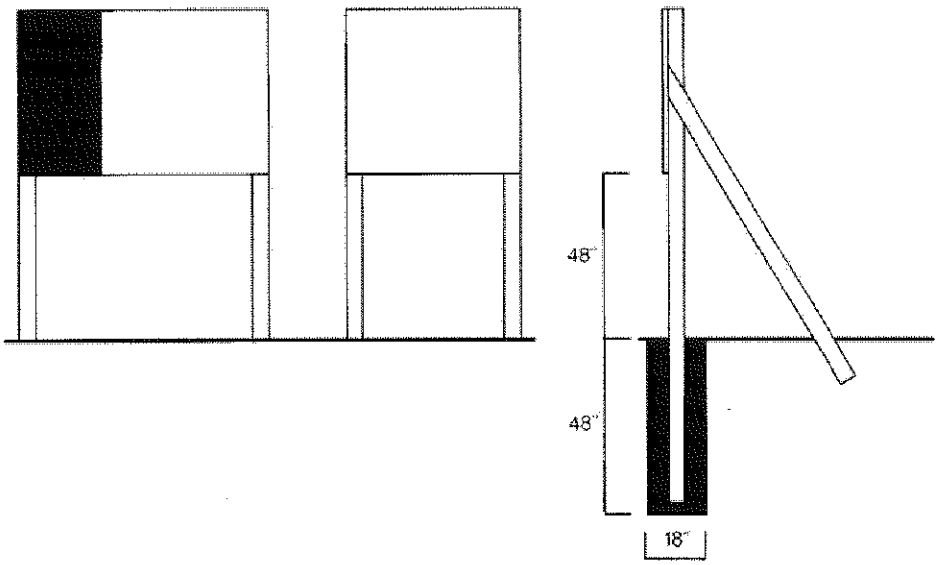
The 2' x 4' Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction artwork for the signature is provided on page 4.8 (photographically enlarge from 6.875" to 10.5").

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.



Construction Project Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 2a: Military/Civil Works Sponsor

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5a: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Safety Performance Sign
Legend Group 1: Project Title

1. _____
2. _____

Legend Group 2: Contractor/A&E

1. _____
2. _____

This page was intentionally left blank for duplex printing.

SECTION 01 57 20

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 SUMMARY

This section covers the furnishing of all labor, material and equipment and performing all work required for the protection of the environment during beachfill operations, except for those measures set forth in other sections of these specifications.

1.2 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.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011; Change 7 2012) Safety and Health Requirements Manual
WETLANDS DELINEATION MANUAL	(1997) Corps of Engineers Wetlands Delineation Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions of Waters of the United States
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
40 CFR 68	Chemical Accident Prevention Provisions
49 CFR 171 - 178	Hazardous Materials Regulations

1.3 DEFINITIONS

1.3.1 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.

1.3.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. For the purpose of this specification, environmental protection is further defined as the retention of the environment in its natural state, to the greatest extent possible, during all construction operations and to enhance the natural appearance in its final condition. Environmental protection requires consideration of air, water, and land resources and involves noise, solid waste-management and management of other pollutants. In order to prevent, and to provide for abatement and control of any environmental pollution arising from beachfill activities in performance of this contract, the Contractor and his subcontractors shall comply with all applicable Federal, state, and local laws and regulations and shall obtain all necessary permits required by same.

1.3.3 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers,creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

1.3.4 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.3.5 Wetlands

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLANDS DELINEATION MANUAL.

1.4 GENERAL REQUIREMENTS

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 must be protected during the entire duration of this contract. Comply with all applicable environmental Federal, State, and local laws and regulations. Any delays resulting from failure to comply with environmental laws and regulations will be the Contractor's responsibility.

1.5 SUBCONTRACTORS

Ensure compliance with this section by subcontractors.

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. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G,DO

Submit the environmental protection plan detailing protection methods and procedures as set forth in this section.

Piping Plover Protection Plan; G,DO

Submit plan detailing protection methods and procedures.

SD-07 Certificates

Qualifications; G,COR

Reports;

Submit daily field monitoring reports weekly to the COR throughout the monitoring period.

SD-11 Closeout Submittals

Records;

At the completion of the nesting season and/or construction activities, submit copies of all field notes, within 10 calendar days.

1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing work, submit an Environmental Protection Plan for review and approval by the Contracting Officer. 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 must be defined within the Environmental Protection Plan as outlined in this section. 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 are considered necessary, must be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, meet with the Contracting Officer for the purpose of discussing the implementation of the 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. Approval of the Contractor's plan for environmental protection will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants. The Environmental Protection Plan must be current and maintained onsite by the Contractor.

1.7.1 Compliance

No requirement in this Section will relieve the Contractor of any applicable Federal, State, and local environmental protection laws and

regulations. During Construction, the Contractor will be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 Contents

Include in the environmental protection plan, but not limit it 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. Drawings showing locations of proposed temporary excavations or embankments for haul roads, 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.

f. Traffic control plans including coordination of Contractor vehicle and equipment access with public accessways, 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.

g. Work area plan showing the proposed activity in each portion of the project 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.

h. Drawing showing the location of borrow areas.

i. Include in the Spill Control plan 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. Include in this plan, 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. Include in the plan 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 expeditious contaminant cleanup.

j. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris and schedules for disposal.

k. A historical, archaeological, cultural resources, biological resources, and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources, and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. Include in the plan methods to assure the protection of known or discovered resources, identifying lines of communication between Contractor personnel and the Contracting Officer.

1.7.3 Appendix

Attach to the Environmental Protection Plan, as an appendix, copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents.

1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer will make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report will be signed by both the the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor must protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the work under the contract.

1.9 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations from the drawings,plans and specifications, requested by the Contractor and which may have an environmental impact, will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. 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.

1.10 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. After receipt of such notice, the Contractor shall 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 will be granted or equitable adjustments allowed 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.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

Obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations is the Contractor's responsibility.

3.2 LAND RESOURCES

Confine all activities to areas defined by the drawings and specifications. Identify any land resources to be preserved within the work area prior to the beginning of any construction. Provide effective protection for land and vegetation resources at all times, as defined in the following subparagraphs.

3.2.1 Work Area Limits

Mark the areas that need not be disturbed under this contract prior to commencing construction activities. Mark or fence isolated areas within the general work area which are not to be disturbed. Protect monuments and markers before construction operations commence. Where construction operations are to be conducted during darkness, any markers must be visible in the dark. The Contractor's personnel must be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Except in areas indicated on the plans or specified to be cleared, the Contractor shall not deface, injure, or destroy existing vegetation without

the authority of the Contracting Officer. Ropes, cables, or guys shall not be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized. Where such special emergency use is permitted, it shall be performed in such a manner as to avoid damage to the trees. The Contractor shall in any event be responsible for any damage resulting from such use. Where the possibility exists that trees may be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or operations, the Contractor shall adequately protect such trees. Stone, earth or other material that is displaced into uncleared areas shall be removed. Monuments and markers shall be protected before construction operations commence.

3.2.3 Vegetation on Dunes

Except in those locations where contract work requires the covering of existing vegetation, the Contractor shall take extra precautions to protect any vegetation on existing dunes from damage.

3.2.4 Restoration of Landscape Damage

Any dune grassed areas or other landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored to a condition that appears natural, that will not detract from the appearance of the area, and that is satisfactory to the Contracting Officer. Any disturbed dune grassed areas shall be replanted as directed by the Contracting Officer. The area shall be restored to near natural conditions which will permit the growth of vegetation thereon.

3.2.5 Contractor Facilities and Work Areas

Place field offices, staging areas, stockpile storage, and temporary buildings 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.

3.3 WATER RESOURCES

Monitor all water areas affected by construction activities to prevent pollution. Do not apply toxic or hazardous chemicals to soil or vegetation unless otherwise indicated. Do not pollute any streams, rivers, oceans, or waterways with fuels, oils, bitumens, calcium chloride, acids, insecticides, herbicides or other harmful materials. The Contractor shall investigate and comply with all applicable Federal, state, county, and municipal laws concerning pollution of rivers and streams.

3.4 AIR RESOURCES

Equipment operation, activities, or processes shall be in accordance with all Federal and State air emission and performance laws and standards.

3.4.1 Sound Intrusions

Keep construction activities under surveillance and control to minimize environment damage by noise. Comply with the provisions of the State of New Jersey and all local ordinances, whichever are more stringent.

3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Properly dispose of any debris resulting from the contract work and any

wastes, effluents, trash, garbage, oil, grease, chemicals, etc., in or adjacent to the work area. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore the area to its original condition. If necessary, contaminated ground shall be excavated, disposed of as directed by the Contracting Officer, replaced with suitable fill material, compacted, and planted as required to reestablish vegetation. Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.5.1 Solid Wastes

Place solid wastes (excluding clearing debris) in containers which are emptied on a regular schedule. Handling, storage, and disposal must be conducted to prevent contamination. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with solid waste. Comply with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

3.5.2 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. At a minimum, manage and store hazardous waste in compliance with 40 CFR 262. Take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. Segregate hazardous waste from other materials and wastes, protect it from the weather by placing it in a safe covered location, and take precautionary measures such as berming or other appropriate measures against accidental spillage. 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 is the Contractor's responsibility. 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. Dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials must be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills are the Contractor's responsibility, at no additional cost to the Government. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.5.3 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles must be conducted in a manner that affords the maximum protection against spill and evaporation. Manage and store fuel, lubricants and oil in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded must be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. Storage of fuel on the project site shall be in accordance with all Federal, State, and local laws and regulations.

3.5.4 Disposal of Debris

Disposal of any debris resulting from the contract work and any wastes, effluents, trash, garbage, oil, grease, chemicals, etc., in or adjacent to the work area will not be permitted. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore

the area to its original condition. If necessary, contaminated ground shall be excavated, disposed of as directed by the Contracting Officer, replaced with suitable fill material, compacted and finished with topsoil, and planted as required to reestablish vegetation.

3.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Existing historical, archaeological, and cultural resources within the Contractor's work area are shown on the drawings. Protect these resources and be responsible for avoiding impacts within these areas to ensure their protection throughout the life of the Contract. Resources covered by this paragraph include, but are not limited to: submerged or buried maritime vessels; submerged or buried aircraft; any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, lithic debitage or other deposits; rock or coral alignments; submerged or buried structures such as foundations, paving, walls or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, 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. Cease all activities that may result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

3.6.1 General

Both the Corps and the Contractor's quality control personnel shall regularly examine newly deposited sand for items of potential historical or archaeological interest. Upon discovering any item of interest, the Contractor shall immediately notify the COR. Upon discovering an item of interest, or upon receiving notification from the Contractor that an item of interest has been discovered, the COR shall immediately notify Nikki Minnichbach of the Philadelphia District Environmental Resources Branch at (215) 656-6556 or cell (215) 834-1065. If possible, digital images of the discovered items shall be taken and forwarded to the Environmental Resources Branch to expedite their archaeological evaluation.

3.6.2 Recording And Preserving Historical And Archaeological Finds

If, during dredging or beachfill activities, any previously unidentified or unanticipated historical, archaeological or cultural resources are discovered or found, all activities that might damage or alter such resources shall be temporarily suspended. The area where the find was discovered shall be cordoned off by the Contractor to preserve the find; the Contractor will be directed to immediately move within the borrow area to avoid any further disturbance of the source of the find. If the Contractor cannot move within the designated borrow area, all pumping shall cease until directed otherwise by the Contracting Officer. Any material stockpiled on the dredge, originating from the possible source of the find, shall not be placed on the beach without prior approval by the CO.

3.6.3 Archaeological Monitoring

The Contractor's CQC System Manager and any approved alternate CQC System Managers shall be required to attend a Corp of Engineers facilitated 1 day training class, or to view the training course (on 3 DVDs) on archaeological monitoring. A person trained in archaeological monitoring shall be on the site at all times during construction and shall be employed by the prime contractor. Certificates valid for two years will be issued

to those completing the archaeological monitoring class. If viewing the 3 DVD training course on archaeological monitoring, please email Nikki Minnichbach (nicole.c.minnichbach@usace.army.mil) upon completion of the course. Ms. Minnichbach will keep this information on file for two years.

3.7 BIOLOGICAL RESOURCES

At all times, perform all work and take such steps as required to minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor will not be permitted to alter water flows or otherwise disturb native habitat adjacent to any disposal area which, in the opinion of the Contracting Officer, are critical to fish and wildlife. The protection of threatened and endangered animal and plant species, including their habitat, is the Contractor's responsibility in accordance with Federal, State, Regional, and local laws and regulations.

3.7.1 Seabeach Amaranth

Take all necessary actions to ensure protection of the seabeach amaranth plant, which is a Federally threatened species. The seabeach amaranth growing season runs from May through November. Ensure that all employees are aware of the potential presence of a threatened species and provide sufficient information describing the seabeach amaranth. Immediately notify the COR if any seabeach amaranth plants are located within the project area. State personnel will conduct amaranth surveys and delineate any plant locations within the project area prior to construction activities. If any plants are found, establish a 3 meter buffer zone around each plant. Construction activities shall avoid any delineated locations of seabeach amaranth until the plant dies back or can be relocated by the appropriate agency. Construction activities are defined as, but not limited to; surveys; the movement of equipment and vehicles; and the placement/storage of materials. No stockpiling or staging will be allowed in this area. Take additional action, as directed by the Contracting Officer, to ensure adequate protection of the seabeach amaranth. A picture of seabeach amaranth has been attached at the end of this section for detail.

3.7.2 Piping Plover Protection

Take all necessary actions to ensure protection of the piping plover bird, which is a Federally threatened species, and colonial nesting bird colonies consisting of one or more of the following state rare species: least tern, American oystercatcher, and black skimmer. The nesting season begins approximately on 15 March and ends approximately on 15 August. Ensure that all employees are aware of the potential presence of these species, and provide sufficient information describing them. Immediately notify the COR if any piping plovers and/or colonial nesting birds are sighted in the vicinity of the project area. If construction activities occur during the nesting season, the Contractor is responsible for ensuring that a piping plover monitor is on site to monitor construction activities. During the nesting season, the Contractor shall also be responsible for establishing a buffer zone of up to 1,000 meters between all construction activities and nests. If necessary, the buffer zone may be expanded if the 1,000-meter buffer zone is found to be inadequate. Construction activities are defined as, but not limited to, the movement of equipment and vehicles, surveys, and the placement/storage of materials. The Contractor shall delineate the buffer zones by erecting orange plastic fencing. All Contractor personnel, vehicles and equipment shall remain outside the buffer zones. Absolutely no access is permitted within these zones. The Contractor shall be

responsible for taking any additional action, as directed by the Contracting Officer, to ensure adequate protection of the nests and chicks. Piping plovers have the potential to nest anywhere within the contract limits. The Contractor shall be prepared to take all necessary action to ensure protection of these species, regardless of the nesting location within the contract limits or overlapping buffer zone if outside of the contract limits, in accordance with the specifications herein.

3.7.2.1 Monitoring Requirements

The primary role of the piping plover monitor shall be to ensure that no previously undetected piping plover nest or broods are located within the construction area and to monitor movements of unfledged chicks from adjacent known nesting areas that may disperse into the construction area. The plover monitor shall also detect any territorial or breeding behavior exhibited by any plovers discovered outside of historic nesting areas. A secondary role of the piping plover monitor shall be to ensure that appropriate protective buffer areas are established and maintained surrounding historical nesting (which includes courting and territorial) and chick foraging areas. The piping plover monitor shall coordinate with New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Endangered and Nongame Species Program (ENSP) to become familiar with the locations of known or suspected territorial pairs, nest sites, and chick foraging areas. The piping plover monitor shall notify the ENSP immediately if any territorial or breeding activity is observed or any new nests found and the ENSP shall assist in fencing off nesting or foraging areas and erecting predator exclosures. There shall be no entrance of these fenced areas by the piping plover monitor or any other contractor personnel unless authorized by the ENSP or the U.S. Fish and Wildlife Service (USFWS). Piping plover monitoring shall begin on 15 March and continue until all chicks from adjacent nesting sites have fledged or construction related activities have terminated. With written concurrence from USFWS and the ENSP, work greater than 1,000 meters from a known nesting area may proceed in non-nesting portions of the project area after 1 July, provided no piping plover activity has been observed within the remaining construction area after 8 alternate days of monitoring over the previous 2-week period. If these conditions are met, no further monitoring will be required.

3.7.2.2 Qualifications

Submit qualifications of piping plover monitor(s) which have been approved by the US Fish and Wildlife Service (USFWS) for construction monitoring. The monitor shall be a biologist with a minimum of 2 years experience in the type of work being performed on this project or a person with a minimum of 5 years related experience and has the necessary education and/or experience in accordance with the requirements listed herein.

3.7.2.3 Monitoring Schedule

The monitor shall be present on the beach, in the area of active construction, a minimum of every other day, to include weekends, weather permitting, for a minimum of 2 hours per day in order to determine the arrival and use of the area by piping plovers. Monitoring times shall vary in order to cover the full tidal cycle. If piping plovers are (or become) present in the area, behavioral observations with regard to establishing territories and initiating nesting shall be observed and documented. In the event that piping plovers establish active nests in the construction areas, further coordination between the Corps, USFWS, and ENSP shall be

required to document nests and establish buffer areas. Monitoring frequency shall be increased from every other day initially to several times daily in the event that an active nest is established within the monitored activity area.

Monitoring activities shall take place in and around the immediate construction disturbance area (vehicle staging, sand stockpiling, grading, etc.), the area to where the construction will be progressing, and the buffer areas around the historical nesting area.

3.7.2.4 Establishing Buffer Areas

If a piping plover is observed during the nesting season, in a previously unoccupied area within the contract limits, the plover monitor shall immediately notify the project biologist, ENSP and USFWS, through the COR, to determine necessary protective actions, and a temporary buffer shall be established. These contact numbers will be provided after contract award. Prior to 15 May, a temporary buffer of 300 meters shall be established around areas newly occupied by foraging adult plovers and plovers displaying territorial behavior. From 15 May to 15 August, the temporary buffer shall be 1,000 meters. If nesting behavior (i.e. active scrapes, courtship or copulation) is confirmed, or if nests or chicks are found, a buffer sufficient in size to prevent disturbance to nesting birds and/or to protect unfledged broods will be established based on site-specific conditions and will remain in effect until the conclusion of breeding activity. If birds are not displaying any signs of nesting behavior (i.e., are likely to be non-nesting birds or spring migrants) or are no longer sighted after observations are conducted over one week, the temporary buffers will be removed. Once piping plover nests have hatched and chicks are mobile (possibly as early as approximately 15 May), no construction shall take place within 1,000 meters of chick foraging areas until after the chicks have fledged. All construction related activities (e.g., vehicle use, surveying, framing, equipment set-up, etc.) shall adhere to the appropriate buffer area restrictions. Buffer areas shall extend from the water's edge landward to the furthest seaward extent of the natural or man made feature which would prohibit piping plover chicks from traversing the area (e.g., dunes, boardwalk or bulkhead).

3.7.2.5 Surveying Operations

When conducting beach profile surveys, the Contractor shall be cognizant of nesting areas, and shall not enter any fenced-off areas for any reason unless authorized by the ENSP or the USFWS. If a sled is being used during the survey efforts, it shall remain below the water line at all times. Notify the Contracting Officer if a sled will be used during the surveying operations, prior to the start of survey operations.

3.7.2.6 Reports

Provide daily field reports, with detailed observations of nesting piping plovers and other shorebirds, survey results, weather and other environmental conditions, any disturbances of nesting birds, and construction activities.

3.7.2.7 Records

The plover monitor shall maintain complete contemporaneous field notes and complete daily field reports with detailed observations of nesting piping

plovers and other shorebirds, survey results, weather and other environmental conditions, any disturbances of nesting birds, and construction activities. The monitor shall provide these notes to USFWS and the ENSP through the COR upon request. The monitor shall provide weekly summary updates of construction activity and nesting by e-mail or facsimile to the COR, USFWS, ENSP and appropriate municipal officials as directed by the Contracting Officer. At the completion of the nesting season and/or construction activities, a complete copy of all field notes shall be provided to the Corps, USFWS and ENSP.

3.7.3 Whale Monitoring

3.7.3.1 Avoidance

Dredges and vessels shall not intentionally approach whales closer than 100 yards when in transit. If listed species are present within a distance equal to 500 yards, then speed shall be reduced to 4 knots or less unless precluded by safety considerations. Unless positively identified as another whale species, any large whale shall be considered a suspected right whale, especially if one has been recently sighted by the vessel, or if the vessel is in an area where right whales could be present. The advice of the onboard National Marine Fisheries Service (NMFS)-approved observer, if present, shall be followed at all times when operating around listed species. If no NMFS observer is on board, the COR shall be notified of any whale activity.

3.7.3.2 Monitoring

Monitor for the presence of whales during all dredging activities in this contract. Record the presence of whales on the Daily Report of Operations form. Immediately notify the Contracting Officer following the sighting of a whale.

3.7.4 Sea Turtle and Atlantic Sturgeon Requirements

3.7.4.1 Avoidance

Dredges and vessels should not intentionally approach sea turtles closer than 100 yards when in transit. If listed species are present within a distance equal to 500 yards, then speed should be reduced to 4 knots or less unless precluded by safety considerations. For hopper dredges, the dragarm shall not be operated while in the water column to minimize potential impacts to sea turtles and Atlantic Sturgeon. Operation shall begin when the dragarm reaches the sediment and end before the dragarm is removed from the sediment.

3.7.4.1.1 Protection

a. Take all necessary actions to ensure protection of sea turtles and Atlantic sturgeon. Ensure that all employees are aware of the potential presence of protected species. The Government will provide the Contractor with pamphlets and ID cards to aid in the identification of sea turtles or Atlantic sturgeon that may be encountered during contract activities.

b. In order to prevent sea turtles or Atlantic sturgeon from becoming entrained in the dredge, install screens with openings not to exceed 4-inches by 4-inches on dredge water intake ports that do not have MEC screens.

3.7.4.1.2 Inspection

a. Inspect the dragarm for impinged sea turtles or Atlantic sturgeons by someone familiar with identifying these species each time the dragarm is brought to the surface. Notify the COR immediately if a sea turtle or Atlantic sturgeon is observed during dredging or found to be impinged on the dragarm. Remove the impinged animal and place it in cold storage until further direction is received from the Government and NMFS.

b. Inspect MEC baskets on the beach at a minimum of every 12 hours by someone knowledgeable about listed species identification. Photograph biological material that may be part of a sea turtle or sturgeon and retain it in cold storage until disposal can be discussed with NMFS. Immediately notify the COR if any biological material is found that may be part of a sea turtle or sturgeon.

3.8 PREVIOUSLY USED EQUIPMENT

Clean all previously used construction equipment prior to bringing it onto the project site. Ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. Consult with the USDA jurisdictional office for additional cleaning requirements.

3.9 MAINTENANCE OF POLLUTION, EROSION AND SEDIMENTATION CONTROL FACILITIES

Maintain all pollution, erosion and sedimentation control facilities required for use under this contract as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created.

3.10 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel must be trained in all phases of environmental protection and pollution control. Conduct environmental protection/pollution control meetings for all personnel prior to commencing construction activities. Additional meetings must be conducted for new personnel and when site conditions change. Include in the training and meeting agenda: 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.

3.11 POST CONSTRUCTION CLEANUP

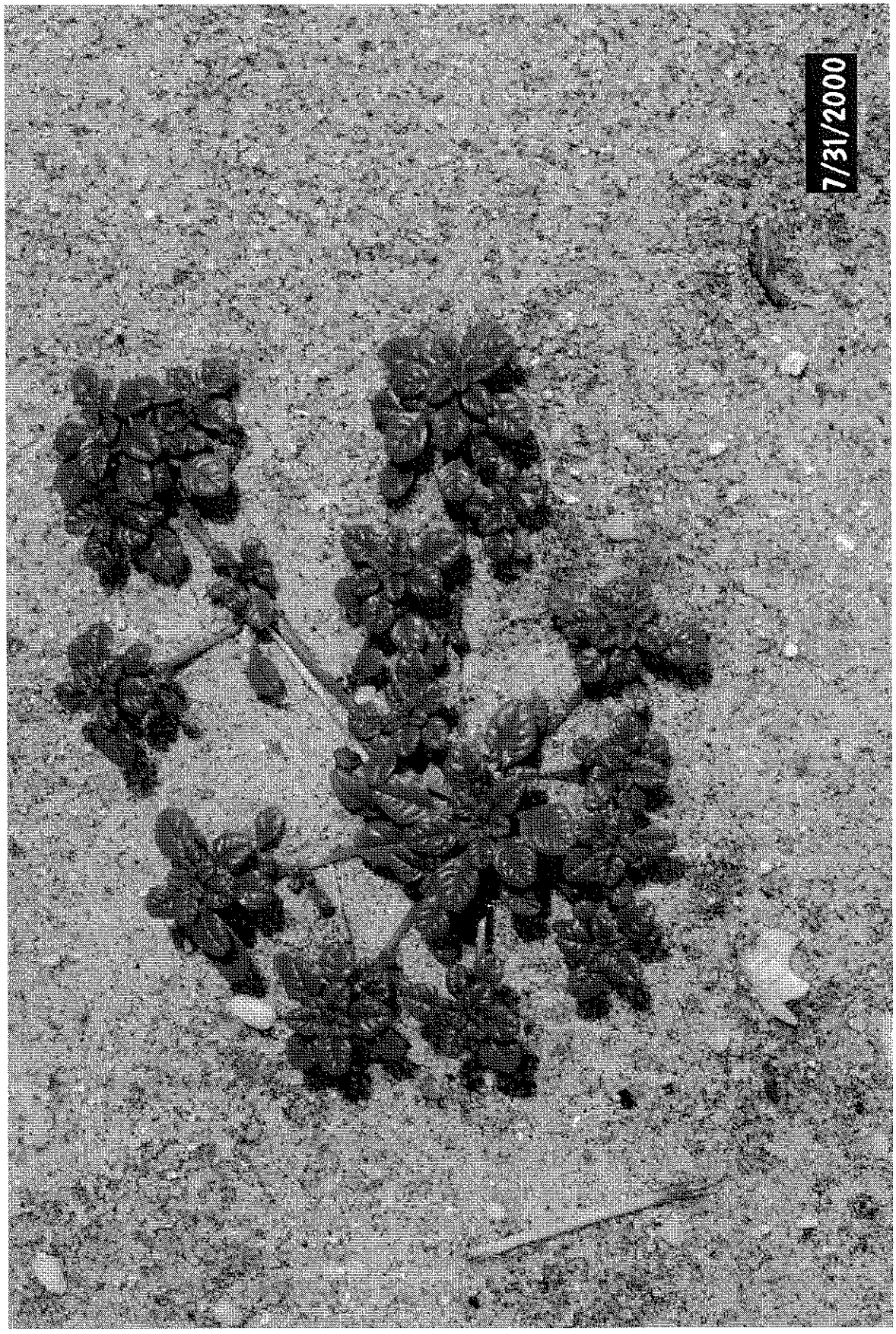
The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". Unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area must be graded, filled and the entire area seeded unless otherwise indicated. The area shall be restored to near natural conditions which will permit the growth of vegetation thereon.

3.12 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items. Payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor, and payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations are solely the Contractor's responsibility.

-- End of Section --

This page was intentionally left blank for duplex printing.



Typical Seabeach Amaranth Plant

This page was intentionally left blank for duplex printing.

SECTION 01 57 23

TEMPORARY STORM WATER POLLUTION CONTROL

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.

ASTM INTERNATIONAL (ASTM)

ASTM C33/C33M	(2013) Standard Specification for Concrete Aggregates
ASTM D4439	(2011) Geosynthetics
ASTM D4491	(1999a; R 2009) Water Permeability of Geotextiles by Permittivity
ASTM D4533	(2011) Trapezoid Tearing Strength of Geotextiles
ASTM D4632	(2008) Grab Breaking Load and Elongation of Geotextiles
ASTM D4751	(2012) Determining Apparent Opening Size of a Geotextile
ASTM D4873	(2002; R 2009) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.2 SYSTEM DESCRIPTION

The work consists of implementing the storm water pollution prevention measures to prevent sediment from entering streams or water bodies as specified in this Section in conformance with the requirements of Section 01 57 20 ENVIRONMENTAL PROTECTION, and the requirements of the National Pollutant Discharge Elimination System (NPDES).

1.3 EROSION AND SEDIMENT CONTROLS

The controls and measures required of the Contractor are described below.

1.3.1 Structural Practices

Implement structural practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Implement structural practices in a timely manner, during the construction process, to minimize erosion and sediment runoff. Include the following devices; Location and details of installation and construction are shown on the drawings.

1.3.1.1 Silt Fences

Install silt fences around the staging area as shown. Provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Prior to the use of the staging area, properly install silt fences to effectively retain sediment. Obtain approval from the Contracting Officer prior to final removal of silt fence barriers.

1.3.2 Stabilized Construction Entrances

Provide stabilized construction entrances (SCE) as a temporary structural practice to minimize erosion and sediment at construction entrances and provide the SCE as shown. The Contracting Officer will approve the final removal of the SCE.

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Mill Certificate or Affidavit

Certificate attesting that the Contractor has met all specified requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

Identify, store and handle filter fabric in accordance with ASTM D4873.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Filter Fabric

Provide geotextile that complies with the requirements of ASTM D4439, and consists of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and contains stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. Provide synthetic filter fabric that contains ultraviolet ray inhibitors and stabilizers to assure a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F. The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE		
PHYSICAL PROPERTY	TEST PROCEDURE	STRENGTH REQUIREMENT

FILTER FABRIC FOR SILT SCREEN FENCE		
Grab Tensile Elongation (percent)	ASTM D4632	100 lbs. min. 30 percent max.
Trapezoid Tear	ASTM D4533	55 lbs. min.
Permittivity	ASTM D4491	0.2 sec-1
AOS (U.S. Std Sieve)	ASTM D4751	20-100

2.1.2 Silt Fence Stakes and Posts

Use wooden posts for fence construction. Wooden posts utilized for silt fence construction, shall have a minimum cross section of 2 by 2 inches when oak is used and 4 by 4 inches when pine is used, and have a minimum length of 5 feet.

2.1.3 Mill Certificate or Affidavit

Provide a mill certificate or affidavit attesting that the fabric and factory seams meet chemical, physical, and manufacturing requirements specified above. Specify in the mill certificate or affidavit the actual Minimum Average Roll Values and identify the fabric supplied by roll identification numbers. Submit a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the filter fabric.

2.1.4 Stone

Material indicated as #2 stone shall be in accordance with ASTM C33/C33M.

PART 3 EXECUTION

3.1 INSTALLATION OF SILT FENCES

Extend silt fences a minimum of 16 inches above the ground surface without exceeding 34 inches above the ground surface. Provide filter fabric from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, splice together filter fabric at a support post, with a minimum 6 inch overlap, and securely sealed. Excavate trench approximately 4 inches wide and 4 inches deep on the upslope side of the location of the silt fence. The 4 by 4 inch trench shall be backfilled and the soil compacted over the filter fabric. Remove silt fences upon approval by the Contracting Officer.

3.2 FIELD QUALITY CONTROL

Maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. Use the following procedures to maintain the protective measures.

3.2.1 Silt Fence Maintenance

Inspect the silt fences in accordance with paragraph, titled "Inspections," of this section. Any required repairs shall be made promptly. Pay close attention to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, replace the fabric promptly. Remove sediment deposits when deposits reach one-third of the height of the barrier. Remove a silt fence when it is no longer required. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall receive erosion control.

3.2.2 Diversion Dike Maintenance

Inspect diversion dikes in accordance with paragraph, titled "Inspections," of this section. Pay close attention to the repair of damaged diversion dikes and accomplish necessary repairs promptly. When diversion dikes are no longer required, shape to an acceptable grade.

3.3 INSPECTIONS

3.3.1 General

Inspect disturbed areas of the construction site, areas that have not been finally stabilized used for storage of materials exposed to precipitation, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every 7 calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Conduct inspections at least once every month where sites have been finally stabilized.

3.3.2 Inspections Details

Inspect disturbed areas and areas used for material storage that are exposed to precipitation for evidence of, or the potential for, pollutants entering the drainage system. Observe erosion and sediment control measures identified in the Storm Water Pollution Prevention Plan to ensure that they are operating correctly. Inspect discharge locations or points to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Inspect locations where vehicles exit the site for evidence of offsite sediment tracking.

3.3.3 Inspection Reports

For each inspection conducted, prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, maintenance performed, and actions taken. Furnish the report to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A copy of the inspection report shall be maintained on the job site.

3.3.4 Monthly Inspection Report and Certification Form

On the first working day of each month, the Contractor must complete, sign, and submit the original Monthly Inspection Report and Certification Form for Erosion and Sediment Controls to the Contracting Officer as part of the

Contractor's daily CQC Report and attach a copy of the completed form to the Plan. Unless otherwise notified by the Contracting Officer, submit the Monthly Inspection Report and Certification Forms for an additional two months after the final completion of all storm water pollution prevention measures required in this contract have been implemented.

3.4 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the the cost of all the bid items.

-- End of Section --

This page was intentionally left blank for duplex printing.

SECTION 01 71 23

SURVEY REQUIREMENTS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required in conducting staking and flagging, pre-placement and post-placement condition surveys, before- and after- beachfill placement surveys, and, before- and after-dredging surveys of the borrow area.

1.2 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. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011; Change 7 2012) Safety and Health Requirements Manual
EM 1110-2-1003	(2002; Change 1 April 2004) Hydrographic Surveying
EM 1110-1-1005	(2007) Engineering and Design - Control and Topographic Surveying

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" require approval prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," require approval prior to commencing the particular task to which the submittal is associated.

SD-01 Preconstruction Submittals

Qualifications; G,DO

Submit qualifications of the independent licensed surveyor(s) for topographic and hydrographic surveying to the Government Survey Point of Contact prior to commencing any survey work.

Surveying Procedures and Equipment; G,DO

Submit all surveying procedures, methods, and equipment for topographic surveys, hydrographic surveys, and tidal monitoring, to the Government Survey Point of Contact, prior to the start of any surveying work. All survey equipment, including vessels, shall be owned or leased by an independent survey company, unless otherwise approved by the Government.

SD-07 Certificates

Pre-Placement Condition Surveys; G,DO

Submit data in the formats specified herein. Include the photographic documentation of the surveys, as specified herein.

Before-Dredging Borrow Area Surveys; G,DO
After-Dredging Borrow Area Surveys; G,DO

Submit Before- and After-dredging survey data of the borrow area within 5 business days after completion of each survey performed.

Before-Beachfill Surveys; G,DO
After-Beachfill Surveys; G,DO

Submit the before-beachfill survey data of a particular location with both the after-beachfill survey data and the specified beachfill template data of that same location. Submit before- and after-beachfill survey data every 14 calendar days unless requested more often by the Contracting Officer. Submit plan view and cross-section drawings on a daily basis.

Survey Logs

Daily submission of survey logs to the District Survey Point of Contact and COR.

DGPS Positioning

Daily submission of recorded dredge position data.

Post-Placement Condition Surveys; G,DO

Submit for review not later than 30 calendar days after acceptance of final beachfill.

Photographic Documentation of Surveys

Submit digital files and a set of hardcopy images in a brief report documenting the surveys, weather conditions, beach conditions and field notes.

Metadata; G,DO

Metadata shall be submitted within 14 business days after completion of beachfill placement operations.

1.4 DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS) EQUIPMENT

The Contractor must have a differential GPS, and shall conduct his survey work in accordance with the U.S. Army Corps of Engineers Hydrographic

Surveying Manual EM 1110-2-1003. Provide real time positioning and elevation of the dredge's draghead or cutterhead on a computer screen, during dredging, and have the capability of playback in 15 minute intervals. Record DGPS positioning of the dredge on a disk every 15 minutes and submit to the Contracting Officer on a daily basis. Submit maps and geospatial data specified for submission in Section 35 31 00 BEACHFILL in ESRI ArcGIS 10.x shape file format, including all components and extensions, or in a Spatial Data Standard compliant geodatabase. All real time positioning data must include northing, easting, elevation, date and time of information.

1.5 HYDROGRAPHIC SURVEYS

Conduct hydrographic surveys in accordance with USACE Performance Standards as defined in the Hydrographic Surveying Manual EM 1110-2-1003. Perform surveys using single transducer sounding techniques, multi-beam sweep type surveys or both. Obtain bottom soundings using a single beam fathometer operating at a frequency ranging from 190 to 210 Khz. When utilizing multi-beam technology, the operating frequency shall range from 180 to 250 Khz. Calibrate all fathometers in accordance with the procedures outlined in EM 1110-2-1003. Include raw data with submittals.

1.6 TOPOGRAPHIC SURVEYS

Perform all topographic surveys in accordance with EM 1110-1-1005. Conduct all topographic and wading surveys utilizing real time kinematic GPS or an electronic total station with a data collector. Record a three-dimensional raw electronic position for each data point. Include raw data with submittals.

1.7 SURVEYING RESTRICTIONS

1.7.1 Swimming

Swimming is prohibited unless performed by a dive team per USACE Safety Manual, EM 385-1-1. Swimming is defined as a worker in water to a depth such that their feet are not in contact with the bottom. Some survey work may be accomplished by a worker in the water who is standing on the bottom---this is considered wading and is acceptable survey practice. Wear a Personal Flotation Device (PFD) when wading and conform to the procedures and requirements found in Section 19, "FLOATING PLANT AND MARINE ACTIVITIES," of EM 385-1-1.

1.7.2 Surf Zone Data Collection

In order to ensure proper data overlap and full profiles without the use of swimmers, a device may be used for the surf zone data collection such as a sea sled or CRAB. The device shall utilize direct measurement with real time kinematic GPS or an electronic total station/prism with data collector. The device will be considered a method of hydrographic surveying and will be held to the same time restraints and tolerances.

1.8 QUALIFICATIONS

Perform all surveys using an independent survey company, and all surveys (topographic, wading and hydrographic) shall be performed by the same company. Perform all topographic surveys under the direction and supervision of a Professional Licensed Surveyor with a minimum 5 years current experience in beach profiling. Conduct all hydrographic surveys

under the direction and supervision of a Surveyor certified by the American Congress on Surveying and Mapping (ACSM) as an In-Shore Hydrographer, or by a Professional Licensed Surveyor with a minimum of 5 years documented experience in a hydrographic surveying environment similar in nature to the surveys required under this Contract. Surveyors shall be State of New Jersey licensed surveyors. The licensed surveyors shall be onsite a minimum of 10 percent of the onsite survey time.

1.9 QUALITY ASSURANCE

Quality assurance will be conducted by the District Survey Office on a minimum of 10 percent of the Contractor's survey work. To accomplish this, the District survey office will either; re-survey areas; observe the Contractor in conducting their surveys; or inspect submitted raw and processed data.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL SURVEY REQUIREMENTS

Conduct all surveys required to demonstrate that the construction is in compliance with the specified placement tolerances and the lines, grades, and elevations shown on the drawings. Conduct all surveys for payment purposes as specified in Special Clause QUANTITY SURVEYS.

3.1.1 Vertical and Horizontal Datums

Utilize North American Vertical Datum (NAVD) 1988 as the vertical datum for elevation and depth references for all surveys. Utilize New Jersey's State Plane Coordinate System (NAD 1983) as the horizontal reference datum.

3.1.2 Tolerances

Conduct topographic surveys utilizing procedures and methodology that meet or exceed accuracy tolerances of +/- 0.20 feet in the vertical and +/- 1.0 feet in the horizontal. Conduct hydrographic surveys utilizing procedures and methodology that meet or exceed accuracy tolerances of +/- 0.20 feet in the vertical and +/- 3.0 feet in the horizontal. Horizontally, keep the vessel within +/- 25 ft of the profile line. Take complete notes in areas where obstructions are present, explaining the offset.

3.1.3 Overlap of Survey Techniques

Survey lines requiring multiple collection methods shall have a minimum of 25 feet of overlap and 10 points recorded in each method recorded. Include all recorded points in the final submittal with attributes indicating the recording method attached. Survey points shall be within 25 feet lateral distance of the planned profile line and overlap points shall be within 25 feet lateral distance of the adjoining overlap point.

3.1.3.1 Pre-Placement And Post-Placement Condition Surveys

Schedule the hydrographic/wading/topographic portions of the survey profiles so that a minimum amount of time transpires between data collection of each portion of the survey lines. Survey the hydrographic

and wading segments within a maximum time period of 2 days for each profile line. If topographic surveys of the upper beach profile are performed separate from the nearshore wading surveys, survey topographic and wading segments within a maximum time period of 5 days for each profile line. For the purpose of this contract, the "Upper Beach" is defined as +6 feet NAVD88 and above. If topographic surveys are performed separate from wading surveys, develop the composite profile from the wading survey in the region of overlap. If significant differences in elevation between survey segments are observed at locations where segments overlap, submit such information to the District Office for assessment, while still at the site. Significant differences between segments shall be defined as elevation differences greater than 1 foot over a distance of 10 feet or greater along a profile line, and occurring on two or more adjacent profile lines.

3.1.3.2 Before- And After-Beachfill Surveys

Schedule the hydrographic/wading/topographic portions of the survey cross sections so that a minimum amount of time transpires between data collection of each portion of the survey lines. Survey the hydrographic, wading and topographic segments within a maximum time period of 48 hours for each line. If topographic surveys are performed separate from wading surveys, develop the composite profile from the wading survey in the region of overlap. If significant differences in elevation between survey segments are observed at locations where segments overlap, submit such information to the District Office for assessment, while still at the site. Significant differences between segments shall be defined as elevation differences greater than 1 foot over a distance of 10 feet or greater along a profile line, and occurring on two or more adjacent profile lines.

3.1.4 Hydrographic Surveying Techniques

Survey hydrographic or offshore portions of beach profile lines using a towed sea sled, direct measurement methodologies, or hydrographic techniques with Real Time Kinematic capabilities. If a towed sea sled method is used, obtain horizontal and vertical positioning utilizing RTK/GPS capabilities to obtain orthometric heights in the required datum, NAVD88. Use the latest NGS separation model to ensure accuracy levels are met. Update rates from the GPS receiver to the data collection processor, shall be collected at a minimum interval of 5 Hz. to a maximum interval of 20 Hz, to minimize the latency error. Augment RTK data with heave information to smooth the vertical position in the post-processing of the data. Locate the GPS base station within 6.2 miles (10 km) of the hydrographic line being surveyed. Conduct topographic and hydrographic portions of the survey at tidal stages to ensure overlap is obtained.

3.2 SURVEY CONTROL

Survey control will be established by the Government prior to the Contractor commencing on-site work. Notify the Contracting Officer a minimum of 15 work days prior to commencing site work to coordinate on-site survey control. Survey the control network utilizing surveying procedures and methodology that meet or exceed accuracy tolerances of +/- 0.10 feet in the vertical and +/- 0.10 feet in the horizontal.

USACE-NAP survey control networks are periodically adjusted and updated. This process results in changes to control monuments and coordinates. It does not change the coordinates of the survey baseline. The survey

baseline coordinates and the coordinates of the physical monument may vary. It should be assumed that the survey control network and the survey baseline are independent entities. The physical monument may or may not be on the survey baseline. Establish the relationship between the supplied physical monumentation and the survey baseline.

If the name of the survey control point includes stationing or numbers of any kind, the station name should not be assumed to be exact stationing on the survey baselines or profile lines. Coordinates shown on the Survey Control Sheets (DA Form 1959) will govern. Station naming often refers to historic project information and standard calculations must be performed based on coordinates in order to derive the specific relationship between the control point and the survey baseline.

Stake and flag all temporary bench marks or control points set within the work limits and clearly label the elevation of the point on the stake.

3.3 SURVEY LOGS

Prepare survey logs in spreadsheet form describing all survey progress and activity for pre- and post-placement condition surveys and for before- and after-dredging surveys. The spreadsheet shall be an ongoing log describing all survey lines that have been started as well as completed.

3.4 STAKING AND FLAGGING

3.4.1 Contractor Work Limit

Stake and flag, every 50 feet, the Contractor's landward work limit, subject to Government approval.

3.4.2 Construction Baseline

Stake and flag, every 100 feet, a survey baseline, located such that it provides easy reference by QA and QC personnel. The location of the survey baseline is subject to the approval of the COR. This survey baseline is shown on the contract drawings.

3.4.3 Centerline of Dune

Stake and flag, every 100 feet, the centerline of the dune, as indicated on the contract drawings, for easy reference by QA and QC personnel.

3.4.4 Groins and Outfalls

Stake and flag, the limits of existing groins, outfalls and other structures as directed by, and subject to the approval of the COR.

3.5 PRE-PLACEMENT AND POST-PLACEMENT CONDITION SURVEYS

3.5.1 General

The beachfill area conditions are dynamic in nature. Conditions existing during the preparation of this contract may not be an accurate representation of the beachfill area conditions existing at the commencement of beachfill operations. Consequently, obtain pre-placement condition survey profiles.

3.5.2 Completion Time Requirements

a. Commence beachfill operations no more than 21 calendar days after completion of pre-placement condition surveys, subject to the approval of these surveys. Prior to commencement of beachfill operations, allow the Government a maximum of 14 calendar days for review and approval of these surveys, and potential revisions to the contract drawings. Re-collect pre-placement condition surveys in the event beachfill operations are not started within the time specified above. The Government will consider Before-Beachfill Surveys as part of beachfill operations.

b. Complete and submit for Government review, post-placement condition surveys not later than 30 calendar days after acceptance of final beachfill.

3.5.3 Locations of Survey Lines

Take pre-placement and post-placement condition surveys at the locations of the profiles shown on the drawings.

3.5.4 Description of Required Survey Lines

The survey profiles shall be long lines, and shall extend from the survey baseline to a depth of -30 feet NAVD88 or 5000 feet seaward, whichever occurs first. The origin of the new profile lines shall be the survey baseline, as shown on sections on the contract drawings.

3.5.5 Intervals Required

Take elevations along the profiles at a maximum of 10 foot intervals, and take additional elevations at breaks in grade and as necessary to describe all hydrographic and topographic features.

3.5.6 Quality Control

Data from previous surveys will be provided to the Contractor in advance of the pre-placement surveys. Overlay the previous surveys with pre-placement surveys as a quality control measure. If previous surveys are not available, this requirement will be waived.

3.5.7 Photographic Documentation of Surveys

During the completion of pre-placement condition surveys, take digital color photographs at each profile line to provide visual documentation of the beach. Take digital photographs from a point on the profile line located approximately halfway between the water line and the seaward toe of the dune. Take the photographs in three directions. Take the first photograph facing perpendicular to the profile line azimuth. The direction of the first photograph shall be defined by facing the ocean while standing on the profile line, then turning counterclockwise approximately 90 degrees (generally facing a northeasterly direction along the coast. Take the second parallel to the profile line azimuth and facing seaward. Take the third parallel to the profile line azimuth and facing landward. Document any obstructions along the profile line azimuth which preclude collection of data with additional digital photographs.

3.6 BEFORE- AND AFTER-BEACHFILL SURVEYS

3.6.1 Completion Time Requirements

a. See time requirements specified under Paragraph "PRE-PLACEMENT AND POST-PLACEMENT CONDITION SURVEYS" for commencement of beachfill operations.

b. Complete after-beachfill surveys of a location no more than 14 calendar days after the commencement of the before-beachfill surveys of that location. (14-day max performance period)

c. In addition, do not commence the after-beachfill surveys sooner than 24 hours after the final placement of beachfill in a location. (24-hour min waiting period)

d. Upon agreement between the COR, vessel operator, and SSHO, that the sea conditions are too rough to safely operate the hydrographic survey vessel to obtain the after-beachfill surveys, a time extension may be granted until the sea conditions improve.

3.6.2 Locations of Survey Lines

Take survey profiles at 100-foot intervals. Survey lines for quantity surveys shall be perpendicular to the seaward edge of berm referenced to the survey baseline.

3.6.3 Description of Required Survey Lines

Extend survey profiles 1,200 feet from the survey baseline or the seaward work limit, whichever is further seaward.

3.6.4 Intervals Required

Take elevations along the profiles at a maximum of 10 foot intervals, and take additional elevations at breaks in grade and as necessary to describe all hydrographic and topographic features.

3.7 BEFORE- AND AFTER-DREDGING SURVEYS OF THE BORROW AREA

3.7.1 Completion Time Requirements

Commence dredging operations in the borrow area no less than 15 calendar days after completion of before-dredging surveys. Conduct after-dredging surveys of the borrow no more than 10 calendar days of completion of dredging of the borrow area.

3.7.2 Locations of Survey Lines

Take before- and after-dredging survey cross sections of the borrow area at maximum intervals of 200-feet, starting 200 feet south of and parallel to the western limit of the borrow area and continuing 200 feet east of and parallel to the eastern limit of the borrow area. In addition, survey 500-foot-interval quality control lines, perpendicular to and through all of the cross-section lines, starting 200 feet south of and parallel to the southern limit of the borrow area and continuing 200 feet north of and parallel to the northern limit of the borrow area. For the purpose of this description, the near shore perimeter line of the borrow area will be considered the western limit and the offshore perimeter line will be considered the eastern limit. Following accordingly, the southern and

northern limits of the borrow area will be the borrow area perimeter lines that are, essentially, perpendicular to the western and eastern limits.

3.7.3 Intervals Required

Take elevations along the cross-section at maximum intervals of 25 feet, and take additional elevations at breaks in grade and as necessary to describe all hydrographic features.

3.8 DATA SUBMISSION

3.8.1 General

Record all survey data digitally on compact disc (CD) in ASCII text format. Label the face of each CD to describe contents including: project name, transmittal no., survey type (e.g., before beachfill), station, and date. Provide a case or sleeve for each CD. Submit all survey data in all of the following formats:

3.8.1.1 Pre- and Post-Placement Condition Surveys:

a. Nine-column XYZ Format, as shown on the attached sheets.

b. BMAP Free Format: ASCII files using distances offset from the baseline (X) and elevation (Z1), as shown on attached sheets.

c. Plotted and electronic profile drawings in AutoCAD version 2010 or later for each profile survey taken. These profiles shall be overlaid on the contract drawing profiles for comparison purposes. The grid spacing shall be 5 feet in the vertical and 50 feet in the horizontal. Each drawn profile shall show the station that it was taken from. Submit electronic files in both AutoCAD and Portable Document Format (PDF).

3.8.1.2 Before- and After-Beachfill Surveys and Beachfill Template Data:

a. Nine-column XYZ Format, as shown on the attached sheets.

b. One ASCII file containing the following for all profile lines: date, profile ID, survey origin, and grid azimuth with respect to the horizontal reference coordinate system.

c. BMAP Free Format: ASCII files using distances offset from the baseline (X) and elevation (Z1), as shown on attached sheets.

d. Plotted and electronic cross section drawings in AutoCAD version 2010 or later for each cross section survey taken. Overlay these cross sections on the contract drawing cross sections and include the specified beachfill template for that location. Each drawn cross section shall show the station that it was taken from. The grid spacing shall be 5 feet in the vertical and 50 feet in the horizontal. Submit electronic files in both AutoCAD and PDF formats.

e. Plotted plan view drawings that show topographic and hydrographic survey data points with tick marks at each shot collected and color coded by survey type (hydro, wading, topo). Plotted cross section drawings that show topographic and hydrographic survey data that are color coded by survey type. Use the data in the Nine-column XYZ format to derive these drawings.

f. Compile all survey data previously submitted with each new before/after beachfill survey disc submittal.

3.8.1.3 Before- and After-Dredging Borrow Area Surveys:

a. Nine-column XYZ Format, as shown on attached sheets. Include Before-Dredging Data in a single file and After-Dredging data in a single file.

b. Plotted and electronic drawings of the survey lines and 2-foot-interval contour lines representing the bathymetric surface with the limits of the borrow area delineated in AutoCAD version 2010 or later. The contour surface shall be a TIN (Triangulated Irregular Network) surface that is elevation referenced within the drawing. Include surveys of the entire borrow area that extend beyond the borrow area perimeter as specified in paragraph above titled "BEFORE- AND AFTER-DREDGING SURVEYS OF THE BORROW AREA," sub-paragraph "Locations of Survey Lines," for both the before and after surveys. Submit electronic files in both AutoCAD and PDF formats.

3.9 DISCREPANCIES

In the event of any discrepancies that cannot be resolved by the District Office quality assurance review of the Contractor's data, the COR may request an additional survey be performed by the Philadelphia District Survey Section. The results of the Government survey will be considered in the final determination made by the Contracting Officer to resolve any conflicts.

3.10 METADATA SUBMISSION

Provide metadata file(s) for all geospatial data produced under this Contract that are compatible with ESRI ArcGIS applications. (Information on ESRI ArcGIS is available at the following link: http://www.esri.com.) The metadata file(s) must comply with Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata Version 2.0 or higher. If another metadata generation tool is used, the ".txt" or ".doc" file types will be sufficient, however the ".xml" alternative file type would be preferred.

Geospatial data is defined as information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the earth, which also includes aerial photography. Geospatial data affected by these requirements are those generated for use in a: Geographic Information System (GIS); Land Information System (LIS); remote Sensing or Image processing system; Computer-Aided Design and Drafting (CADD) system; Automated Mapping/Facilities Management (AM/FM) system and other computer systems that employ or reference data using either absolute, relative or assumed coordinates.

Provide digital FGDC compliant metadata file(s) for each deliverable product and data set outlined in these specifications.

Metadata standards can be found at http://www.fgdc.gov/metadata.

3.11 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the Bid Items titled, "Beachfill".

SURVEY DATA FORMATSa. Nine-column XYZ Format

One ASCII file containing all data points for all profiles and having a descriptive header at the top of the file followed by a record of nine comma delimited fields for each data point including the following information: Profile ID, Date, Time, Point Number, Easting (X), Northing (Y), Elevation (Z), survey type (TOPO, WADING, or HYDRO), and description (as appropriate). The following is a sample data file format:

(DESCRIPTIVE HEADER)
CAPE MAY POINT, NEW JERSEY
BEACH PROFILE DATA
July 2012
VERTICAL DATA REFERENCED TO NAVD88, U.S. SURVEY FOOT
HORIZONTAL DATA REFERENCED TO NAD83, NEW JERSEY MERCATOR - ZONE 2900, U.S. SURVEY FOOT

DESCRIPTION LEGEND (SAMPLE):
STREET = STREET OR SHOULDER
ROAD_BED = GRASSY SHOULDER OR EDGE OF ROAD
PK_NAIL = ON STATION, RANGE 0.0, PK NAIL MARKER
SEAWALL = CONCRETE EXTENT
BASE_DUNE = WINDWARD/SEAWARD TOE OF DUNE
VEG_DUNE = VEGETATION AND/OR DUNE SLOPE
TOP_DUNE = CREST OF DUNE
THICK_VEG = MODERATE TO EXTREMELY DENSE VEGETATION
VEG_G = SPARSE TO MODERATE VEGETATION
FENCE = TYPICAL WIRE AND WOOD BEACH FENCE
G = SPARSE TO NIL VEGETATION, GRAVEL OR SAND
RIPRAP = EDGE TO EDGE, EXTENT OF ROCK
BERM = NOTICEABLE HIGH TIDE LIMIT
BEACH_FACE = BETWEEN BERM AND SWASH ZONE
SWASH_ZONE = WAVE BREAK AREA, TIDE DURING COLLECTION

DATA TYPE LEGEND
TOPO = RTK TOPOGRAPHIC DATA COLLECTION
WADING = WADING CONVENTIONAL LEVEL DATA COLLECTION
HYDRO= RTK ECHO SOUNDER COLLECTION (ELEVATION)

PROFILE ID, DATE, TIME (EST), POINT #, EASTING (X), NORTHING (Y), ELEVATION (Z), TYPE, DESCRIPTION
(START OF DATA)
V020, 20040417, 1107, 10001, 385926.7, 40466.0, 10.9, TOPO, THICK_VEG
V020, 20040417, 1108, 10002, 385931.4, 40457.2, 10.8, TOPO, VEG_DUNE
....
....
V021, 20040417, 1037, 9801, 384943.2, 40330.6, -8.3, HYDRO, SOUNDING
V021, 20040417, 1038, 9802, 384946.7, 40320.6, -8.2, HYDRO, SOUNDING
Etc.

b. BMAP Free Format

```
Profile:,CM 00 021210 00400     Line Name; (CM for Cape May);
                                 00 for Line Number; Date; Station
# Pts:,20                       Number of points in cross section
X,Z1
XX 00400 031704          Line Name; (CM for Cape May);
                         Station; Date;
 # Pts:,20               Number of points in cross section
X,Z1
827.4000    9.6200          Offset Distance from baseline, Elevation
840.3000    8.6100                    "
848.6000    6.6000                    "
859.7000    5.4900                    "
871.4000    4.2900                    "
883.3000    3.1700                    "
894.1000    2.4200                    "
906.4000    1.6700                    "
918.6000    0.6100                    "
929.8000   -0.6700                    "
942.9000   -1.8200                    "
955.3000   -2.7400                    "
956.0000   -2.8600                    "
967.8000   -3.0100                    "
980.0000   -2.9900                    "
992.4000   -3.1800                    "
1004.3000   -3.6000                   "
1016.5000   -3.6900                   "
1028.4000   -4.2000                   "
1047.8000   -4.4200                   "
```

-- End of Section --

This page was intentionally left blank for duplex printing.

SECTION 01 76 00

STRUCTURES MONITORING

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section consists of furnishing all labor, materials and equipment, and performing all operations required to monitor structures for potential effects of the contract work.

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. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Qualifications; G,DO

Submit qualifications of the professional engineer, including a copy of their license, proposed to develop and conduct the structure monitoring.

Letter to Owners; G,DO

Submit the proposed letter to the owners of the monitored structures.

Structure Monitoring Plan; G,DO

Submit a structures monitoring plan describing the personnel, materials, equipment and methods to be utilized to monitor the effects of the contract operations on existing structures. In addition, the monitoring plan shall include qualifications of the personnel developing the monitoring plan; qualifications of personnel who shall do the monitoring; frequency of monitoring during each phase of the construction; maximum acceptable vibration level; and contingency plan if that vibration level is approached.

SD-07 Certificates

Monitoring Report; G,DO

Submit on compact disks (CD) the monitoring reports on a weekly basis following the monitoring, and include details of where and when the monitoring was performed, the frequency and peak particle velocities of the vibrations, the limiting criteria and any relevant notes.

1.3 OBJECTIVE

Monitor structures during this contract for vibration. The objective of

this monitoring is to predict and prevent damage to the structures from the Contractor's work operations. Any damage to the structures as a result of the Contractor's work operations shall be the responsibility of the Contractor, and shall be repaired, at no additional cost to the Government.

1.4 QUALIFICATIONS

Develop the proposed monitoring plan using a professional engineer that has experience with a minimum of 2 current monitoring projects similar in type and scope to this monitoring work.

1.5 COORDINATION

After approval of the monitoring plan by the Government and before work begins at the site, draft a letter to the owners of all the beachfront structures to inform them of the methods of construction to be used for this contract, the hours of operation, and the content of the monitoring plan. In addition, explain to the owners that people may "experience" vibrations at levels much lower than vibration levels that would damage structures. Upon approval of this letter by the Government, the Contractor shall disseminate the letter. Attend a public meeting which will be coordinated, planned, and conducted by the Government.

1.6 PHOTOGRAPHY

Conduct photography as specified in Section 01 32 33 CONSTRUCTION PHOTOGRAPHY. All videography shall be digital.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 DESCRIPTION OF STRUCTURES

Monitor beachfront residential and commercial structures. In addition, monitor in-ground pools within the monitoring limits. The type of structures include residential homes, attached decks and commercial buildings and shops. Monitoring of sheds and detached garages in not required.

3.2 MONITORING

Monitoring shall include the daily use of a seismograph at representative beachfront structures only. Monitor representative beachfront structures within 500 feet of where contract operations with large and/or heavy equipment are actively working. Place seismographs at locations on or at the base of the beachfront structures to obtain the highest peak particle velocities. Representative structures shall be defined as one of each foundation type (pile foundation, masonry, concrete, slab on grade). Monitor no less than three structures within the 500 feet of the active work area.

Determine the maximum acceptable vibration level from the chart attached at the end of this section, published by the United States Bureau of Mines Report of Investigation 8507, dated 1980.

3.3 EXCEEDING ACCEPTABLE VIBRATION LEVELS

Do not continue any activity that results in peak particle velocities greater than the maximum acceptable vibration level. In the event construction activities impact a structure, the aforementioned engineer shall reinspect the structure(s) and report the findings, including digital images, to the Contracting Officer via compact disk no later than one day following the reinspection.

3.4 MEASUREMENT AND PAYMENT

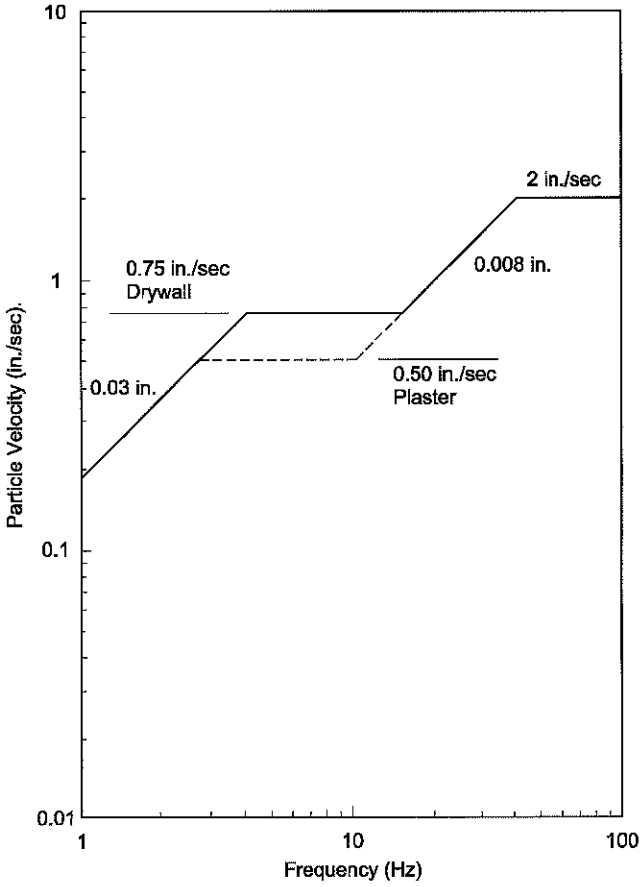
a. No separate measurement or payment will be made for the work specified in this section for base bid work and all costs in connection therewith shall be included in the lump sum prices for the Base Bid Items titled, "Structures Monitoring".

b. No separate measurement or payment will be made for the work specified in this section for option work and all costs in connection therewith shall be included in the contract unit price per cubic yard for the Option Bid Items titled, "Beachfill".

-- End of Section --

This page was intentionally left blank for duplex printing.

Maximum Acceptable Vibration Level



This page was intentionally left blank for duplex printing.

SECTION 01 78 39

AS-BUILT DRAWINGS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section includes the preparation of as-built drawings complete, as a requirement of this contract.

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 01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Progress Prints; G,COR.

The Contractor shall submit as-built marked prints with submission of each monthly pay estimate.

SD-11 Closeout Submittals

As-Built Drawings; G,COR.

The Contractor shall submit as-built drawings as specified herein.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 PROGRESS MARKED-UP AS-BUILT PRINTS

Mark-up one set of paper prints to show the as-built conditions for the project. These as-built marked prints shall be kept current and available on the jobsite at all times. All changes from the contract plans which are made in the work or 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 as-built marked prints will be jointly inspected for accuracy and completeness by the Contracting Officer's representative and a responsible representative of the Construction Contractor prior to submission of each monthly pay estimate. The drawings shall show the following information, but not be limited thereto:

a. 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 shall include dimensions to permanent features.

b. The location and dimensions of any changes within the building or structure.

c. Correct grade or alignment of roads, structures, or utilities if any changes were made from the contract plans.

d. Correct elevation if changes were made in site grading.

e. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

f. The topography and grades of all drainage installed or affected as part of the project construction.

g. All changes or modifications which result from the final inspection.

h. Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the as-built prints.

i. After-surveys, for payment, shall be plotted on the contract drawing cross-sections.

3.2 PRELIMINARY SUBMITTALS

Prepare the progress as-built prints and these shall be delivered to the Contracting Officer at the time of final inspection for his review and approval. These as-built marked prints shall be neat, legible and accurate. The review by Government personnel will be expedited to the maximum extent possible. Upon approval, the as-built marked prints will be returned to the Contractor for use in preparation of final as-built drawings. If upon review, the drawings are found to contain errors and/or omissions, they will be returned to the Contractor for corrections. Complete the corrections and return the as-built marked prints to the Contracting Officer within ten (10) calendar days.

3.3 DRAWING PREPARATION

3.3.1 General Requirements

Upon approval of the as-built prints submitted, the Contractor will be furnished the contract drawings on compact disc (CD) in AutoCAD Version 2010, 2011, or 2012, with all amendments incorporated. The drawing files shall be modified as necessary to correctly show all the features of the project as it has been constructed by bringing the contract set into agreement with the approved as-built prints, adding such additional drawings as may be necessary.

3.3.2 Modification of Contract Drawings

Only personnel proficient in the preparation of engineering drawings and the use of AutoCAD Version 2010, 2011 or 2012, to standards satisfactory and acceptable to the Contracting Officer, shall be employed to modify the contract drawings or prepare additional new drawings. All additions and corrections to the contract drawings shall be done using AutoCAD Version 2010, 2011 or 2012, in a professional manner, and shall match the existing linework and/or lettering used on the drawings in type, density, size and style. The title block to be used for any new as-built drawings shall be the same as that used on the original drawings.

3.3.3 Identification of Final As-Built Drawings

When final revisions have been completed, each drawing shall be identified with the words "RECORD DRAWING AS-BUILT" followed by the name of the General Contractor in letters at least 3/16-inch high. All contract drawings shall be annotated and dated in the revision block as either "AS-BUILT DRAWING" denoting no revision on the sheet or "REVISED AS-BUILT DRAWING" denoting one or more revisions. For drawings having as-built revisions, a revision number contained within a 3/16-inch high triangle shall be included in the revision block. All changes to drawings shall be encircled with a series of short arcs forming a "cloud", with the triangle revision number positioned immediately next to each cloud.

3.4 FINAL REQUIREMENTS

After receipt by the Contractor of the approved as-built prints and the original contract drawings, and within 30 days for contracts less than $5 million or within 60 days for contracts of $5 million or more, the Contractor shall make the final as-built submittal. This submittal shall consist of the completed as-built drawings on compact disk (CD) in AutoCAD Version 2010, 2011 or 2012, as well as in Acrobat PDF format, one full-size paper copy of the completed as-built drawings, and the return of the approved as-built prints. All drawings shall be complete in all details. All AutoCAD files and reproducible drawings will become the property of the Government upon final approval. Failure to submit the above as-built information as required will be cause for withholding any payment due the Contractor under this contract. The Contracting Officer will review all as-built drawings for accuracy and conformance to the above requirements. Make all corrections, changes, additions, and deletions required to meet these standards. Approval and acceptance of final as-built drawings will be required before final payment is made to the Contractor.

3.5 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

This page was intentionally left blank for duplex printing.

SECTION 06 13 33

OUTFALL PIPE SUPPORTS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required for installing and/or repairing stormwater outfall pipe support systems, as specified herein and as shown.

1.2 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.

ASTM INTERNATIONAL (ASTM)

ASTM A123/A123M	(2013) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A153/A153M	(2009) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A307	(2012) Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength
ASTM A563	(2007a) Standard Specification for Carbon and Alloy Steel Nuts
ASTM D25	(2012) Round Timber Piles
ASTM D450/D450M	(2007; E 2013; R 2013) Coal-Tar Pitch Used in Roofing, Dampproofing, and Waterproofing

ASME INTERNATIONAL (ASME)

ASME B18.21.1	(2009) Washers: Helical Spring-Lock, Tooth Lock, and Plain Washers (Inch Series)

AMERICAN WOOD PROTECTION ASSOCIATION (AWPA)

AWPA M1	(2012) Standard for the Purchase of Treated Wood Products
AWPA M2	(2011) Standard for Inspection of Treated Wood Products
AWPA M3	(2013) Standard Quality Control Procedures for Wood Preserving Plants
AWPA M4	(2011) Standard for the Care of

	Preservative-Treated Wood Products
AWPA M6	(2013) Brands Used on Preservative Treated Materials
AWPA U1	(2013) Use Category System: User Specification for Treated Wood
AWPA T1	(2013) Use Category System: Processing and Treatment Standard
AWPA U1	(2013) Use Category System: User Specification for Treated Wood

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB 1003	(2002) Standard Grading Rules for Southern Pine Lumber

U.S. DEPARTMENT OF DEFENSE (DOD)

MIL-P-21035	(1991; Rev B; Notice 2 2003) Paint, High Zinc Dust Content, Galvanizing Repair (Metric)

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FS MM-L-751	(Rev H) Lumber; Softwood

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 171	Certification of Pesticide Applicators

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 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Detailed Work Plan; G, DO

Prior to performing the work in this section, submit a detailed work plan for transporting, storing, inspecting, repairing, recording, and installing all materials. Include the means that will be taken to ensure that all pipe joints are located within a timber pile support system as shown. Include detailed drawings or sketches of templates or guides that will be used to properly locate the piles prior to installation.

SD-02 Shop Drawings

Installation Drawings; G, DO
Spliced Timber Strut Connections; G, DO

Submit drawings of timber showing dimensions of cut, framed, or

bored timbers. Submit drawings and calculations, certified by a registered professional engineer, describing the methods for splicing and attachment of bracing for timber pile supports and cribbing. Drawings shall include material sizes and types, arrangement of members, and the sequence and method of installation. Calculations shall include data and references used.

Pile shoes; G, DO

SD-07 Certificates

Preservative Treated Timber; G, DO
MSDS and CIS; G, DO
Pesticide Applicator; G, DO
Equipment Description; G, DO

Prior to commencement of pile installation, submit detailed descriptions of all pile driving and jetting equipment to be used. Include sketches, details, and descriptions of the driving hammer, power plant, leads, driving cap and cushion material, collars, jetting nozzle, water supply system, and other appurtenances.

Hardware; G, DO

Submit a statement signed by an official authorized to certify on behalf of the manufacturer of the product, system, or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

SD-11 Closeout Submittals

Pile Installation Record; G, DO

Submit records within 15 calendar days after completion of installation.

Pile Installation Drawings; G, DO

Submit final drawings within 15 calendar days prior to project closeout.

1.4 DELIVERY, HANDLING, AND STORAGE

Inspect materials delivered to the site for damage, and unload and store with a minimum of handling. Do not store materials directly on the ground. Close-stack treated timber and lumber material in a manner that will prevent material from sagging or becoming crooked. Keep ground under and within 5 feet of such piles free of weeds, rubbish, and combustible materials. Protect materials from weather. Handle treated timber with ropes or chain slings without dropping, breaking outer fibers, bruising, or penetrating surface with tools. Do not use cant dogs, peaveys, hooks, or pike poles. Protect timber and hardware from damage. Handle materials in such a manner as to ensure delivery to the location of installation in a sound, undamaged condition.

1.5 QUALITY ASSURANCE

The producer must brand each treated pile, in accordance with AWPA M1, AWPA M2, AWPA M6, AWPA T1 and AWPA U1.

1.5.1 Preservative Treated Timber

The Contractor shall be responsible for the quality of treated wood products. Submit an inspection report of an independent inspection agency approved by the Contracting Officer, that offers products that comply with applicable AWPA standards, and that the plant conforms to AWPA M3. Identify treatment on each piece by the quality mark of an agency accredited by the Board of Review of the American Lumber Standard Committee. Inspect all preservative-treated wood visually to ensure there are no excessive residual materials or preservative deposits. Materials shall be clean and dry or it will be rejected because of environmental concerns. If Contracting Officer has reason to believe the preservative treatment of timber is of insufficient quality the Contractor may be required to test the timber in accordance with AWPA M2.

1.5.2 MSDS and CIS

Provide Material Safety Data Sheets (MSDS) and Consumer Information Sheets (CIS) associated with timber preservative treatment. Comply with all safety precautions indicated on MSDS and CIS.

1.5.3 Pesticide Applicators

Provide certifications for all individuals (applicators) who will be working with regulated wood preservative products on site. All applicators shall be certified by the State or Environmental Protection Agency (EPA) (under the provisions of 40 CFR 171) to use wood preservatives, and have completed an approved EPA training program on the use of wood preservative products.

1.5.4 Delivery Inspection

Provide the necessary facilities at the work site for the proper inspection of new timber piles or cribbing upon delivery. Material inspected and found not to meet this specification shall be removed from the site and replaced at no additional cost to the Government. Do not incorporate materials damaged in transport from plant to site. Inspect all preservative-treated wood, visually to ensure there are no excessive residual materials or preservative deposits. Material shall be clean and dry or it will be rejected due to environmental concerns. Any material damaged after inspection may be subsequently rejected if damage is deemed sufficient for rejection by the Contracting Officer.

1.6 PLANT INSPECTION

The Government, at its discretion, reserves the right to inspect the treating process. Notify the Contracting Officer at least 3 weeks prior to beginning the treatment, stating where preservative treatment will be done. Allow Government inspector access to all parts of the plant. Allow inspection of all facets of the treating process.

1.7 SPLICED TIMBER STRUT CONNECTIONS

The Contractor shall be responsible for the design of all spliced timber

connections. Design splice to provide a capacity equal to the larger of the tensile or compression capacity of the members being spliced. The ends of the members being spliced shall be cut to create a butt type connection before the splice is assembled, with no overlapping of members permitted. Submit drawings and calculations, certified by a registered professional engineer, describing the methods for splicing and attachment to timber pile supports.

1.8 PILE INSTALLATION DRAWINGS

Prepare record drawings that indicate pile locations with surveyed coordinates, and are fully coordinated with the pile driving records as the work progresses.

1.9 RESTRICTIONS ON WORK

All work on timber cribbing shall only be performed during daylight hours.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Timber Piles

a. Provide pressure treated Douglas fir or southern pine clean-peeled piles conforming to ASTM D25, except pile dimensions shall be as specified herein. Piles shall be pressure-preservative treated for marine piles as specified herein. Piles shall be in one piece. Splices are not permitted.

The nominal butt circumference, measured 3 feet from the butt, shall be a minimum of 38 inches. Each pile shall be marked at 1 foot intervals starting from the tip to the butt with a lumber crayon. The butt and tip of the piles shall be cut square with the long axis of the piles. Chamfering or shaving of the pile tips shall not be permitted.

2.1.2 Timber Cribbing

Timber cribbing, including bracing, spacers, shims and struts shall be Southern Yellow Pine, Stress Grade No. 1, and shall conform to SPIB 1003 and the applicable requirements of FS MM-L-751, and identified by the grade mark of a recognized association or independent inspection agency using the specific grading requirements of an association recognized as covering the species used. The association or independent inspection agency shall be certified by the Board of Review, American Lumber Standards Committee, to grade the species used. Cribbing shall be surfaced four sides and shall be pressure-preservative treated as specified herein.

2.1.2.1 Pipe Supports

Timber cribbing shall be shop cut prior to preservative treatment. Cut each top, bottom and side timber cribbing pipe support conforming to the outside circumference of the outfall pipe as shown. After the preservative treatment and drying process of the cribbing, the tolerance of the cut conforming to the outside circumference of the pipe shall be plus or minus 1/8-inch. Cribbing not within specified tolerances shall be cause for rejection.

2.1.2.2 Spacers

Fabricate timber cribbing spacers using either: one piece of timber ripped to the exact width between the cribbing members, or using two pieces of timber ripped to equal dimensions, such that when adjoined they form a composite piece of the exact width. Glue and nail adjoined pieces, using exterior grade wood glue and galvanized nails. The nail pattern shall be such so that it does not interfere with the bolt pattern.

2.1.2.3 Preservative Treatment

Fabricate timbers before preservative treatment. Each piece of treated timber shall be branded, by the producer, in accordance with AWPA M6. Treat wood to a uniform minimum net retention of 2.50 pounds per cubic foot using Ammoniacal Copper Zinc Arsenate (ACZA), or Chromated Copper Arsenate (CCA) in accordance with AWPA T1 and for use as specified in AWPA U1 for UCS category UC5B, except CCA shall not be used for Douglas Fir wood. All wood shall be air or kiln dried after treatment. Do not incise surfaces of lumber that will be exposed. Brush coat areas that are cut or drilled after treatment with either the same preservative used in the treatment or with a 2 percent Copper Naphthenate solution in accordance with AWPA M4.

2.1.3 Hardware

Provide bolts with necessary nuts and washers, timber connectors, drift pins, dowels, nails, screws, spikes, and other fastenings. Bolts and nuts shall conform to ASTM A307, Grade A, hot-dipped galvanized. Washers and nuts shall be hot-dipped galvanized conforming to ASME B18.21.1 and ASTM A563, respectively. Provide bolts with washers under nut and head. Provide timber connectors and other metal fastenings of type and size shown, sized to length required to minimize field cutting.

2.1.3.1 Zinc-Coating

Galvanize steel specified or indicated by the hot-dip process in accordance with ASTM A123/A123M or ASTM A153/A153M, as applicable.

2.2 PILE DRIVING EQUIPMENT

2.2.1 Pile Driving Hammers

Pile driving hammers shall be steam, air or diesel drop, single-acting or double-acting type. The size and capacity of hammers shall be as recommended by the manufacturer for the pile weights and soil formation to be penetrated. The pile hammer shall be of sufficient weight and energy to install the specified pile without damage into the soils as indicated. The minimum driving energy of hammers shall be 8,700 foot-pounds. The maximum driving energy of hammers shall be 15,000 foot-pounds for piles of any length. Diesel powered hammers shall be operated at the rate recommended by the manufacturer throughout the entire driving period. Sufficient pressure shall be maintained at the hammer so that:

a. for double-acting hammers, the number of blows per minute during and at the completion of driving of a pile is equal approximately to that at which the hammer is rated.

b. for single-acting hammers, there is a full upward stroke of the ram.

2.2.2 Driving Cap or Helmet and Cushion Block

Driving cap or helmet shall be an approved design and shall be capable of protecting pile heads, minimizing energy absorption, and transmitting hammer energy uniformly and consistently to piles. Place driving helmet or cap and cushion block combination between top of pile and the ram. Driving caps shall be of an approved design and shall be capable of protecting pile heads, minimizing energy absorption, and transmitting hammer energy uniformly and consistently to the piles. Driving cap shall fit snugly on the top of piles and shall employ a cushion block to prevent impact damage to piles. The cushion block may be a solid or laminated softwood block with the grain parallel to the pile axis and enclosed in a close-fitting steel housing. The thickness of the block shall be suitable for the length of pile to be driven and the character of subsurface material to be encountered. Generally, thicker blocks are required for longer piles and softer subsurface material. If block is damaged, split, highly compressed, charred or burned, or has become spongy or deteriorated, replace with new block. Under no circumstances will the use of small wood blocks, wood chips, rope, or other material permitting excessive loss of hammer energy be permitted.

2.2.3 Pile Collars

Collars or bands for protecting pile butts against splitting, brooming, and other damage while being driven shall be of an approved design.

2.2.4 Jetting Equipment

Equipment shall be designed so that the discharge volume and pressure are sufficient to freely erode the material under and adjacent to the piles.

PART 3 EXECUTION

While the means, methods and sequence of construction under this contract are the responsibility of the Contractor, unless otherwise specified, it is assumed that the Contractor will install the outfall pipe supports and pipe in conjunction with the placement of the beachfill. Additional beachfill, sheet piling or other materials or methods required due to erosion after the placement of beachfill material shall be provided by the Contractor at no additional cost to the Government.

3.1 GENERAL

Cut, bevel, and face timbers prior to plant preservative treatment. In addition to the contract clause titled "Accident Prevention" provide protective equipment for personnel fabricating, field treating, or handling treated materials. Refer to paragraph titled "MSDS and CIS".

3.2 REMOVALS

Remove timber cribbing not shown as being reinstalled and dispose of off-site. Remove timber cribbing to be reinstalled and store for reuse. Timber cribbing requiring reinstallation shall be reinstalled so joints fit tightly to contact surfaces. Timber cribbing shall be secured in alignment to piles.

3.3 PILE INSTALLATION

Install piles in accordance with the approved work plan utilizing approved methods, equipment and materials. Select piles of uniform size for each bent. After inspection of each pile upon delivery and prior to use, inspect each pile in the leads prior to installation. Repair damaged piles in accordance with AWPA M4, unless the pile is damaged to such extent that it is rejected. Support piles laterally during driving, but do not unduly restrain from rotation in the leads. Place pile collars or bands around the pile butt to prevent brooming. Install piles such that no more than 2 feet of each pile needs to be cut off. Cutting of piles, if required, shall be with pneumatic tools, sawing, or other means approved by the Contracting Officer. Bolt holes as indicated on the drawings shall be of the size that will insure a driving fit. Pile shoes may be used for driven piles.

3.3.1 Pile Location

Accurately place piles at the locations and alignments both laterally and vertically to ensure that the pipe joints will be located within a support system as shown. Maintain correct location of piles by the use of templates, guides, or by other approved means. Pull and replace piles incorrectly placed at no additional cost to the Government.

3.3.2 Driving of Piles

Drive piles without interruption to the depth indicated on the contract drawings. During driving, operate pile driving hammers at the rate and conditions recommended by the hammer manufacturer.

a. Hammer Pressure: Maintain sufficient pressure at the hammer so that: (1) for double-acting hammer, the number of blows per minute during and at the completion of driving of a pile is approximately equal to that at which the hammer is rated; and (2) for single-acting hammer, there is a full upward stroke of the ram. Replace the driving cap or cushion block whenever they become damaged, split, highly compressed, charred or burned, or have become spongy or deteriorated in any manner. Under no circumstances will the use of small wood blocks, wood chips, rope, or other material permitting excessive loss of hammer energy be permitted.

3.3.3 Jetting of Piles

Jetting may be used for placement of the piles. During the jetting operation, take all necessary precautions to ensure that the jetting nozzle does not advance ahead of the pile being jetted. Discontinue jetting when the pile tip is 3 feet above the indicated pile tip elevation, and drive the pile to the final penetration, or to the maximum of 5-10 blows per inch (after the pile has advanced a minimum of 1-inch), whichever occurs first. Drive piles within 36 hours of jetting and as specified in Paragraph "Driving".

3.3.4 Tolerances For Installing Piles

A variation of not more than 0.25 inch per foot of pile length from the vertical for plumb piles or more than 0.50 inch per foot of pile length from the required angle for batter piles is permitted. The center of butts must be within 4 inches of the location indicated. Manipulation of piles is not permitted. Redrive heaved piles to the required tip elevation.

Remove and replace with new piles those damaged, misplaced, driven below the design cutoff, or driven out of alignment, or provide additional piles, driven as directed at no additional cost to the Government.

3.3.5 Pile Installation Record

Keep a complete and accurate record of each pile installed. Indicate pile location, deviations from design location, tip and butt circumference, original length, mudline elevation, tip elevation, cutoff elevation, penetration in blows per 5 foot interval for the initial 20 foot length of penetration, then penetration in blows per foot for the remaining penetration length, hammer data including rate of operation, make, and size, and unusual pile behavior or circumstances experienced during driving such as redriving, heaving, weaving, obstructions, spudding, predrilling, and unanticipated interruptions. Preprinted forms for recording pile driving data are attached at the end of this section. Make pile driving records available to the Contracting Officer at the job site, a minimum of 24 hours after each day of pile driving. Include in the construction records the wood species, preservative type, retention, and producer of installed treated piles.

3.4 TIMBER CRIBBING AND STRUTS

Piles shall not be cut to permit fitting of cribbing or bracing. Cut and frame cribbing and struts so that joints will fit over contact surface. Open joints are unacceptable. Shimming is not allowed, unless otherwise shown. Secure cribbing, struts, braces, and piles in alignment. Nailing of cribbing and struts to the piles prior to drilling holes for thru bolts will only be permitted through the vertical face of the cribbing. If necessary, use treated filler blocks to fill out between piles and cribbing. Drill bolt holes not more than 1/16 inch larger than diameter of bolt shank. Counterbore holes for bolt heads and washers as indicated. Attach cribbing to piles using thru bolts, washers, and nuts as shown. Holes shall not be drilled nor spikes driven into piles to support scaffolding.

Note: In lieu of using beveled washers, a flat-bottomed, recessed shoulder may be counterbored for use with a flat washer. Depth of recessed shoulder shall not exceed 1/4 inch deeper than that depth required for uniform washer contact, perpendicular to bolt alignment. Diameter of recess shall be no greater than that clearance required for socket tool access for tightening.

3.5 BRACING

Align bents before bracing is placed. Provide bracing of sufficient length to provide a minimum distance of 8 inches between outside bolt and end of brace. Bracing shall bear firmly against piles or cribbing to which secured. Place fillers to avoid bending the bracing or cribbing more than one inch out of line when bolts or other fastenings are drawn tight. Make filler a single piece of the same treated lumber as that in the brace, with a width of at least 6 inches and a length of at least 12 inches. Bolt ends of bracing through pile, post, or cap with a bolt of at least the indicated diameter.

3.6 FASTENING

Vertical bolts shall have nuts on the lower end. Install bolts, washers and nuts at the locations shown. Retighten bolts immediately prior to

final acceptance of the contract. Bolts shall have sufficient additional threading to provide at least 3/8 inch per foot thickness of timber for future retightening. Existing hardware damaged during the removal process shall be replaced with new hardware.

3.7 FIELD TREATMENT

3.7.1 Timberwork

Field treat cuts, bevels, notches, refacing and abrasions made in the field in treated piles or timbers in accordance with AWPA M4, MSDS and CIS. Timber subject to water spray or inundation shall be treated immediately after they are cut and before cut surface has been wetted. If wood preservatives are restricted use pesticides they shall be applied by a person certified through an EPA approved training program for the application of wood treatment products in accordance with 40 CFR 171, regulated under 7 U.S.C.A. Sections 136 to 136y, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and applicable standards. Trim cuts and abrasions before field treatment. Paint depressions or openings around bolt holes, joints, or gaps including recesses formed by counterboring, with several heavy applications of the same preservative treatment used to treat the piles, lumber or timber; and after bolt or screw is in place, fill with hot pitch or a bitumastic compound.

3.7.2 Piling Protection

In accordance with AWPA M4, immediately after pile tops are cut off, protect pile top with several heavy applications of the same preservative used to treat the pile, or a copper naphthenate solution containing a minimum of 2 percent copper metal. Seal ends with a heavy application of ASTM D450/D450M coal-tar pitch or other appropriate sealer.

3.7.3 Galvanized Surfaces

Repair and recoat zinc coating which has been field or shop cut, burned by welding, abraded, or otherwise damaged to such an extent as to expose the base metal. Thoroughly clean the damaged area by wire brushing and remove traces of welding flux and loose or cracked zinc coating prior to painting. Paint cleaned area with two coats of zinc oxide-zinc dust paint conforming to MIL-P-21035. Compound paint with a suitable vehicle in a ratio of one part zinc oxide to four parts zinc dust by weight.

3.8 MEASUREMENT AND PAYMENT

The work specified in this section for providing new pipe support systems will be measured for payment by the number of pipe support units installed. One support system shall consist of two piles, top and bottom cribbing, bracing, struts, and hardware. All costs in connection therewith shall be included in the contract unit prices for the Bid Items titled "Type A Pipe Support Units" and "Type B Pipe Support Units". The contract unit price shall constitute full compensation to the Contractor for excavating, backfilling, and grading the beach around the pipe support units.

3.9 PILE DRIVING LOG

The following log is a preprinted form for recording pile driving data.

PILE DRIVING LOG

CONTRACT NO._____ CONTRACT NAME_____
CONTRACTOR_____ TYPE OF PILE_____
PILE NUMBER_____ PILE SIZE: BUTT/TIP: _____ LENGTH_____
GROUND ELEVATION_____ CUT OFF ELEVATION_____
PILE TIP ELEVATION_____ VERTICAL (_____) BATTER 1 ON (_____)
SPLICES ELEVATION_____ COMPANY_____

HAMMER: MAKE & MODEL_____ WT. RAM_____
STROKE_____ RAM RATED ENERGY_____
DESCRIPTION & DIMENSIONS OF DRIVING CAP_____
CUSHION MATERIALS & THICKNESS_____

INSPECTOR_____

"DEPTH" COLUMN OF PILE DRIVING RECORD REFERENCED TO:
_____ CUT-OFF ELEVATION
_____ GROUND SURFACE ELEVATION

TIME: START DRIVING_____ FINISH DRIVING_____ DRIVING TIME_____
INTERRUPTIONS (TIME, TIP ELEV. & REASON)_____
JET PRESSURE & ELEVATIONS_____

_____

DRIVING RESISTANCE

DEPTH FT.	NO. OF BLOWS	DEPTH FT.	NO. OF BLOWS	DEPTH FT.	NO. OF BLOWS
0	_____	18	_____	36	_____
1	_____	19	_____	37	_____
2	_____	20	_____	38	_____
3	_____	21	_____	39	_____
4	_____	22	_____	40	_____
5	_____	23	_____	41	_____
6	_____	24	_____	42	_____
7	_____	25	_____	43	_____
8	_____	26	_____	44	_____
9	_____	27	_____	45	_____
10	_____	28	_____	46	_____
11	_____	29	_____	47	_____
12	_____	30	_____	48	_____
13	_____	31	_____	49	_____
14	_____	32	_____	50	_____
15	_____	33	_____	51	_____
16	_____	34	_____	52	_____
17	_____	35	_____	53	_____

SHEET 1 OF 2

PILE DRIVING LOG

54	_____	77	_____	99	_____
55	_____	78	_____	100	_____
56	_____	79	_____	101	_____
57	_____	80	_____	102	_____
58	_____	81	_____	103	_____
59	_____	82	_____	104	_____
60	_____	83	_____	105	_____
61	_____	84	_____	106	_____
62	_____	85	_____	107	_____
63	_____	86	_____	108	_____
64	_____	87	_____	109	_____
65	_____	88	_____	110	_____
66	_____	89	_____	111	_____
67	_____	90	_____	112	_____
68	_____	91	_____	113	_____
69	_____	92	_____	114	_____
70	_____	93	_____	115	_____
71	_____	94	_____	116	_____
72	_____	95	_____	117	_____
73	_____	96	_____	118	_____
74	_____	97	_____	119	_____
75	_____	98	_____	120	_____
76	_____				

DRIVING RESISTANCE IN BLOWS PER INCH FOR LAST FOOT OF PENETRATION:

DEPTH_____ DEPTH_____

1"___2"___3"___4"___5"___6"___7"___8"___9"___10"___11"___12"___

ELEV._____ ELEV._____

REMARKS_____

CUT OFF ELEVATION: FROM DRAWING _____

TIP ELEVATION = GROUND ELEVATION - DRIVEN DEPTH = _____

DRIVEN LENGTH = CUT OFF ELEVATION - TIP ELEVATION = _____

CUT OFF LENGTH = PILE LENGTH - DRIVEN LENGTH = _____

SHEET 2 OF 2

-- End of Section --

SECTION 31 05 19

GEOTEXTILE

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, material, and equipment, and performing all operations required for providing geotextile under the pedestrian handicap, and vehicular dune crossovers as indicated on the contract drawings.

1.2 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.

ASTM INTERNATIONAL (ASTM)

ASTM D4354	(2012) Sampling of Geosynthetics and Rolled Erosion Control Products(RECPs) for Testing
ASTM D4355	(2007) Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus
ASTM D4491	(1999a; R 2009) Water Permeability of Geotextiles by Permittivity
ASTM D4533	(2011) Trapezoid Tearing Strength of Geotextiles
ASTM D4632	(2008) Grab Breaking Load and Elongation of Geotextiles
ASTM D4751	(2012) Determining Apparent Opening Size of a Geotextile
ASTM D4759	(2011) Determining the Specification Conformance of Geosynthetics
ASTM D4873	(2002; R 2009) Identification, Storage, and Handling of Geosynthetic Rolls and Samples
ASTM D6241	(2004; R 2009) Standard Test Method of the Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe

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 the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Thread; G,DO

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; G,DO

A minimum of 7 days prior to scheduled use, manufacturer's quality control manual.

SD-07 Certificates

Geotextile; G,DO

A minimum of 7 days prior to scheduled use, submit manufacturer's certificate of compliance stating that the geotextile meets the requirements of this section. For needle punched geotextiles, the manufacturer shall also certify that the geotextile has been continuously inspected using permanent on-line full-width metal detectors and does not contain any needles which could damage other geosynthetic layers. The certificate of compliance shall be attested to by a person having legal authority to bind the geotextile manufacturer. Certificate shall be a statement signed by an official authorized to certify on behalf of the manufacturer of the geotextile, attesting that the product meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

1.4 DELIVERY, STORAGE, AND HANDLING

Deliver, store, and handle geotextile in accordance with ASTM D4873.

1.4.1 Delivery

Notify the Contracting Officer a minimum of 24 hours prior to delivery and unloading of geotextile rolls packaged in an opaque, waterproof, protective plastic wrapping. The plastic wrapping shall not be removed until deployment. If quality assurance samples are collected, immediately rewrap rolls with the plastic wrapping. Geotextile or plastic wrapping damaged during storage or handling shall be repaired or replaced, as directed. Label each roll with the manufacturer's name, geotextile type, roll number, roll dimensions (length, width, gross weight), and date manufactured.

1.4.2 Storage

Protect rolls of geotextile from construction equipment, chemicals, sparks and flames, temperatures in excess of 160 degrees F, or any other environmental condition that may damage the physical properties of the geotextile. To protect geotextile from becoming saturated, either elevate

rolls off the ground or place them on a sacrificial sheet of plastic in an area where water will not accumulate.

1.4.3 Handling

Handle and unload geotextile rolls with load carrying straps, a fork lift with a stinger bar, or an axial bar assembly. Rolls shall not be dragged along the ground, lifted by one end, or dropped to the ground.

PART 2 PRODUCTS

2.1 RAW MATERIALS

2.1.1 Geotextile

Provide geotextile that is a nonwoven pervious sheet of polymeric material consisting of long-chain synthetic polymers composed of at least 95 percent by weight polyolefins, polyesters, or polyamides. The use of woven slit film geotextiles (i.e. geotextiles made from yarns of a flat, tape-like character) will not be allowed. Add stabilizers and/or inhibitors to the base polymer, as needed, to make the filaments resistant to deterioration by ultraviolet light, oxidation, and heat exposure. Regrind material, which consists of edge trimmings and other scraps that have never reached the consumer, may be used to produce the geotextile. Post-consumer recycled material may also be used. Geotextile shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including the edges. Geotextiles shall meet the requirements specified in Table 1. Where applicable, Table 1 property values represent minimum average roll values (MARV) in the weakest principal direction. Values for AOS represent maximum average roll values.

TABLE 1
MINIMUM PHYSICAL REQUIREMENTS FOR DRAINAGE GEOTEXTILE

PROPERTY	UNITS	ACCEPTABLE VALUES	TEST METHOD
GRAB STRENGTH	LBS	250	ASTM D4632
SEAM STRENGTH	LBS	200	ASTM D4632
PUNCTURE	LBS	700	ASTM D6241
TRAPEZOID TEAR	LBS	100	ASTM D4533
APPARENT OPENING SIZE	U.S. SIEVE	70-100	ASTM D4751
PERMITTIVITY	SEC -1	0.7	ASTM D4491
ULTRAVIOLET DEGRADATION	PERCENT	50 AT 500 HRS	ASTM D4355

2.1.2 Thread

Construct sewn seams with high-strength polyester, nylon, or other approved thread type. Thread shall have ultraviolet light stability equivalent to the geotextile and the color shall contrast with the geotextile.

2.2 MANUFACTURING QUALITY CONTROL SAMPLING AND TESTING

The Contractor shall ensure and hold the Manufacturer 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. Perform manufacturing quality control sampling and testing in accordance with the manufacturer's approved quality control manual. As a minimum, randomly sample geotextiles for testing in accordance with ASTM D4354, Procedure A. Acceptance of geotextile shall be in accordance with ASTM D4759. Tests not meeting the specified requirements will result in the rejection of applicable rolls.

PART 3 EXECUTION

3.1 SUBGRADE PREPARATION

The surface underlying the geotextile shall be smooth and free of ruts or protrusions which could damage the geotextile. Any irregularities shall 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, shall be removed; erosion features such as rills, gullies, etc. must be graded out of the surface before geotextile placement.

3.2 INSTALLATION

3.2.1 Placement

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 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. Place the geotextile with the long dimension parallel to the crossover centerline and shall be laid smooth and free of tension, stress, folds, wrinkles or creases. The placement procedures require that the length of the geotextile be slightly greater than the dune cross-over length. The geotextile shall be carried up the sides of the soil aggregate materials and the extra shall be tucked down and covered with sand.

3.3 SEAMS

3.3.1 Overlap Seams

Continuously overlap geotextile panels a minimum of 24 inches at all longitudinal and transverse joints. Where seams must be oriented across the slope, lap the upper panel 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. The stitch type used shall be a 401 locking chain stitch or as recommended by the manufacturer. Provide Quality Assurance seam samples 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.

3.4 PROTECTION

Protect the geotextile during installation from clogging, tears, and other damage. Damaged geotextile shall be repaired or replaced as directed. Use adequate ballast (e.g. sand bags) to prevent uplift by wind. The geotextile shall not be left uncovered for more than 4 hours after installation.

3.5 REPAIRS

Repair torn or damaged geotextile. Clogged areas of geotextile shall be removed. Perform repairs 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. A nonwoven geotextile shall be patched by either sewing, using one row of a two-thread chain stitch, or by tack welding the patch to the surrounding undamaged geotextile using a hot-air tack-welding tool such that the patch does not move while backfilling over the geotextile. 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. Remove and replace geotextile rolls which cannot be repaired. Repairs shall be performed at no additional cost to the Government

3.6 COVERING

Do not cover geotextile prior to inspection and approval by the Contracting Officer. Place cover materials in a manner that prevents materials from entering the geotextile overlap zone, prevents tensile stress from being mobilized in the geotextile, and prevents wrinkles from folding over onto themselves. No equipment shall be operated directly on top of the geotextile without approval of the Contracting Officer. Cover material type, compaction, and testing requirements are described in Section 32 15 00 DUNE CROSSOVERS. Protect the geotextile from damage during the placement of overlying materials primarily by limiting the height of drop of materials to no greater than 1-foot unless otherwise approved by the Contracting Officer. Any damage to the geotextile during placement of the overlying materials shall be repaired or replaced by the Contractor at no additional expense to the Government.

3.7 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section. All costs in connection with providing and installing geotextile shall be included in the contract prices of those items for which the geotextile is incidental.

-- End of Section --

This page was intentionally left blank for duplex printing.

SECTION 32 15 00

DUNE CROSSOVERS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, and equipment, and performing all operations required for the construction of pedestrian, vehicle and handicapped dune crossovers, as specified herein and shown on the drawings.

1.2 REFERENCES

The following publications form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A153/A153M	(2009) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A307	(2012) Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength
ASTM A563	(2007a) Standard Specification for Carbon and Alloy Steel Nuts
ASTM D422	(1963; R 2007) Particle-Size Analysis of Soils
ASTM D1556	(2007) Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	(2012) Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3) (2700 kN-m/m3)
ASTM D6112	(2010) Compressive and Flexural Creep and Creep-Rupture of Plastic Lumber and Shapes
ASTM D6938	(2010) Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

ASME INTERNATIONAL (ASME)

ASME B18.21.1	(2009) Washers: Helical Spring-Lock, Tooth Lock, and Plain Washers (Inch Series)

AMERICAN WOOD PROTECTION ASSOCIATION (AWPA)

AWPA M4	(2011) Standard for the Care of Preservative-Treated Wood Products
AWPA U1	(2012) Use Category System: User Specification for Treated Wood

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

NJDOT Specifications	(2007) Standard Specifications for Road and Bridge Construction

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB 1003	(2002) Standard Grading Rules for Southern Pine Lumber

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 171	Certification of Pesticide Applicators

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. See Section 01 33 00 SUBMITTAL PROCEDURES for all procedures related to the submission of submittals.

The following shall be submitted:

SD-01 Preconstruction Submittals

Work Plans for Handicap, Pedestrian, and Vehicle Crossover; G, DO

Submit typical work plans for the construction of the pedestrian, vehicular, and handicap crossovers. The work plans shall include the labor, equipment, and methods to be used to construct pedestrian, handicap, and vehicle crossovers, and shall demonstrate how the Contractor intends to comply with Paragraph "SEQUENCING AND SCHEDULING". Prepare an individual work plan for each type of crossover.

SD-03 Product Data

Crossover Materials; G,DO

Submit information describing the quality and performance of the materials proposed for construction of all crossovers. Include a certified test assay analysis from an approved testing organization attesting that preservative treated lumber to be used in the work meets the requirment of this section.

Post and Rail Fence; G, DO
Split Rail Fence; G, DO

Submit information describing the quality and performance of the

materials proposed for construction of post and rail fence, split rail fence and ADA compliant handrail system with product data sheets and manufacturers installation instructions.

Source for I-5 Material; G,COR

Prior to purchase, submit the proposed source for the I-5 material.

Stabilization Mats; G, DO

Submit information describing the quality and performance of the materials proposed with product data sheets.

SD-04 Samples

I-5 Material; G,DO

Submit a sample of the soil aggregate material to confirm the color is similar to the beachfill material and to ensure the material includes non-angular aggregate.

Stabilization Mat Sample; G, DO

Submit a sample of the stabilization mat material to confirm the material includes a non-angular, slip-resistant surface.

SD-06 Test Reports

Grain Size Distribution Curves; G,DO

Submit grain size distribution curves in accordance with ASTM D422 and from the proposed source of the I-5 Material. At a minimum, include the following sieves: 2 inch, three-quarter inch, #4, #50, and #200.

Testing Results; G,DO

Submit within one week of conclusion of physical tests, including gradation tests, proctor tests and nuclear density tests, three copies of test results, including calibration curves and results of calibration tests. Reports shall indicate the location of the sample/test, the test data, and a statement of compliance or non-compliance, where applicable.

SD-07 Certificates

MSDS and CIS; G,DO
Pesticide Applicator; G,DO
Best Management Practices (BMPs); G,DO
Nuclear Gauge; G,DO

Submit the type/model of each proposed nuclear gauge and its latest laboratory calibration certificate.

SD-08 Manufacturer's Instructions; G,DO

Stabilization Mat Installation and Maintenance

Submit stabilization mat manufacturer's installation, field repair, cleaning, and maintenance instructions.

1.4 QUALITY ASSURANCE

1.4.1 Preservative Treated Wood Products

The Contractor shall be responsible for the quality of treated wood products. Provide the Contracting Officer's Representative (COR) with the inspection report of an independent inspection agency, approved by the Contracting Officer, that offered products comply with applicable AWPA standards. Identify treatment on each piece by the quality mark of an agency accredited by the Board of Review of the American Lumber Standard Committee. Inspect all preservative-treated wood visually to ensure there are no excessive residual materials or preservative deposits. Materials shall be clean and dry or it will be rejected because of environmental concerns.

1.4.2 MSDS and CIS

Provide Material Safety Data Sheets (MSDS) and Consumer Information Sheets (CIS) associated with preservative treatment. Contractor shall comply with all safety precautions indicated on MSDS and CIS.

1.4.3 Best Management Practices (BMPs)

The producer of the treated wood products shall provide certification that Best Management Practices (BMPs) for the use of Treated Wood in Aquatic Environments were utilized including a written description and appropriate documentation of the BMPs utilized.

1.4.4 Pesticide Applicators

Provide certifications for all individuals (applicators) who will be working with wood preservative products on site. All applicators shall be certified by the State or Environmental Protection Agency (EPA) (under the provisions of 40 CFR 171) to use wood preservatives, and have completed an approved EPA training program on the use of wood preservative products.

1.5 DELIVERY, STORAGE, AND HANDLING

Handle and store wood products in accordance with AWPA M4. Comply with paragraph titled "MSDS and CIS". Special care shall be taken in supporting materials to prevent excessive bending stresses. Materials shall be carefully handled without dropping, breaking of outer fibers, and penetrating the surface with tools. Peaveys, cant hooks, pikes, and other pointed tools shall not be used in handling treated wood products.

1.6 SEQUENCING AND SCHEDULING

Reasonable public access to the beach must be provided during the course of construction of the project. Typically, portions of areas receiving beachfill are not accessible to the public until the completion of dune crossovers. In order to ensure reasonable public access, complete each crossover not later than 14 calendar days after completion of beachfill in each area of a crossover. The Contracting Officer reserves the right to temporarily stop beachfill operations if the completion of dune crossovers exceeds this time period, at no additional cost to the Government. Any street lane closures shall be coordinated with the COR, the local Fire

Department, and the local Police Department a minimum of 7 calendars days prior to the needed closure. Any additional costs associated with such closures, shall be at no additional cost to the government.

PART 2 PRODUCTS

2.1 I-5 MATERIAL

I-5 Material conforming to the composition and gradation requirements of Subsection 901.11 of the NJDOT Specifications. Minimize angular aggregate to provide a comfortable walking surface. Provide I-5 material of similar color of the new beachfill material. Recycled materials are not acceptable.

The Government will visit the selected quarry to inspect the I-5 material.

The Contracting Officer reserves the right to reject any materials, which in his opinion, contains organic material or debris in quantities which he considers objectionable. Material which is frozen at the time of placement may also be rejected.

2.2 FENCE LUMBER AND TIMBER EDGE BOARDS

Post and rail fence lumber and timber edge boards shall be Southern Yellow Pine, Grade No. 1 in accordance with SPIB 1003. Split rail fence (posts and rails) shall be Southern Yellow Pine, Grade No. 1 in accordance with SPIB 1003, or No. 1 cedar. Southern Yellow Pine Lumber shall be treated with CA-C or CCA in accordance with AWPA U1 to the requirements of Use Category UC3B for lumber and timber installed above ground, and use category UC4A for lumber and timber intended for ground contact.

Treated wood shall be air or kiln dried after treatment. Specific treatments shall be verified by the report of an approved independent inspection agency, or the AWPA Quality Mark on each piece. Do not incise surfaces of lumber that will be exposed. Brush coat areas that are cut or drilled after treatment as specified in AWPA M4.

2.2.1 Handrails, Side Rails and Top Rails

Lumber used for the handrails, side rails and top rails shall be wood-polymer composite lumber. The product shall meet the structural integrity test requirements, ASTM D6112. The materials shall be new and clean. Color shall be light gray.

2.3 FASTENERS

Fasteners shall be ASTM A307, Grade A, hot-dipped galvanized. Washers and nuts shall be hot-dipped galvanized conforming to ASME B18.21.1 and ASTM A563, respectively. Hot-dip galvanizing shall be in accordance with ASTM A153/A153M. Deck screws shall be weather guard-coated steel.

2.4 GEOTEXTILE

Geotextile shall be as specified in Section 31 05 19 GEOTEXTILE.

2.5 STABILIZATION MATS

Stabilization mats shall be ABA/ADA compliant and shall provide a firm and slip resistant, flexible surface for wheelchair and pedestrian beach access

with the following features:

a. Minimum continuous roll width of 60 inches.

b. Minimum roll length of 30 feet.

c. Minimum weight not less than 0.24 lbs/sf and individual rolls shall be of such size and weight that they may be manageably moved by two people.

d. Manufactured from durable, UV stabilized material that is rot-proof and rust-proof in material and construction, and able to withstand extensive pedestrian and wheelchair traffic.

e. Material shall have a flat, open weave structure and finished edges to accommodate the anchoring devices required for installation.

f. Manufactured to provide a slip resistant surface in wet conditions and a non-angular comfortable walking surface for bare foot usage.

g. All components shall arrive fully factory fabricated and ready for field installation.

h. Color to be selected by Contracting Officer from manufacturer's standard colors.

2.5.1 Connectors

Furnish stabilization mats with an integral connector strip on each end of the mat with predefined, reinforced holes in the mat connector strip. Connectors shall provide a factory manufactured method to seamlessly connect mats together at the ends.

2.5.2 Anchoring

Provide U-shaped galvanized or plastic pins to facilitate the installation and anchoring of the stabilization mats. Anchors shall be approximately six inches wide and a minimum 16 inches deep.

2.6 SAND FENCE

Sand fence shall be as specified in Section 32 92 00 SAND FENCE AND DUNE GRASS.

PART 3 EXECUTION

3.1 RESTRICTIONS ON CROSSOVER CONSTRUCTION

Do not construct two adjacent pedestrian crossovers concurrently. Complete the fencing associated with each pedestrian crossover concurrently with the construction of each pedestrian crossover.

3.2 SITE PREPARATION

Crossover construction may require excavation of portions of the dune. Excavation shall be performed only to the extent necessary for the installation of crossovers.

3.2 Demolition

Remove existing fencing along the existing crossovers within the work limit, as directed by the Contracting Officer and as shown on the drawings.

3.3 Excavation

Minimize excavation of dunes. Dispose of unsatisfactory excavated material off-site. Stockpile remaining material for reuse in restoring dune to preconstruction configuration.

3.4 CONSTRUCTION OF DUNE CROSSOVERS

3.4.1 General

Construct dune crossovers including observation areas at the locations and in the manner indicated on the drawings and in accordance with the approved work plan. Construct handicap dune crossovers utilizing a soil aggregate, consisting of I-5 material, as shown on the Contract Drawings.

3.4.2 Placement of Base Material

Prior to placement of base material, place geotextile in accordance with Section 31 05 19 GEOTEXTILE. Place I-5 material in maximum 12 inch lifts and compact to at least 90 percent laboratory maximum dry density as determined by the Modified Proctor test procedure as specified in ASTM D1557. Remove, replace or dry materials that are too wet to facilitate proper compaction, by any method approved by the Contracting Officer. Place materials to the lines and grades shown and compact by the controlled use of the hauling and spreading equipment. Movement of the equipment shall be distributed as much as practicable over the surface to provide uniform compaction and complete coverage of the fill.

3.4.3 Testing

Furnish materials meeting the requirements specified herein, for placing the materials within the limits of moisture suitable for proper compaction, and for compacting the materials in accordance with the requirements of this section. Perform laboratory tests as required to control the work and demonstrate compliance with material specifications. Testing shall be as specified in Section 01 45 00 CONTRACTOR QUALITY CONTROL(CQC). Determine field in-place moisture/density in accordance with ASTM D6938. All nuclear gauges proposed for use on site shall have been laboratory calibrated within 9 months of their actual use on site. When test results indicate, as determined by the Contracting Officer, that compaction is not as specified, remove, replace and recompact the material to meet specification requirements. Perform tests on recompacted areas to determine conformance with specification requirements. The following number of tests, if performed at the appropriate time, will be the minimum acceptable for each type operation.

a. Perform not less than one gradation test on material placed in each vehicular and handicapped crossover and not less than one test for every fifth pedestrian crossover unless otherwise directed or approved by the Contracting Officer. The Contracting Officer may require additional tests, whenever materials are questionable, at no additional cost to the Government. During the course of construction, if the source or appearance or performance of the crossover materials

noticeably changes, in the opinion of the Contracting Officer, repeat the appropriate index testing as described herein, of the materials to ensure compliance and reestablish moisture/density relationships for compaction, at no additional cost to the Government.

b. Generate a compaction curve from a modified Proctor test in accordance with ASTM D1557 for each type of material used and for any change in appearance or composition of each material source as determined by the Contracting Officer. Perform tests, in accordance with ASTM D1557, to determine the respective material's optimum moisture and laboratory maximum density value at the following frequency: one preconstruction test for this project; one test in each beachfill town during production at the beginning; and one test at the midpoint in each beachfill town.

c. Perform three in-place nuclear density tests per lift of material placed at each crossover.

d. Check in-place densities using ASTM D1556 once for every 5 vehicular or pedestrian crossovers constructed and once for each handicap crossover constructed. Additional checks shall be performed as requested by the Contracting Officer, at no additional cost to the Government.

3.4.3.1 Action Required for Non-Compliance

Whenever test results indicate material non-compliance, remove such material, at no additional cost to the Government. Perform additional tests as directed by the Contracting Officer, to identify the limits of unsuitable material, at no additional cost to the Government.

3.4.4 Timber Edge Boards

Construct timber edge boards as indicated on the drawings. Set edge boards plumb and to tolerances specified below. Backfill shall be compacted with hand tampers or other approved method.

a. Tolerances: the finish grade between abutting boards shall not vary by more than 0.125-inch; the horizontal alignment of abutting boards shall not vary by more than 0.25-inch; and the gap between abutting ends shall be no more than 0.25-inch, unless otherwise approved or directed by the Contracting Officer.

3.5 STABILIZATION MAT INSTALLATION

a. Prepare the surface where the stabilization mats will be placed by raking the beach. Remove debris and foreign objects from the area. The surface should be as smooth and flat as possible to ensure optimal wheelchair accessibility.

b. Unroll the stabilization mat fully. Install the mat with the walking surface facing up.

c. Where the stabilization mat meets permanent dune crossover structures, the mat end shall be placed so there is no gap. Set the mat flush or below the permanent path to eliminate a tripping hazard. Dig a one to two inch trench and tuck the end of the mat into this trench and cover end of mat with beach sand.

d. Anchor the mat end using U-shaped pin anchors across the connector strip. Install the pins in the predefined holes in the mat connector strip. A connector strip is supplied on each end of the stabilization mat.

e. Anchor the beach end of the mat by digging a three inch trench. Fold the end of the mat into the trench firmly securing this end with four anchor pins inserted through the predefined holes in the mat connector strip.

f. Rake sand over the trench covering the end of the mat to prevent a tripping hazard.

3.5.1 Connecting Stabilization Mats

a. Install the successive mats by overlapping the connector strips, ensuring that the anchoring holes are lined up so that the anchor pins anchor both mats securely together.

b. Secure the mats with four U-shaped pins at each seam or as recommended by the mat manufacturer.

c. Continue connecting mat sections for the length of the access route. Complete the installation by securing the end of the final stabilization mat section as specified above or per manufacturer's instructions.

3.6 INSTALLATION OF POST AND RAIL, AND SPLIT RAIL FENCING

Construct fencing as indicated on the drawings. Excavate to the depths indicated for posts. Remove debris encountered during excavation. Set posts plumb and in proper alignment. Backfill shall be compacted with hand tampers or other approved method. Pre-drill holes for screws to prevent splitting. Replace items that split at no additional cost to the Government. Preservative treat lumber immediately after cutting, notching and drilling treated lumber, as specified in AWPA M4.

3.6.1 Handrail Installation

Install handrails on post and rail fence for Handicapped crossovers. Fit handrail sections together to form tight joints, except as necessary for expansion. Handrail shall be constructed as indicated and installed such that handrails maintain uniform height above grade and are installed at the same slope of the ramp, as shown on the drawings. Unless otherwise shown on the drawings, install handrails not less than 34 inches nor more than 38 inches above grade.

3.7 SAND FENCE

The sand fence shall be constructed as indicated on the contract drawings and in the manner specified in Section 32 92 00 SAND FENCE AND DUNE GRASS.

3.8 MEASUREMENT AND PAYMENT

3.8.1 Pedestrian Dune Crossovers

The work specified in this section for the construction of pedestrian dune crossovers will be measured for payment by the number of pedestrian dune crossovers satisfactorily constructed and accepted. Payment will be made at the contract unit price for the Bid Items titled "Pedestrian Dune

Crossover", and will include all costs associated with demolition, excavation, and geotextile incidental to this item.

3.8.2 Vehicle Dune Crossovers

The work specified in this section for the construction of vehicle dune crossovers will be measured for payment by the number of vehicle dune crossovers satisfactorily constructed and accepted. Payment will be made at the contract unit price for the Bid Items titled "Vehicle Dune Crossover", and will include all costs associated with demolition, excavation, timber edge boards, and geotextile incidental to this item.

3.8.3 Handicap Dune Crossover

The work specified in this section for the construction of handicap dune crossovers will be measured for payment by the number of handicap dune crossovers satisfactorily constructed and accepted. Payment will be made at the contract price per for the Bid Items titled "Handicap Dune Crossover", and shall include all costs associated with demolition, excavation and geotextile incidental to this item.

3.8.4 Stabilization Mats

The work specified in this section for the installation of stabilization mats will be measured for payment by the linear footage of stabilization mats satisfactorily installed and accepted. All costs in connection therewith shall be included in the contract unit price for the Bid Items titled, "Stabilization Mats".

3.8.5 Split Rail Fence

The work specified in this section for the construction of split rail fence will be measured for payment by the linear footage of fence satisfactorily installed and accepted. Fencing on each side of crossover(s) shall be measured separately. Payment will be made at the contract unit price for the Bid Items titled "Split Rail Fence".

3.8.6 Sand Fence

The work specified in this section for the installation of sand fence will be measured for payment as specified in Section 32 92 00 SAND FENCE AND DUNE GRASS.

3.8.7 Post and Rail Fence

The work specified in this section for the construction of the post and rail fencing will be measured for payment by the linear footage of fence satisfactorily installed and accepted. Fencing on each side of crossover(s) shall be measured separately. Payment will be made at the contract unit price for the Bid Items titled "Post and Rail Fence".

-- End of Section --

SECTION 32 92 00

SAND FENCE AND DUNE GRASS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials and equipment, and performing all operations required for the erection of sand fence and the planting of dune grass, as specified herein and shown on the drawings.

1.2 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.

ASTM INTERNATIONAL (ASTM)

ASTM A641/A641M	(2009a) Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
ASTM F537	(2001; R 2007) Standard Specification for Design, Fabrication, and Installation of Fences Constructed of Wood and Related Materials

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. See Section 01 33 00 SUBMITTAL PROCEDURES for all procedures related to the submission of submittals.

The following shall be submitted:

SD-07 Certificates

Sand Fence

Dune Grass Plants

Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

PART 2 PRODUCTS

2.1 SAND FENCE

2.1.1 Fence

Fence shall be ASTM F537, Type III, wire-bound wood picket fence. Slats shall be No. 1 White Cedar, Aspen, Douglas Fir or Spruce; minimum 0.375 inches thick; 1.5 inches wide; 48 inches long, square cut both ends; substantially free from excessive wane, knots, short slats and unsquare ends. Fence shall be free of decay, broken wire, and missing or broken pickets/slats. Fence binding wire shall be minimum 14 gauge galvanized wire. Fence shall be stretched after weaving to ensure the slats are tightly bound by the wire. Fence shall be furnished in minimum 50 foot lengths and shall be unpainted.

2.1.2 Fence Posts

Fence posts shall be a minimum of 3 inch diameter cedar.

2.1.3 Post Binding Wire

Wire for attaching the fence to the posts shall be ASTM A641/A641M, soft temper, galvanized, 14 gauge minimum.

2.2 DUNE GRASS

2.2.1 Plants

2.2.1.1 American Beachgrass

Provide the Cape variety of American Beachgrass *(Ammophila breviligulata)*. Each plant shall consist of 2 or more healthy culms. Care shall be taken to protect plant root system. Plants which are damaged will not be accepted. Deliver each plant to the planting site in a dormant state and cut to length as shown, prior to planting.

2.2.1.2 Spartina Patens

Provide the Avalon variety of Spartina Patens. The plants shall come from the nursery as live plugs. Each plant shall consist of 1 live plug. Plants which are damaged will not be accepted.

2.2.2 Fertilizer

Fertilizer shall be 10-10-10 grade. Fertilizer shall be uniform in composition, free-flowing, and suitable for application with approved equipment.

PART 3 EXECUTION

3.1 REQUIRED ORDER OF WORK

To avoid damaging the plants, the sand fence shall be installed prior to the beachgrass and Spartina planting in a particular location.

3.2 SAND FENCE

Install fence in the locations and along the lines shown on the drawings.

Posts and pickets shall be set vertical, including on slope. Debris may be encountered when excavating to install posts. The Contractor may be required to excavate at an adjacent location to avoid the debris encountered. Posts shall be set plumb, in proper alignment, at intervals not exceeding 10 feet, and placed so that the top of the post is even with the top of the fence pickets, and bottom of fence pickets are even with finished grade. Backfill shall be moistened to optimum condition and compacted with hand tampers. The posts shall be set such that the number of protrusions, i.e. knots, are minimized on the side to which the fence is to be attached. The sand fence shall be placed on alternating sides of posts where shown and attached to the posts by pulling fence taut and securely wrapping with minimum 14 gauge galvanized wire around fence post and adjacent picket, and subsequently twisting wire ends together to secure fence to post at each of the locations as the picket bindings. Splice fence by overlapping a minimum of two pickets and wrapping with wire at each of the locations as the fence picket bindings and twisting ends securely. All wire ends shall be tucked in at all locations to prevent injury to workers and the public.

3.3 DUNE GRASS

3.3.1 General

All dunes within the Contractor's Work Limit shall be fertilized and planted with beachgrass and spartina patens after finish grading of all dune crossovers and sand fence installation.

3.3.2 Surface Preparation

All surfaces to be planted shall be graded with no sharp depressions greater than 2 inches in depth.

3.3.3 Planting Method

3.3.3.1 American Beachgrass

Beachgrass shall only be planted from 15 October to 1 April. One beachgrass plant shall be planted per hole. The plants shall be spaced as shown on the plans. The dune grass shall be inserted into a preformed hole to a depth as indicated.

3.3.3.2 Spartina Patens

Spartina patens shall only be planted from 1 September to 1 October, or from 1 March to 31 May. Spartina patens shall be planted in clusters, at 18 feet on center between clusters. Each cluster shall consist of 5 plants planted at 18 inches on center. Each plant shall consist of 1 live plug. Plant 1 plug per hole. Each plant shall be planted at a minimum of 4 to 6 inches deep. Clusters shall be evenly dispersed along the landward dune face in the location shown on the contract drawings.

Where the landward slope of dune is completely stabilized with existing growth, Spartina Patens shall only be added where feasible and approved by the COR along adjacent areas, but no further seaward than the area designated on the contract drawings.

3.3.3.3 Fertilizer

Once the Spartina patens has been planted and the American beachgrass

plants break dormancy, as determined by the COR, execute the initial application of fertilizer at the rate of 20 pounds of nitrogen per acre. This initial application shall be performed within the first 30 days of the beachgrass breaking dormancy. Between 1 July and 1 August, after the initial planting, execute a second application of fertilizer at a rate of 20 pounds of nitrogen per acre. Both applications of fertilizer shall be made via an approved broadcast methodology, demonstrated in the field to apply the product at the specified rate. Fertilizer shall not be applied without prior approval by the COR and shall not be applied when wind speeds are more than 10 miles per hour.

3.3.4 Care and Protection

The Contractor shall be responsible for proper care and protection of all planted areas. At least 80 percent plant survival is required in areas at the end of the first growing season. Areas having less than an 80 percent survival rate shall be replanted and fertilized by the Contractor.

3.4 MEASUREMENT AND PAYMENT

3.4.1 Dune Grass

The work specified in this section for planting of dune grass (beachgrass) will be measured for payment by the total area of dune grass satisfactorily planted and accepted. Payment will be made at the contract unit prices per square yard for the Bid Items titled "Dune Grass Planting".

3.4.2 Sand Fence

The work specified in this section for sand fence will be measured for payment by the linear footage of sand fence installed. Payment for this work will be made at the contract unit prices for the Bid Items titled "Sand Fence".

-- End of Section --

SECTION 33 40 00

STORMWATER OUTFALL PIPES

PART 1 GENERAL

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required for extending and/or repairing stormwater outfall pipes as specified herein and on the contract drawings.

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.

ASTM INTERNATIONAL (ASTM)

ASTM A716	(2008) Standard Specification for Ductile Iron Culvert Pipe
ASTM C564	(2012) Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings
ASTM C920	(2011) Standard Specification for Elastomeric Joint Sealants

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C110/A21.10	(2012) Ductile-Iron and Gray-Iron Fittings for Water
AWWA C111/A21.11	(2012) Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
AWWA C151/A21.51	(2009) Ductile-Iron Pipe, Centrifugally Cast, for Water
AWWA C153/A21.53	(2011) Ductile-Iron Compact Fittings for Water Service
AWWA C600	(2010) Installation of Ductile-Iron Water Mains and Their Appurtenances
AWWA C606	(2011) Grooved and Shouldered Joints

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011; Change 7 2012) Safety and Health Requirements Manual

THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC SP 2 (1982; E 2000; E 2004) Hand Tool Cleaning

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. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Detailed Work Plan; G, DO

Submit a detailed work plan for transporting, storing, inspecting, repairing, recording, and installing all materials specified in this section, prior to performing the work.

Shoring and Sheeting Work Plan; G,DO

If sheeting is used for the excavation work, submit a shoring and bracing work plan with working drawings and design calculations sealed by a Registered Professional Engineer in the State of New Jersey, at least 10 days prior to shoring and sheeting activities.

SD-02 Shop Drawings

Outfall Pipe Modifications; G,DO

Submit a separate shop drawing for each outfall repair location. Drawings shall show invert elevations, slopes of the pipes and number of supports. Pipe and pipe support systems shall be detailed.

SD-03 Product Data

Ductile Iron Pipe and Fittings; G,DO
Universal Flexible Pipe Coupling; G,DO
Elastomeric Sealant; G,DO
Rubber Gaskets; G,DO

Submit manufacturer's data and installation instructions for the flexible coupling, elastomeric sealant, ductile iron pipe and fittings, prior to installation.

SD-07 Certificates

Ductile Iron Pipe and Fittings; G, DO
Universal Flexible Pipe Coupling; G, DO
Elastomeric Sealant; G, DO
Rubber Gaskets; G,COR

Statement signed by an official authorized to certify on behalf of the manufacturer of the pipe and pipe coupling attesting that the product meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's

name and address, must name of the project and location, and must list the specific requirements which are being certified.

Outfall Pipe Repairs

Submit a complete and accurate record of each outfall pipe repair within three days of completion of pipe installation. The record shall indicate the outfall number and station, the pile spacings, pipe sizes and lengths, member sizes, and materials used.

1.3 DELIVERY, STORAGE, AND HANDLING

1.3.1 Delivery and Storage

Materials delivered to site shall be inspected for damage, unloaded, and stored with a minimum of handling. Do not store materials directly on the ground. Keep the inside of pipes and fittings free of dirt and debris. Before, during, and after installation, protect the pipe and fittings from any environment that would result in damage or deterioration to the material. Keep a copy of the manufacturer's instructions available at the construction site at all times and follow these instructions unless directed otherwise by the Contracting Officer. Store solvents, solvent compounds, lubricants, elastomeric gaskets, and any similar materials required to install pipe, in accordance with the manufacturer's recommendations. Solvents in use shall be discarded when the recommended pot life is exceeded.

1.3.2 Handling

Handle pipe and accessories to ensure delivery to the timber pipe support systems in sound, undamaged condition. Carry pipe into position without dragging. Use of pinch bars and tongs for aligning or turning pipe will be permitted. Thoroughly clean the interior of pipe and accessories of foreign matter before being placed on the timber pile supports and keep the pipe clean during installation by plugging or other approved method. Before installation, inspect the pipe for defects. Replace material found to be defective before or after installation with sound material at no additional cost to the Government. Store rubber gaskets that are not to be installed immediately in a cool, dark place.

1.4 SITE CONDITIONS

Bidders are expected to examine the site of the work in accordance with Contract Clause: SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK to determine the conditions affecting their operations. The entire work site is designated as a hard hat area in accordance with EM 385-1-1.

1.5 QUALITY ASSURANCE

1.5.1 Shoring and Sheeting Plan

Submit drawings and calculations, certified by a registered professional engineer, describing the methods for shoring and sheeting of excavations. Drawings shall include material sizes and types, arrangement of members, and the sequence and method of installation and removal. Calculations shall include data and references used.

1.5.2 Dewatering Work Plan

Submit procedures for accomplishing dewatering work.

1.5.3 Utilities

Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Excavate by hand when adjacent to or for excavations exposing a utility or other buried obstruction. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the Contracting Officer. Report damage to utility lines or subsurface construction immediately to the Contracting Officer.

PART 2 PRODUCTS

2.1 STORMWATER OUTFALL MATERIALS

2.1.1 Ductile Iron Pipe and Fittings (DIP)

a. Pipe: AWWA C151/A21.51, Thickness Class 52.

b. Fittings: AWWA C110/A21.10 or AWWA C153/A21.53; fittings with push-on joint ends conforming to the same requirements as fittings with mechanical-joint ends, except that the bell design shall be modified, as approved, for push-on joint. Fittings shall have pressure rating at least equivalent to that of the pipe. Ends of pipe and fittings shall be suitable for the specified joints. Shape of pipe ends and fitting ends, gaskets, and lubricant for joint assembly, AWWA C111/A21.11 and the pipe manufacturer's recommendations.

2.1.2 Mechanical Joint Restraint

Provide mechanical joint restraint as shown on the plans. Mechanical joint restraint shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of AWWA C110/A21.10.

2.1.3 Universal Flexible Pipe Coupling

Universal flexible pipe coupling shall be a sleeve-type, made of elastomeric polyvinyl chloride (PVC) and designed to fit the outside diameter of the new ductile iron pipe. Coupling shall meet the applicable requirements of ASTM C564 and shall be furnished with stainless steel clamps for compression of the coupling to the pipes. Coupling material shall include an ultraviolet sunscreen, a fungicide preventative, and shall be resistant to ozone.

2.1.2 Elastomeric Sealant

Elastomeric sealant shall be a 2-component, premium grade, polyurethane-base in accordance with ASTM C920. Sealant primer and surface conditions shall be in accordance with the sealant manufacturer`s recommendation.

PART 3 EXECUTION

3.1 RESTRICTIONS ON WORK

Existing stormwater outfall pipes to be modified or removed, shall remain in service at all times, unless otherwise directed by the Contracting Officer.

3.2 DEMOLITION/DECONSTRUCTION

Existing stormwater outfall pipes and portions of existing pipe support systems shall be removed, repaired, and modified at the locations, and to the extent, as indicated on the contract drawings and as specified in Section 06 13 33 OUTFALL PIPE SUPPORTS. New pipe support systems shall be constructed as indicated and as specified in Section 06 13 33 OUTFALL PIPE SUPPORTS to support the new outfall pipe sections. Construction debris generated shall be disposed off-site in accordance with State and Federal regulations.

3.3 PROTECTION

3.3.1 Shoring

Provide shoring including sheet piling, and install it as necessary to protect workmen and adjacent structures and utilities. Shoring, bracing, and sheeting shall be designed and sealed by a licensed professional engineer. Shoring, bracing, and sheeting shall be removed as excavations are backfilled, in a manner to prevent caving.

3.3.2 Drainage and Dewatering

Establish and maintain the drainage of outfall pipes at all times throughout the entire contract. Any excavation associated with the installation of the new pipes shall be graded to provide stable embankment slopes or sheeted and shored as specified herein.

3.3.3 Underground Utilities

Location of the existing utilities indicated is approximate. The Contractor shall physically verify the location and elevation of the existing utilities indicated prior to starting construction.

3.3.4 Machinery and Equipment

Movement of construction machinery and equipment over pipes during construction shall be at the Contractor's risk. A minimum of 5-foot of beachfill cover over outfalls shall be placed prior to the use of equipment across these structures. Repair damage to existing outfalls due to the work operations at no additional cost to the Government.

3.4 EXCAVATION

Excavation will be unclassified regardless of the nature of the material encountered and shall be performed to the lines, grades, and elevation indicated.

During excavation, stockpile material satisfactory for backfilling trenches in an orderly manner and at a distance from the edges of trench equal to at least one-half the depth of excavation, but in no case closer than 2 feet.

Remove from the site all other excavated material not required or not satisfactory for backfill and disposed of properly at no additional cost to the Government. Grade as necessary to prevent surface water from flowing into the excavation, and remove water accumulating therein to maintain the stability of the bottom and sides of the excavation. Determination of elevations and measurements of approved overdepth excavation of unsatisfactory material below grades indicated shall be done under the direction of the Contracting Officer.

3.4.1 Pipe Trenches

The width of trenches at any point below the top of the pipe shall be not greater than the outside diameter of the pipe plus 24 inches to permit satisfactory jointing and thorough tamping of the bedding material under and around the pipe. Trenches 3 feet deep or more shall be shored, cut back to a stable slope, or provided with equivalent means of protection for workers who may be exposed to moving earth or cave-ins. Vertical trench walls more than 5 feet high shall be shored in accordance with paragraph "Shoring". Trench walls which are cut back shall be excavated to at least the angle of repose of the soil. Special attention shall be given to slopes which may be adversely affected by weather or moisture content.

3.4.1.1 Bottom Preparation

Accurately grade the bottoms of trenches to provide uniform bearing and support for the bottom quadrant of each section of the pipe. Remove stones of 1-inch or greater in any dimension to avoid point bearing.

3.4.2 Excavated Materials

Place satisfactory excavated material required for fill or backfill in the proper portion of the permanent work or stockpile the material if it cannot be readily placed.

3.4.3 Stockpiles

Stockpiles shall be kept in a neat and well drained condition, giving due consideration to drainage at all times.

3.5 PLACING PIPE

Examine each pipe thoroughly examined before being laid; defective or damaged pipe shall not be used. Install pipes and other fittings on the timber cribbing to the lines, slopes, and inverts shown on the contract drawings. Ensure that all pipe joints will be located within pipe support systems as shown on the contract drawings. Provide proper equipment for lowering sections of pipe into trenches. Do not lay pipe in water, and pipe shall not be laid when trench conditions or weather are unsuitable for such work. Provide diversion of drainage or dewatering of trenches during construction as necessary to accomplish the work.

3.5.1 Ductile Iron Pipe (DIP)

Furnish ductile iron pipes per ASTM A716, in 18 foot nominal lengths, except as noted on the contract drawings. The diameter of the pipe shall be as indicated on the contract drawings. Be aware that the pipes supplied by the manufacturer may vary in length. Select the length of pipe to ensure the pipe joints are located within a pipe support system. Cutting of pipes to locate pipe joints within a pipe support system will not be

permitted unless approved by the Contracting Officer.

3.5.1.1 Placing and Laying

Place pipe and accessories carefully onto the existing pipe support systems by means of derrick, ropes, belt slings, or other authorized equipment. Except where necessary in making connections with other lines or as approved by the Contracting Officer, pipe shall be laid with the bells facing in the direction of laying. The pipe shall be supported at all joints, at the discharge end, and at the connection to the existing discharge pipe. Remove and reinstall pipe that has the grade or joint disturbed after installation. Repair damaged coating or lining in a satisfactory manner and in accordance with manufacturers recommendations, at no additional cost to the Government.

3.5.1.2 Jointing

Locate push-on type pipe joints within the timber pile pipe supports as indicated. Install push-on type joints in accordance with AWWA C600 for buried lines or AWWA C606 above ground. One piece rubber gaskets shall be handled, lubricated where necessary, and installed in accordance with the pipe manufacturer's recommendations.

Connect new ductile iron outfall pipe section to existing pipe, using a universal flexible pipe coupling as shown on the contract drawings and as specified herein. Field modification may be required. Prior to installing the universal flexible coupling, clean new and existing pipes in accordance with SSPC SP 2 to produce a surface that is free of dirt, dust, loose rust or loose mill scale. Install flexible coupling and torque the clamps in accordance with the coupling manufacturer's instructions. Seal the couplings using elastomeric sealant as shown on the contract drawings.

3.5.1.2.1 Flexible Watertight, Gasketed Joints

Install gaskets in accordance with the manufacturer recommendations for use with lubricants and other special installation requirements. Place the universal flexible pipe coupling over one end of a section of pipe for half the width of the coupling. The other half shall be doubled over the end of the same pipe. When the adjoining section of pipe is in place, the doubled-over half of the gasket shall then be rolled over the adjoining section. Correct unevenness in overlap so that the gasket covers the end of pipe sections equally. Center connecting bands over adjoining sections of pipe; place rods or bolts in position; and tighten the nuts.

3.5.1.2.2 Band Tightening

Tighten the connecting band evenly with even tension being kept on the rods or bolts, and the gasket; and seat the gasket properly in the corrugations. Watertight joints shall remain uncovered for a period of time designated, and before being covered, tightness of the nuts shall be measured with a torque wrench. If the nut has tended to loosen its grip on the bolts or rods, the nut shall be retightened with a torque wrench and remain uncovered until a tight, permanent joint is assured.

3.5.1.3 Mechanical Joint Restraint

Locate two mechanical joint restraints on each outfall extension constructed, at the respective outfall pipe section shown on plans. Ensure joint restraint is positioned uniformly against timber cribbing prior to

tightening joint restraint onto pipe.

3.6 BACKFILLING

3.6.1 Backfilling Pipe in Trenches

Notify the Contracting Officer's Representative prior to backfilling over outfall pipes and support systems. The COR will inspect the outfall extensions and support systems and determine if they are in compliance with the contract requirements. Any work determined not in compliance, shall be reworked and reinspected prior to backfilling over the pipes and support systems. After the pipe has been properly placed and supported, hand-place selected material from excavation or borrow under and along both sides of pipe in layers not exceeding 6 inches in compacted depth. The backfill shall be brought up evenly on both sides of pipe for the full length of pipe. Thoroughly compact fill under the haunches of the pipe. Thoroughly compact each layer with mechanical tampers or rammers. Continue this method of filling and compacting until the fill has reached an elevation of at least one half the diameter of the pipe. Backfill the remainder of the trench around the outfall pipes and support systems to meet the beachfill template, as specified in Section 35 31 00 BEACHFILL. Placement or grading of beachfill material around outfall pipes that have been removed and replaced and support systems that have been modified shall be done in a manner that minimizes the ponding of water. Protect the outfall pipes and support systems from damage during placement or grading of beachfill material.

Repair or replace damage that occurs to the outfall pipes or the piping support system caused by contract operations at no additional cost to the Government. Backfill shall be satisfactory materials selected from the required excavated beachfill materials or from satisfactory materials obtained from the borrow source as specified in Section 35 31 00, "BEACHFILL", to the extent shown on the drawings.

3.7 CLEANUP

Upon completion of the outfall work, remove debris and surplus materials resulting from the work and dispose of properly.

3.8 MEASUREMENT AND PAYMENT

The work specified in this section will be measured for payment by the installed linear foot of pipe. The length of pipe will be determined by measuring along the centerline of the overall installed outfall pipe. All associated costs in connection therewith shall be included in the contract unit prices for the Bid Items titled "12-Inch Ductile Iron Pipe", "10-Inch Ductile Iron Pipe" and "16-Inch Ductile Iron Pipe". Payment shall include excavating and trenching pipe, furnishing and installing new pipe, and backfilling.

-- End of Section --

SECTION 35 20 23

HOPPER DREDGE SILENT INSPECTOR

PART 1 GENERAL

1.1 DESCRIPTION

The work under this contract requires use of the Silent Inspector (SI) System, for hopper dredges only, to monitor the dredges status at all times during the contract, and to track trip number, time-position history, instrument readings, vessel state, compute tons dry solids, report data, and manage data history. This performance-based specification section identifies the minimum required output and precision and instrumentation requirements. The requirements may be satisfied using equipment and technical procedures selected by the Contractor.

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 responsible for review of the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00, "SUBMITTAL PROCEDURES":

SD-01, Preconstruction Submittals

Dredge Plant Instrumentation Plan; G,SAM

SD-07, Certificates

Letter of Silent Inspector Certification; G,OP

1.3 PAYMENT

No separate payment will be made for installation, operation and maintenance of the SI system as specified herein for the duration of the dredging operations; all costs in connection therewith shall be considered a subsidiary obligation of the Contractor and covered under the contract unit prices for beachfill in the bidding schedule.

1.4 SILENT INSPECTOR CERTIFICATION

The Contractor is required to have a current Silent Inspector Certification for the dredge instrumentation system to be used under this contract at the time of issuance of the Notice to Proceed. Certification shall be based on an on-site dredge inspection conducted by Silent Inspector Support Center personnel.

The inspection shall include:

A series of data quality checks as described in paragraph 3.5 "Compliance Inspection and Quality Assurance Checks",

Verification of data acquisition and transfer (Paragraph 3.2),

Review of the Dredge Plant Instrumentation Plan (DPIP) as described in Paragraph 1.5.

A Silent Inspector Certification is valid for one year from the date of certification. The owner or operator of the dredge shall contact the SI support team at 1-877-840-8024 on an annual basis to schedule reinspection, allowing ample time for re-certification, and coordinate this with all local authorities. The Contractor shall have personnel, who are familiar with the SI system instrumentation and have the expertise to recalibrate sensors, on site during the inspection. Re-inspection is required for any yard work which produces modification to displacement (e.g. change in vessel lines, repositioning or repainting hull marks), modification to hopper volume (change in hopper dimensions or addition or subtraction of structure) or changes in sensor type or location. These changes will be reported in the sensor log section of the DPIP. If the SI system has been disabled or turned off, re-calibration of all sensors and concurrent re-certification will be required. This is not to be construed that data must be continually transmitted if the dredge is between jobs or engaged in a non-government project which does not require certification.

1.5 DREDGE PLANT INSTRUMENTATION PLAN (DPIP)

The Contractor shall have a DPIP on file with the National SI Support Center. This document shall describe how sensor data will be collected, how quality control on the data will be performed, and how sensors/data reporting equipment will be calibrated and repaired if they fail. A description of computed dredge specific data and how the sensor data will be transmitted to the Silent Inspector Database shall also be included. The Contractor shall submit to the SI Support Center any addendum or modifications made to the plan subsequent to its original submission, prior to Notice to Proceed. The Contractor shall also maintain a copy of the DPIP on the dredge which is readily accessible to Government personnel at all times.

The DPIP shall include the following as a minimum:
(DPIP must have table of contents in the following order)

Dredging Company

Dredge Point of Contact
Phone Number

Dredge Monitoring System Provider

Dredge Monitoring System Point of Contact
Telephone Number

Dredge Name

Sensor data collection method

Any averaging
Route from sensor to SI computer

SI Computer Hardware & Components

Brand names and specifications
User guides and owner manuals

Sensor repair, replacement, installation, modification or calibration methods

Dimensioned Drawings of the Dredge

A typical plan and profile view of the dredge showing:
Hopper cross section
Locations of required sensors referenced to:

Fore and aft perpendicular
Hopper length, depth, width, zero reference
External hull draft markings (latitudinal, longitudinal, keel)
Each other

Overall dredge dimensions
Dimensions of draghead

Length
Pipe inside diameter at sensor locations
Offset to positioning system antenna

Criteria and method used to increment load number

Description of how the UTC date/time stamp is collected

Positioning system

Brand name and specifications
Dredge heading instrumentation brand name and specifications
Instrument used to calculate COG
Any calculation done external to the instrumentation
Certificates of calibration and/or manufacturer certificates of compliance
Description of how dredge speed is determined

Tide

Description of how tidal information is entered into the data string.

Hull status

Instrumentation brand name and specifications
Certificates of calibration and/or manufacturer certificates of compliance
Any calculation done external to the instrumentation

Drafts:

Instrumentation brand name and specifications
Certificates of calibration and/or manufacturer certificates of compliance
Any calculation done external to the instrumentation

Displacement:

Method used by Contractor to calculate displacement based on fore and aft draft

Method used by Contractor to calculate lightship displacement
Hydrostatic curves
Tables listing (fresh and salt water) displacement as a function of draft certified by a licensed marine surveyor/ naval architect independent of the Contractor (feet and tenths of feet)

These methods and tables shall be an accurate reflection of the current configuration and displacement

Hopper Ullage:

Sensor brand name and specifications
Certificates of calibration and/or manufacturer certificates of compliance
Any calculation done external to the instrumentation

Hopper Volume:

Method used by Contractor to calculate hopper volume based on fore and aft hopper ullage
Table listing the hopper volume as a function of hopper ullage, certified by a licensed marine surveyor/ naval architect independent of the Contractor (feet and tenths of feet). Upon approval, each page of the ullage table will receive the visible, dated Silent Inspector stamp. The Contractor shall include his copy of the SI stamped table in the on-board copy of the DPIP.

These methods and tables shall be an accurate reflection of the current configuration and volume

DragHead

DragHead Depth

Sensor brand name and specifications
Certificates of calibration and/or manufacturer certificates of compliance
Any calculation done external to the instrumentation

DragHead Depth Check

Method used
If applicable sensor brand name and specifications
If applicable certificates of calibration and/or manufacturer certificates of compliance
If applicable any calculation done external to the instrumentation

Drag Head Position
Sensor brand name and specifications
Any calculation done external to the instrumentation
Certificates of calibration and/or manufacturer certificates of compliance

Slurry Density and Velocity Sensors:

Sensor brand name and specifications
Any calculation done external to the instrumentation
Certificates of calibration and/or manufacturer certificates of compliance

Pump RPM

Sensor brand name and specifications
Any calculation done external to the instrumentation
Certificates of calibration and/or manufacturer certificates of compliance
Description of the pump for which the RPM is reported

Criteria used to determine

Minimum pump effort
Pumping water
Material recovery
Pumpout

Pumpout

Criteria used to determine pumpout
Sensor brand name and specifications
Any calculation done external to the instrumentation
Certificates of calibration and/or manufacturer certificates of compliance

Refractometer:

Brand
Resolution and accuracy
Method of calibration

Criteria used to determine open/closed status of hopper

Documentation of:

Test methods used by the Contractor to provide quality control of data
Verification that the reported values are applicable for the sensor and application

Log of sensor performance and modifications

Log of Contractor data backup as per Paragraph 3.3.7

Any changes to the computation methods shall be approved by the Silent Inspector Support Center prior to their implementation.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 REQUIREMENTS FOR REPORTED DATA

The Contractor shall provide, operate and maintain all hardware and

software to meet these specifications. The Contractor shall be responsible for replacement, repair and calibration of sensors and other necessary data acquisition equipment needed to supply the required data.

Repairs shall be completed within 48 hours of any sensor failure. Upon completion of a repair, replacement, installation, modification or calibration, the Contractor shall notify the Contracting Office's Representative. The Contracting Officer's Representative may request re-calibration of sensors or other hardware components at any time during contract execution as deemed necessary.

The Contractor shall keep a log of sensor repair, replacement, installation, modification and calibration in the dredge's onboard copy of the DPIP. The log shall contain a three-year history of sensor maintenance to include: the time of sensor failures (and subsequent repairs), the time and results of sensor calibrations, the time of sensor replacements, and the time that backup sensor systems are initiated to provide required data. It shall also contain the name of the person responsible for the sensor work. Only sensors that affect the data reported in paragraph 3.3.6, "Reporting Metadata", are affected by this logging requirement.

3.1.1 Date and Time

The date and time shall be reported to the nearest second and referenced to UTC time based on a 24-hour format.

3.1.2 Load Number

The load number documents each instance of loading the hopper with dredge material. Load numbering will begin at the number 1 at the start of the contract, and will be incremented by 1 at the completion of each dump/emptying of the hopper.

3.1.3 Vessel Horizontal Positioning

Horizontal positioning of the antenna location shall be obtained using a positioning system operating with a minimum accuracy level of 1 to 3 meters horizontal Circular Error Probable (CEP). Positions shall be reported as Latitude/Longitude WGS 84.

3.1.4 Draghead Horizontal Positioning

Horizontal positioning of the dragheads shall be obtained using a positioning system operating with a minimum accuracy level of 1-3 meters horizontal Circular Error Probable (CEP). Positions shall be reported as Latitude/Longitude WGS 84.

3.1.5 Hull status

Open/closed status of the hopper, corresponding to the split/non-split condition of a split hull hopper dredge shall be monitored. For dredges with hopper doors, the status of a single door that is the first opened during normal disposal operations may be monitored. An "OPEN" value shall indicate the hopper door is open, or in the case of split hull dredges, the hull is split. A "CLOSED" value shall indicate that the hopper doors are closed, or in the case of split hull dredges, that the hull is not split.

3.1.6 Dredge Course

Dredge course-over-ground shall be provided using industry standard equipment. The Contractor shall provide dredge course over ground to the nearest whole degree with values from 000 (true north) to 359 degrees referenced to a clockwise positive direction convention.

3.1.7 Dredge Speed

Dredge speed-over-ground shall be provided in knots using industry standard equipment with a minimum accuracy of 1 knot.

3.1.8 Dredge Heading

Dredge heading shall be provided using industry standard equipment. The dredge heading shall be accurate to within 5 degrees and reported to the nearest whole degree, with values from 000 (true north) to 359 degrees referenced to a clockwise positive direction convention.

3.1.9 Tide

Tide data shall be obtained using appropriate equipment to give the water level with an accuracy of + 0.1 feet and a resolution of 0.01 feet. Tide values above project datum described in the dredging specification shall be entered with a positive sign, those below with a negative sign.

3.1.10 Draft

Draft measurements shall be made in feet with an accuracy of 0.1 feet, and reported with a resolution to the nearest 0.01 feet relative to the fore and aft draft marks. Industry standard pressure sensors, or an equivalent system, may be used. Two draft sensors, one fore and one aft, are required. At the discretion of the SI Support Center, a system may use other means of measuring drafts if accuracies and resolution are maintained relative to the draft marks

3.1.11 Hopper Ullage

Fore and aft hopper material ullage shall be measured to the nearest 0.01 feet with a minimum accuracy of + 0.1 feet relative to the hopper zero reference elevation. A minimum of two sensors is required, one fore and one aft. If only two sensors are used, they shall be mounted in locations as near as possible to the hopper centerline, and away from discharge flume turbulence and foam. If one sensor is offset to port or starboard, the other sensor shall be offset to the opposite side of the hopper. If more than one fore or one aft sensor is used, they shall be placed near the corners of the hopper and the average value of the fore sensors and the average value of the aft sensors shall be reported.

3.1.12 Hopper Volume

Hopper volume shall be reported in cubic yards, based on the most accurate method available for the dredge. The minimum standard of accuracy for hopper volume is interpolation from the certified ullage table, based on the average fore and aft ullage readings.

3.1.13 Displacement

Dredge displacement shall be reported in long tons, based on the most

accurate method available for the dredge. The minimum standard of accuracy for displacement is interpolation from the certified displacement table, based on the average fore and aft draft readings.

3.1.14 Empty Displacement

Empty displacement shall be reported in long tons, and shall be the lightship value of the dredge, or the weight of the dredge with no material in the hopper, adjusted for fuel and water consumption.

3.1.15 Draghead depths

Draghead depths shall be reported with an accuracy of + 0.5 feet and a resolution to the nearest 0.1 feet as measured from the surface of the water with no tidal adjustments. Minimum accuracies are conditional to relatively calm water.

3.1.16 Slurry Densities of Dragarms

A density metering device, calibrated according to the manufacturer's specifications, shall be used to record the slurry density of each dragarm to the nearest 0.0001 g/cc with an accuracy of + 0.001g/cc. If the manufacture does not specify a frequency of re-calibration, calibration shall be conducted prior to commencement of work.

3.1.17 Slurry Velocities of Dragarms

A flow metering device, calibrated according to the manufacturer's specifications, shall be used to record the slurry velocity of each dragarm to the nearest 0.001 fps with an accuracy of + 0.1 fps. If the manufacturer does not specify a frequency of re-calibration, calibration shall be conducted prior to commencement of work. The slurry velocity shall be measured in the same pipeline inside diameter as that used for the slurry density measurement.

3.1.18 Pump RPM

Pump RPM shall be measured with the highest level of accuracy that is standard on the vessel operational displays, either at the bridge, at the drag tenders controls, or in the engine room. Dredges with multiple pumps per side shall report RPM for the pump that best describes the dredging process (typically the outboard pump). If requirements of paragraph 3.1.19 are determined based on pump RPM, then that value shall be reported.

3.1.19 Dragarm Production Criteria

For the purposes of SI, a dragarm pump can only operate one of three ways and each shall be mutually exclusive of the other two.

3.1.19.1 Minimum Pumping Effort

For Minimum Pumping Effort a "TRUE" value shall mean the hopper dredge's dredge pumps are idling (assuring minimum dragarm intake velocity) or off. The logic can be triggered either with Pump revolutions per minute below a certain idle threshold or dragarm slurry velocity at or below the idle speed threshold (depending on the particular dredge plant and project). The only permissible values are "TRUE" and "FALSE". The criteria for minimum pump effort may be unique to each dredge.

3.1.19.2 Pumping Water

For Pumping Water a "TRUE" value shall indicate the dredge is not digging material but is pumping water (or very low-density material) through the dredge pump(s). For example, when the slurry density is less than 1.05 grams per cubic centimeter, the dredge is considered to be pumping water. Other parameters such as pump vacuum may be used to satisfy the pumping water requirement. These criteria may be unique to each dredge. The only permissible values are "TRUE" and "FALSE".

3.1.19.3 Material Recovery

For Material Recovery a "TRUE" value shall indicate the dredge is digging material. The only permissible values are "TRUE" and "FALSE". Example; when the slurry velocity is greater than 10 feet per second and the density is greater than 1.05 grams per cubic centimeter, material recovery is "TRUE". These criteria may be unique to each dredge.

3.1.20 Pumpout

When the hopper is being pumped out, a "True" value shall be reported; when it is not, a "False" value shall be reported. The only permissible values are "TRUE" and "FALSE".

3.2 SILENT INSPECTOR SHIP SERVER COMPUTER SYSTEM

The Dredge shall be equipped with an SI computer system consisting of a computer, monitor, keyboard, mouse, printer, data modem, UPS, and network hub. The computer system shall be a stand alone system, exclusive to the SI monitoring system, and will have USACE SI software installed on it. The Contractor is not responsible for maintaining the Silent Inspector computer software. If the SI Ship Server (including printer and other hardware) fails to operate properly, the SI Support Center will work with the Contractor to determine the nature of the problem. If a hardware problem is identified, or if a part of the system is physically damaged, then the Contractor shall be responsible for repairing it within 48 hours of determination of the condition.

3.2.1 Hardware Requirements

The Contractor shall provide and dedicate an on-board computer for the use of the Silent Inspector system. This computer shall run Corps' software and receive data from the Contractor's data reporting interface. This computer shall consist of, at a minimum, an Intel Celeron or AMD Sempron (or equivalent) microprocessor with no less than a 2.8 Gigahertz CPU. The computer shall contain a hard disk no smaller than 80 Gigabytes, include at least 1 Gigabyte of system memory, and support the Windows XP operating system. The Contractor shall be responsible for obtaining component vendor software drivers if the drivers are not provided with the latest release of the Windows XP operating system software. The computer shall also contain an Ethernet adapter that supports 10BaseT Unshielded Twisted Pair connections that shall connect to the network hub (Contractor shall supply a stranded Category 5 UTP patch cable to the network hub and one spare). Also, the computer shall have a standard 101 key keyboard, Microsoft compatible mouse, two unoccupied serial ports, an unoccupied universal serial bus port, and a CD-ROM drive (16X speed or faster). It shall also have a minimum 17-inch (viewable-size measured diagonally) video monitor capable of supporting at a minimum XVGA resolution of 1204X768 pixels and 32 bit color quality. The computer screen and keyboard will be located in

a position suitable for data viewing and data entry to the satisfaction of the Contracting Officer's Representative.

3.2.2 Network Hub

The SI Ship Server computer shall communicate via IEEE 802.3 Ethernet and the TCP/IP networking protocol. The Contractor shall provide a network hub to allow the temporary addition of the Contracting Officer's representative's portable computer to the computer network. The hub shall provide a minimum of four RJ-45 ports that support Category 5 Unshielded Twisted-Pair Network wiring.

3.2.3 UPS

The Contractor shall supply an Uninterruptible Power Supply (UPS) for the computer and networking equipment. The UPS shall provide backup power at 1kVA for a minimum of 10 minutes. The UPS shall have a serial interface to the SI Ship Server computer to communicate UPS status. The Contractor shall ensure that sufficient power outlets are available to run all specified equipment.

3.2.4 Printer

The Contractor shall supply a printer and driver software (when necessary) for use with the SI computer. The printer shall support the Universal Serial Bus interface (cable supplied by the Contractor), and shall have a minimum resolution of 300 dots per inch and a rated print speed of 6 pages per minute (black and white) or higher and support color. Additionally, the printer shall have minimum paper capacity of 50 pages of 8.5X11 inch paper. The Contractor shall be responsible for maintaining a supply of printer paper and other consumables such as printer cartridges. Printer usage will not exceed 500 pages per month.

3.2.5 Data Communication Device

The Contractor may select any commercial satellite, cellular phone, or other data communications system available to transmit the data to the SI Database over an internet connection using Simple Mail Transfer Protocol (SMTP) based emails. The Contractor shall provide an Ethernet connection from the SI Ship computer to the data communication device, and Internet Transmission Control Protocol SMTP port 25 on the device shall remain open to allow email transmission from the SI computer.

If the communications device for transmitting data is not exclusive to the SI computer, then a router should be configured to block all inbound connections to the SI computer.

3.3 DREDGE MONITORING DATA

3.3.1 General

Onboard sensors will continually monitor dredge conditions, operations and efficiency and route this information into the shipboard dredge-specific system computer (DSS) to assist in guiding dredge operations. Portions of this Contractor-collected information shall be routed to the SI Ship Server computer on a near real-time basis for archival data storage and compilation into summary reports of dredging operations. The parameters reported to the SI Ship server shall include: date and time, load number, dredge position, draft, vessel speed and heading, draghead depth, ullage

and hopper volume, displacement, tidal information, hull status, pumping status, minimum pump effort, density and velocity of the slurry material.

3.3.2 Data Reporting Interface

Standard sensor data shall be sent to the SI Ship Server computer via an RS 232 19200-baud serial interface. The serial interface shall be configured as 8 bits no parity and no flow control.

3.3.3 Data Measurement Frequency

Disposal activities shall be logged with high temporal and spatial resolution. Data shall be logged as a series of events. Each set of measurements (i.e. time, position, etc…) will be considered an event. All required information in paragraph 3.1 shall be collected within one second of the reported time. A data string for an event shall be sent to the SI Ship Server computer every 10 seconds or less; but never more frequently than one per second. If the dredge is within 2 miles of the disposal or dredging area, a failure to send a data string to the SI Ship Server computer within 25 seconds of the previous event shall result in a dredge down status determination by the automated monitoring system. Activities, such as the start or end of a disposal sequence or an elapsed time of 10 seconds since the last event, shall have an event time resolution of one second.

3.3.4 Data Reporting

The system shall transmit data to the SI Database continuously from mobilization until the last USACE post-dredging survey has been accepted. If the data communications device (paragraph 3.2.5) is non-operable, either because of hardware failure or poor local operating conditions; or if the device does not have the capability to send approximately 1 megabyte of data per day, then manual backups shall be performed for each day the device is inoperable. Using protocol contained in the SI Control Center and SI Send Data programs, the Contractor shall download all collected data to an approved medium (CD, flash drive etc…), and transmit this file to the SI Database. The Contractor shall copy the data to a contractor provided flash drive using the Copy Data button on the SI Ship Server computer's SI Control Center Menu. The flash drive will then be moved to an email capable computer that has the SI Send Data program installed, and that program will be used to send the flash drive data to the SI database.

The Contractor shall email a carbon copy of the data transfer notification to the Contracting Officer's Representative. Before downloading data, the Contractor shall click the Read Return Receipt button on the Control Center menu to read the receipt file from the previous transmission. Complete instructions on how to backup SI data, perform SI data transfer (Contractor) and the downloadable executable for SI Send Data can be found at http://si.usace.army.mil/QAR.asp.

In the event of sensor failure, a manual dump log shall be maintained and submitted on a daily basis to the Contracting Officer's Representative.

3.3.5 Reporting Data Format

Data shall be reported as an extensible Markup Language (W3C standard XML 1.0) document as indicated below. Data tags that are marked optional may be omitted or reported according the XML convention of to signify an empty tag. Line breaks and spaces are added for readability, but the carriage

return, line feed character combination is only added to delineate records (HOPPER_DREDGING_DATA tag) for actual data transmission. Scrolled parentheses {}, should be replaced by brackets in the actual data string.

```
{?xml version="1.0"?}
{HOPPER_DREDGING_DATA version = "2.0"}
     {DREDGE_NAME} string32 {/DREDGE_NAME}
        {HOPPER_DATA_RECORD}
            {DATE_TIME} time date string {/DATE_TIME}
            {LOAD_NUMBER} integer string  {/LOAD_NUMBER}
            {VESSEL_X coord_type =  "(LL)"} floating point string
{/VESSEL_X}
            {VESSEL_Y coord_type =  "(LL)"} floating point string
{/VESSEL_Y}
        {PORT_DRAG_X coord_type =  "(LL)"} floating point
string{/PORT_DRAG_X}
        {PORT_DRAG_Y coord_type =  "(LL)"} floating point
string{/PORT_DRAG_Y}
        {STBD_DRAG_X coord_type =  "(LL)"}    floating point
string{/STBD_DRAG_X}
            {STBD_DRAG_Y coord_type =  "(LL)"}    floating point
string{/STBD_DRAG_Y}
            {HULL_STATUS} OPEN/CLOSED string {/HULL_STATUS}
            {VESSEL_COURSE} floating point string {VESSEL_COURSE }
            {VESSEL_SPEED} floating point string {/VESSEL_SPEED}
            {VESSEL_HEADING} floating point string {/VESSEL_HEADING}
            {TIDE} floating point string {/TIDE}
            {DRAFT_FORE} floating point string {/DRAFT_FORE}
            {DRAFT_AFT} floating point string {/DRAFT_AFT}
            {ULLAGE_FORE} floating point string {/ULLAGE_FORE}
            {ULLAGE_AFT} floating point string {/ULLAGE_AFT}
            {HOPPER_VOLUME} floating point string {/HOPPER_VOLUME}
            {DISPLACEMENT} floating point string {/DISPLACEMENT}
           {EMPTY_DISPLACEMENT} floating point string {/EMPTY_DISPLACEMENT}
            {DRAGHEAD_DEPTH_PORT} floating point string
{/DRAGHEAD_DEPTH_PORT}
            {DRAGHEAD_DEPTH_STBD} floating point string
{/DRAGHEAD_DEPTH_STBD}
            {PORT_DENSITY} floating point string {/PORT_DENSITY}
            {STBD_DENSITY} floating point string {/STBD_DENSITY}
            {PORT_VELOCITY} floating point string {/PORT_VELOCITY}
            {STBD_VELOCITY} floating point string {/STBD_VELOCITY}
            {PUMP_RPM_PORT} floating point string {/PUMP_RPM_PORT}
            {PUMP_RPM_STBD} floating point string {/PUMP_RPM_STBD}
            {MIN_PUMP_EFFORT_PORT} true/false/unknown string
{/MIN_PUMP_EFFORT_PORT}
            {MIN_PUMP_EFFORT_STBD} true/false/unknown string
{/MIN_PUMP_EFFORT_STBD}
            {PUMP_WATER_PORT} true/false/unknown string {/PUMP_WATER_PORT}
            {PUMP_WATER_STBD} true/false/unknown string {/PUMP_WATER_STBD}
            {PUMP_MATERIAL_PORT} true/false/unknown
string{/PUMP_MATERIAL_PORT}
            {PUMP_MATERIAL_STBD} true/false/unknown string
{/PUMP_MATERIAL_STBD}
            {PUMP_OUT_ON} true/false/unknown string {/PUMP_OUT_ON}

           {/HOPPER_DATA_RECORD}
           {/HOPPER_DREDGING_DATA}
           Carriage return - ASCII value 13
```

Line Feed - ASCII value 10

3.3.6 Reporting Metadata

Data shall be reported to the SI Ship Server using the tags and criteria specified in the following table:

Data Tag	Description
DATE_TIME	mm/dd/yyyy hh:mm:ss defined as UTC time of the measurement in 24hr format. See paragraph 3.1.10
LOAD_NUMBER	The load number starts at 1 and is incremented by 1 at the completion of the disposal phase of each loading cycle. See paragraph 3.1.2
X_POSITION	Longitude in decimal degrees. West Longitude values are reported as negative. The attribute coord_type shall be LL. See paragraph 3.1.3
Y_POSITION	Latitude values are to be reported in decimal degrees. Northerly Latitude values are reported as positive. The attribute coord_type shall be LL. See paragraph 3.1.3
STBD_DRAG_X PORT_DRAG_X	Draghead Longitude as computed or measured by the Contractor in decimal degrees. West Longitude values are reported as negative. The attribute coord_type shall be LL. See paragraph 3.1.4
PORT_DRAG_Y STBD_DRAG_Y	Draghead Latitude as computed or measured by the Contractor in decimal degrees. Latitude values are reported as positive. The attribute coord_type shall be LL . See paragraph 3.1.4
HULL_STATUS	The only permissible values for hull status are OPEN or CLOSED. See paragraph 3.1.5
VESSEL_COURSE	The dredge course over ground reported to the nearest whole degree. See paragraph 3.1.6
VESSEL_SPEED	The dredge speed measured in knots at the reported time. See paragraph 3.1.7
VESSEL_HEADING	The dredge heading reported to the nearest whole degree. See paragraph 3.1.8
TIDE	Water level elevation reported in feet; positive above project datum, negative below. See paragraph 3.1.9
DRAFT_FORE DRAFT_AFT	Draft of vessel in feet relative to forward and aft draft marks. See paragraph 3.1.10
ULLAGE_FORE ULLAGE_AFT	Distance from the top of the hopper down to the surface of the dredged material in the hopper (measured in feet). See paragraph 3.1.11

Data Tag	Description
HOPPER_VOLUME	Hopper volume in cubic yards computed from the ullage sensor values. See paragraph 3.1.12
DISPLACEMENT	Displacement of the dredge at the time of measurement in long tons. See paragraph 3.1.13
EMPTY_DISPLACEMENT	Weight of the dredge with a completely empty hopper in long tons. See paragraph 3.1.14
DRAGHEAD_DEPTH_PORT DRAGHEAD_DEPTH_STBD	Depth of the drag head measured from the surface of the water to the lowest fixed point on the draghead (often the heel). See paragraph 3.1.15
PORT_SLURRY_DENSITY STBD_SLURRY_DENSITY	Dragarm slurry density (grams/cubic centimeters). See paragraph 3.1.16
PORT_SLURRY_VELOCITY STBD_SLURRY_VELOCITY	Dragarm slurry velocity (feet/second). See paragraph 3.1.17
PUMP_RPM_PORT PUMP_RPM_STBD	The shaft revolutions per minute of the pumps that are used to pump excavated slurry. See paragraph 3.1.18
MIN_PUMP_EFFORT_PORT MIN_PUMP_EFFORT_STBD	The only permissible values are TRUE or FALSE. See paragraphs 3.1.19 and 3.1.19.1
PUMP_WATER_PORT PUMP_WATER_STBD	The only permissible values are TRUE or FALSE. See paragraphs 3.1.19 and 3.1.19.2
PUMP_MATERIAL_PORT PUMP_MATERIAL_STBD	The only permissible values are TRUE or FALSE. See paragraphs 3.1.19 and 3.1.19.3
PUMP_OUT_ON	The only permissible values are TRUE or FALSE. See paragraph 3.1.20

3.3.7 Contractor Data Backup

The Contractor shall maintain an archive of all data sent to the SI Ship Server computer during the dredging contract. The Contracting Officer's Representative may require, at no increase in the contract price, that the Contractor provide a copy of these data covering specified time periods. The data shall be provided on PC format USB flash drive, CD-ROM , file transfer protocol (ftp) upload, or other storage medium acceptable to the Contracting Officer's Representative. At the end of the dredging contract, the Contractor shall contact the national SI Support Center prior to discarding the data to ensure all data have been appropriately archived. The person who made the call, the date of the call, and the representative who gave permission to discard the data shall be recorded in a separate section at the end of the dredges on-board copy of the DPIP.

3.3.8 Additional Data

An example ASCII format file of sensor data, other than that listed in paragraph 3.3.6 "Reporting Metadata", which will be supplied to the SI Ship Server computer shall be provided in the DPIP.

3.3.9 Data Reporting Example

```
{?xml version="1.0"?}
{HOPPER_DREDGING_DATA version = "2.0"}
  {DREDGE_NAME}Essayons{/DREDGE_NAME}
     {HOPPER_DATA_RECORD}
            {DATE_TIME}04/11/2002 13:12:05{/DATE_TIME}
            {LOAD_NUMBER}102{/LOAD_NUMBER}
            {VESSEL_X coord_type =  "LL"}10.123345{/VESSEL_X}
            {VESSEL_Y coord_type =  "LL"}-80.123333{/VESSEL_Y}
            {PORT_DRAG_X coord_type =  "LL"}10.123351{/PORT_DRAG_X }
            {PORT_DRAG_Y coord_type =  "LL"}-80.123337{/PORT_DRAG_Y }
            {STBD_DRAG_X coord_type =  "LL"}10.123347{/STBD_DRAG_X }
            {STBD_DRAG_Y coord_type =  "LL"}-80.123339{/STBD_DRAG_Y }
            {HULL_STATUS}CLOSED{/HULL_STATUS}
            {VESSEL_COURSE}258{/VESSEL_COURSE}
            {VESSEL_SPEED}3.4{/VESSEL_SPEED}
            {VESSEL_HEADING}302{/VESSEL_HEADING}
            {TIDE}-0.1{/TIDE}
            {DRAFT_FORE}10.05{/DRAFT_FORE}
            {DRAFT_AFT}15.13{/DRAFT_AFT}
            {ULLAGE_FORE}10.11{/ULLAGE_FORE}
            {ULLAGE_AFT}10.22{/ULLAGE_AFT}
            {HOPPER_VOLUME}2555.2{/HOPPER_VOLUME}
            {DISPLACEMENT}4444.1{/DISPLACEMENT}
            {EMPTY_DISPLACEMENT}2345.0{/EMPTY_DISPLACEMENT}
            {DRAGHEAD_DEPTH_PORT}55.10{/DRAGHEAD_DEPTH_PORT}
            {DRAGHEAD_DEPTH_STBD}53.21{/DRAGHEAD_DEPTH_STBD
            {PORT_DENSITY}1.02{/PORT_DENSITY}
            {STBD_DENSITY}1.03{/STBD_DENSITY}
            {PORT_VELOCITY}22.1{/PORT_VELOCITY}
            {STBD_VELOCITY}23.3{/STBD_VELOCITY}
            {MIN_PUMP_EFFORT_PORT}false{/MIN_PUMP_EFFORT_PORT}
            {MIN_PUMP_EFFORT_STBD}false{/MIN_PUMP_EFFORT_STBD}
            {PUMP_WATER_PORT}true{/PUMP_WATER_PORT}
            {PUMP_WATER_STBD}true{/PUMP_WATER_STBD}
            {PUMP_MATERIAL_PORT}false{/PUMP_MATERIAL_PORT}
            {PUMP_MATERIAL_STBD}false{/PUMP_MATERIAL_STBD}
            {PUMP_OUT_ON}false{/PUMP_OUT_ON}
     {/HOPPER_DATA_RECORD}
{/HOPPER_DREDGING_DATA}
{cr}
{lf}
```

3.4 PERFORMANCE REQUIREMENTS

The Contractor's Silent Inspector system shall be fully operational at the start of dredging operations. To meet contract requirements for operability, the Contractor's system shall provide a minimum 95 percent data return and be 95 percent compliant with DPIP requirements. Data return percentage is defined as the total number of quality data strings sent by the DSS system to the SI Ship Server computer divided by the total possible number of records that could be sent by a system in good working order. Quality data strings are considered to be those providing accurate values for at least 34 of the 35 data parameters reported. DPIP compliance is determined by percent of items listed in paragraph 1.5 to be at minimum compliance. After fifty percent project completion, combined percentage of data return and DPIP compliance should equal 95 percent or greater. If repairs necessary to restore 95 percent data return are not made within 48

hours, or if the Contractor fails to report required data within the specified time window for dredge measurements (see paragraphs above titled "Data Measurement Frequency" and "Data Reporting"); the system will be declared not fully operational, and the Contractor will be assessed liquidated damages equivalent to the additional oversight hours that would be required for Corps personnel to be on site from the first full day after the system is deemed not operational through to the time when the system is returned to fully operational status. For this contract, the liquidated damages shall be $1,000 per day.

3.5 QUALITY ASSURANCE CHECKS

The quality assurance checks listed below are a part of the annual SI dredge certification procedure. Quality assurance checks are required prior to the commencement of dredging and, at the discretion of a Contracting Officer's Representative, periodically throughout the duration of the contract. Detailed instructions for performing these checks and a spreadsheet for recording the results are available at http://si.usace.army.mil/downloads.asp.

3.5.1 Displacement (Draft) Check

The Contracting Officer's Representative will periodically verify the accuracy of the fore and aft draft sensors by comparing the vessel hull draft marks to the corresponding sensor readings indicated on the SI screen. The vessel's hull draft reading will be viewed from a contractor supplied auxiliary vessel circling the dredge. The Contracting Officer's Representative will review the difference between averaged drafts recorded by the instruments and those estimated from the draft marks to insure that the system is operating within the acceptable accuracy of approximately +/- 0.1 ft. in calm seas conditions, and will direct the Contractor to re-calibrate or repair system components as necessary. This check may be performed separately or as a part of the Water Load Test.

3.5.2 Draghead Depth Check

The Contracting Officer's Representative may require periodic calibration checks of the reported draghead depth using manual means such as tape measures or sounding lines to directly measure draghead depth. The Contractor shall furnish a steel tape, chain, or wire with clearly visible flags/tags placed at 1 foot increments within the operational range of the dragarm. These devices shall be capable of measuring the depth below the water surface to the lowest fixed point of each draghead (often the heel) with sufficient length to measure 5 feet more than the maximum project depth. Pressure sensors may be used to verify calibration of the draghead sensors only in areas where current flow past the vessel/dragarm cannot be reduced sufficiently to allow safe handling of manual measuring devices. Pressure sensors, used for this purpose shall be vented pressure gages and shall be subjected to an annual manufacturer's calibration. Prior to the dragarm depth check, the sensor shall be checked at a known depth, and may be required to be zeroed at this point according to manufacturer's specifications. Care shall be taken not to kink the cable or restrict the vent during deployment.

The Contracting Officer's Representative will review the draghead depth data to insure that the system is operating within acceptable accuracy, and may direct the Contractor to re-calibrate or repair system components as necessary. If a bubbler type system is used, weekly calibration of the draghead sensors is recommended, as they are sensitive to environmental

conditions.

3.5.3 Hopper Ullage Check

The Contracting Officer's Representative will periodically check the reported hopper ullage using a tape measure or other distance measuring device. The Contractor shall furnish a clearly readable weighted tape, marked in tenths of a foot, capable of measuring throughout the full range of hopper depth. The weight for this tape shall be a 6-inch diameter disk weighing between 2 and 3 pounds. The Contracting Officer's Representative will review the hopper ullage data to insure that the system is operating within acceptable limits (0.1 feet), and may direct the Contractor to re-calibrate or repair system components as necessary. This check may be performed separately or as a part of the Water Load Test.

3.5.4 Position Check

During inspection the reported position of the dredge will be verified by comparison with readings from a handheld GPS receiver. Throughout the contract, the Contracting Officer's Representative will periodically take readings from an independent GPS to verify locations.

3.5.5 Water Load Test

Water Tests shall consist of pumping the hopper out to its lowest level and then filling it to capacity with water, taking ullage and draft measurements at both levels to determine hopper volume and displacement. The objective of the water test is to validate the dredge's reported displacement and hopper volumes. If the results of the water test indicate that the system is not operating within acceptable accuracy, the Contractor shall correct the deficiencies causing the error and repeat the water test until the results are acceptable.

The Contractor shall provide a handheld refractometer with automatic temperature compensation to measure the hopper water specific gravity during water tests. The refractometer shall be capable of measuring the hopper water specific gravity with a resolution of 0.001 and minimum accuracy of + 0.001. The Contractor shall also provide a water-sampling device to retrieve a sufficient volume of water from various depths in the hopper to accurately determine specific gravity with the refractometer, and a sufficient volume of deionized water for calibration of the device.

3.6 LIST OF ITEMS TO BE PROVIDED BY THE CONTRACTOR

DPIP	Sec 1.5 Dredge Plant Instrumentation Plan
SI SYSTEM	
Sensor Instrumentation	Sec. 3.1 Requirements for Reported Data
Ship Server Computer	Sec. 3.2 Silent Inspector Ship Server Computer System
DREDGE DATA	
Event documentation	Sec. 3.3.3 Data Measurement Frequency
Summary reports for each load	Sec. 3.3.4 Data Reporting
Daily detailed data backups	Sec. 3.3.4 Data Reporting
QA EQUIPMENT ON DREDGE	
Ullage tape	Sec. 3.5.3 Hopper Ullage Check
Dragarm depth chain	Sec. 3.5.2 Draghead Depth Check

Refractometer -measuring in grams/cubic centimeter with a resolution of 0.001 and a minimum accuracy of + 0.001 with calibration water	Sec. 3.5.5 Water Load Test
Water sampling device	Sec. 3.5.5 Water Load Test

-- End of Section --

SECTION 35 31 00

BEACHFILL

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, plant and equipment and performing all operations required for dredging the beachfill material from the designated borrow areas and placing the material on the beach within the limits shown on the Contract drawings.

1.2 REFERENCES

The following publications form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D422	(1963; R 2007) Particle-Size Analysis of Soils

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011; Change 7 2012) Safety and Health Requirements Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 156	(2010) Navigation and Navigable Waters, Oil and Hazardous Material Transfer Operations

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 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Borrow Areas; G,DO

Provide a hard copy map of the borrow area, printed or plotted to scale, with stationing and range information. Provide maps in the following two electronic formats: (1) ESRI ArcGIS 10.x Shapefile format (.shp), including all components and extensions, or, in a Spatial Data Standard compliant geodatabase; (2) Portable Document Format (PDF) files containing PDF layer maps.

Debris Prevention Plan; G,COR

Submit a monitoring program/method to ensure that debris

(boulders, cobbles, clay balls, and other debris) is not deposited upon the beach and buried by beachfill material.

Work Plan; G,DO

Submit a detailed plan for removing the material from the borrow area and placing it in the areas shown on the contract drawings. The plan shall show the pipeline layout, details of ramps over the pipeline, safety fence locations, personnel to be used to patrol closed beach area, and signage, and shall include the surveying procedures, methods, and equipment for topographic surveys, hydrographic surveys, and tidal monitoring, as specified in Section 01 71 23 SURVEY REQUIREMENTS. Additionally, the plan shall address the safe working wave height limits for daily work procedures.

Pumpout Plan; G,COR

If a hopper dredge is used for the contract work, submit prior to the start of work its plan for pumpout of excavated material from the dredge to the beachfill area. The plan shall include the description, dimensions, and location of the proposed mooring facility.

Accident Prevention Plan; G,DO

Prior to the start of work, submit a detailed plan for accident prevention, as specified in Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Emphasize in the plan, the protection and safety of the general public using the adjacent beach areas, as well as the protection and safety of the Contractor's personnel, and provide details of any barricades, warning signs, and equipment proposed for use in the implementation of the accident prevention plan.

Grade Stake Recovery Plan; G,COR

Submit a plan describing the procedures that will be used to ensure that all grade stakes placed on the beach during construction are subsequently removed. Grade stake removals and lost stakes shall be included with the Quality Control Report.

SD-06 Test Reports

Test Reports; G,DO

Copies of all laboratory and field test reports shall be submitted to the Contracting Officer within one week after completion of each test.

SD-07 Certificates

Daily Report of Operations; G,COR

Prepare, maintain, and submit daily, the completed Daily Report of Operations forms, and furnish signed copies thereof with the Quality Control Reports required in SECTION 01 45 00 CONTRACTOR QUALITY CONTROL (CQC), to the Contracting Officer. Daily Report of Operations forms shall be completed in the RMS system and submitted daily to the COR. Samples of the types of Daily Report

of Operations forms to be used are attached at the end of this section. Submittals for the Daily Report of Operations are available to the public.

Fuel Usage

Furnish the Contracting Officer reports, to be received on or before the last day of each month, listing the totals of fuels consumed by the dredging plant and supporting vessels. The reports shall separately list the quantities of each type of fuel used. The reports shall cover the period from the 25th of the preceding month to the 25th of the current month.

Request to Adjust Construction Template; G,DO

Submit documentation describing why the specified foreshore slope cannot be achieved in an area, and requesting permission to adjust the construction template, as specified herein. Documentation shall include the location, by project site and range of survey baseline stations, for which the request is being made.

Daily Dredge Location; G,DO

Submit daily, electronic files containing the real time positioning of the dredge. The location data shall be recorded on 15 minute intervals. Submit data in ESRI ArcGIS 10.x Shapefile format (.shp, including all components and extensions, or in a Spatial Data Standard compliant geodatabase.

Maps of Dredge Position; G,DO

After every 5 days of dredging, submit a map of the borrow areas, to scale, with the Contractor-assigned stationing and range information, along with the draghead or cutterhead positioning data indicating the location of the dredge and the time period associated with a set of daily recorded positions. In addition, provide an electronic PDF file containing PDF layer maps.

1.4 SITE CONDITIONS

There are numerous obstructions in the project area(s), which may include, but is not limited to: existing bulkheads, dunes, stairs, groins (which are visible and hidden), piers, boardwalk, and stone revetment and piles, which may effect placement of the beachfill. Bidders are expected to examine the site of the work in accordance with Contract Clause: SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK to determine the conditions affecting their operations. The entire work site is designated as a hard hat area in accordance with EM 385-1-1. Throughout the dredging operations the Contractor shall maintain close coordination with the U.S. Coast Guard.

1.4.1 Access and Limits of Work

Access to either of the beachfill sites is available only at the locations shown on the contract drawings. The limits of work shall be as shown on the contract drawings. Restrict contract work and equipment to within these limits. The staging area is located as shown on the contract drawings and may be used for storing material and temporary construction facilities.

1.5 DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS)

Provide real time positioning of the dredge, as well as positioning and elevation of the draghead or cutterhead, recorded as specified in Section 01 71 23 SURVEY REQUIREMENTS. See paragraph SUBMITTALS above for submittal requirements.

1.6 BORROW MATERIAL

1.6.1 Location of Borrow Material

The location of the approved borrow area(s) and the limits to which removal of material is permitted are shown on the contract drawings. These borrow areas shall be used for all beachfill work performed under this contract. See contract drawings for details on location and allowable depths. Unless specifically directed by the Contracting Officer, no payment will be made for material removed from below the maximum allowable depth plus 1-foot overdepth or from outside the approved borrow area limits, as indicated on the contract drawings. If, during the progress of the work, it is determined that the borrow area does not contain a sufficient quantity of material for completion of the project, the Contracting Officer may adjust the maximum allowable depth of the borrow area. If this adjustment results in the pumping of undesirable material quality, the Contractor shall move to another location within the specified limits of the borrow area.

1.6.2 Character of Borrow Material

The character of the material in the borrow area is believed to be as indicated by the results of Government-conducted sampling. Vibrational core logs are included in Section 00 73 41 of these contract specifications. Associated sieve curves are included in Section 00 73 42. The locations of the vibrational core holes in the borrow area are shown on the drawings. The information depicted on the vibrational core logs represent the results of subsurface explorations made on the dates indicated and can only be considered as conditions existing at that time.

1.6.3 Maximum Allowable Depth for Removal

The maximum allowable depth for removal of material from the borrow area is as indicated on the borrow area drawings. To cover the inaccuracies of the dredging process, the Contractor may remove material in the borrow area to a depth of not more than 1 foot below the maximum allowable depth.

1.6.4 Nature of Borrow Areas

The survey of the borrow area shown on the contract drawings is the most recent survey available. The conditions in the borrow area are dynamic in nature. Therefore the soundings and material descriptions shown on the drawings and in the specifications may not be an accurate representation of the depths and conditions existing at the commencement of dredging operations under this contract.

Boulders, cobbles, clay balls and munitions and explosives of concern (MEC) may also be encountered in the borrow area. The borrow area is located in the vicinity of known World War II era firing ranges. See Section 01 35 30 MUNITIONS AND EXPLOSIVES OF CONCERN (MEC) CONSTRUCTION SUPPORT for all requirements related to potentially encountering MEC in the borrow areas.

1.6.5 Before- and After-Dredging Surveys

Before- and after- dredging surveys shall be conducted as specified in Section 01 71 23 SURVEY REQUIREMENTS and Special Clause: QUANTITY SURVEYS.

1.7 RESTRICTIONS ON BEACHFILL OPERATIONS

1.7.1 Beach Closings

Close the beach in the active construction area, utilizing temporary fencing, barricades, and signage, in maximum 1,000-foot sections to allow placement of beachfill. Do not advance the closed section of beach until acceptance of a section by the Contracting Officer. All other sections of the beach, except storage areas, are to remain open to the general public. All beach closings shall be coordinated with the respective Margate City and Longport Borough Beach Patrol and Fire Departments to ensure access by emergency vehicles. In addition, erect signage at the corresponding Atlantic Avenue intersections when beach access is closed so that people accessing the beach can move to the next street along Atlantic Avenue to where beach is open.

1.7.2 Pipe Ramps

Provide ramps over the pipeline at all street ends and pedestrian, vehicle and handicap crossover access points to allow safe public access to the ocean. The ramps shall be 6 feet wide (measured along the pipeline), with 3:1 slopes and one foot minimum of cover over the pipeline. Ensure that any movement of pipeline or equipment is done with recognition to the public presence, in accordance with the approved Accident Prevention Plan.

1.8 DEDICATED PUBLIC SAFETY PERSONNEL

Provide a minimum of one public safety person to patrol the perimeter of each closed beach area and direct the public to not enter the construction area. A dedicated public safety person shall be provided at all times during active construction operations and shall have no other responsibilities.

1.9 OUTFALL MAINTENANCE

Maintain drainage of outfalls within the project limits at all times, until final project demobilization is complete.

1.10 DEBRIS PREVENTION

Submit for approval, a method to ensure that debris (either dredged from the borrow area or deposited by the Contractor's personnel) is not deposited upon the beach and buried by beachfill material. A proposed monitoring program shall be included, using the Contractor's personnel, to monitor the proposed debris-prevention method's results. Debris includes cobbles, clay balls, shells, and man-made trash and materials.

1.11 FUEL OIL HANDLING

Ensure that all fuel oil transfer operations to or from his plant and equipment comply with all applicable Federal, State, and municipal laws, codes, and regulations. The Contractor shall incorporate in his accident prevention plan, required under Paragraph "Accident Prevention Plan", sufficient information to demonstrate compliance with 33 CFR 156 and all

other applicable laws, codes, and regulations.

1.12 SEQUENCING AND SCHEDULING

See Section 32 15 00 DUNE CROSSOVERS for sequencing and scheduling of Dune Crossovers with the placement of beachfill material.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 EXISTING DEBRIS/ITEMS REMOVAL

Prior to commencing beachfill work, remove all debris and miscellaneous items, including, but not limited to abandoned wood piers, wood groins, and man-made trash and materials, from the existing beach, and dispose of them offsite at no additional cost to the Government. Do not bury existing debris or miscellaneous items of any kind with the new beachfill.

3.2 SURVEY REQUIREMENTS

See Section 01 71 23 SURVEY REQUIREMENTS for all qualification, equipment, performance and submittal requirements associated with project surveys, including, but not limited to, the establishment of baselines, staking and flagging, pre- and post-placement condition surveys, before- and after-dreding surveys, and before- and after-beachfill surveys.

3.3 PLACEMENT OF BEACHFILL

3.3.1 General

Place and shape beachfill material to the beachfill template lines, grades, slopes, and elevations shown on the contract drawings. There shall be no pronounced ridges or wash holes in the final grades and slopes unless otherwise indicated. Beachfill lines and grades shall extend linearly between payment sections with no scallops in planform contours. Conduct work operations so that no areas landward of the work limits shown on the Contract Drawings are disturbed. Use land-based equipment for grading the beachfill material. If the beachfill material is stockpiled and subsequently moved to the final postion using land-based equipment, wait 24 hours after placement of beachfill before conducting after-beachfill surveys of an area.

3.3.2 Removal of Debris

If MEC or MEC-like items are detected on the beach, implement the procedures specified in Paragraph "DETECTION OF MEC" in Section 01 35 30 MUNITIONS AND EXPLOSIVES OF CONCERN (MEC) CONSTRUCTION SUPPORT.

During the operation of placing beachfill material, remove from the work site, debris resulting from construction operations and dispose of at no additional cost to the Government. Such disposal shall comply with all applicable Federal, state and local laws. Remove such materials from the work site prior to contract completion date.

3.3.3 Placement Of Beachfill Beneath Existing Beach Structures

Place and grade beachfill material by hand beneath existing beach structures. Protect existing beach structures from damage. Place beachfill material beneath structures in a manner that minimizes the ponding of water. If ponded areas are created due to the work operations, pump these areas dry at no additional cost to the Government. Repair or replace structures damaged in a manner as determined and directed by the Contracting Officer, at no additional cost of the Government.

3.3.4 Placement of Beachfill Over Existing Structures

Cover existing structures with sand to the template shown on the drawings. Hand placement and grading of beachfill material may be required to protect the existing beach structures from damage.

3.3.5 Placement of Beachfill Above Groins, Piles, Revetments and Outfalls

Place a minimum of 5 feet of beachfill cover over groins, piles, revetments and outfalls prior to the use of equipment across these structures. Repair damage to these structures as a result of work operations, at no additional cost to the Government.

3.3.6 Hydraulic and Hopper Dredges

Keep pipelines used with hydraulic dredging in good condition at all times, and promptly repair leaks or breaks. Load material excavated by hopper dredging into bins or hoppers and pump directly to the beachfill area by a means which prevents the loss of any material into the ocean. Take special care to ensure that hoppers do not leak during any phase of the contract work.

3.3.7 Marking of Pipeline

Provide barricades, warning signs and lights, subject to the approval of the Contracting Officer, as part of the accident prevention plan, for the protection and safety of the public using the adjacent beach areas. Clearly mark the beachfill dredge pipe with buoy signs or other signage approved by the Contracting Officer, at a distance of 200 feet seaward of the low water line, at all locations that the dredge pipe is landed. This signage shall warn the public of the location and danger of the submerged pipe. Install barricades, warning signs, and lights prior to the start of work. Notify the Coast Guard for issuance of a "Notice to Mariners" in accordance with Section 00 73 00 SPECIAL CLAUSES.

3.3.8 Removal of Stakes and Markers

Remove stakes, markers, temporary fencing, burlap, piping, or other items used in the construction of the beach within 24 hours after completion and before approval of an acceptance section, or as otherwise directed by the Contracting Officer. Remove stakes, markers, temporary fencing, burlap, piping, or other items used in the construction that become uncovered after approval of the acceptance section, within 24 hours of their detection. Report grade stake removals and lost stakes weekly to the COR.

3.3.9 Template Quantity

The required template placement quantity of sand between survey lines will be determined by the average-end-area method using the difference

incross-sectional area between (1) the profile surveys obtained by the Contractor before the beachfill operations in accordance with Section 01 71 23 SURVEY REQUIREMENTS and (2) the template lines shown on the drawings.

3.3.10 Placement Tolerances

a. A vertical tolerance of plus 0.5 feet and minus 0 will be permitted on the berm portion of the beach and a vertical tolerance of plus 0.2 feet and minus 0 will be permitted on the dune portion of the beach.

b. Adjusted Construction Template: Place beachfill to the minimum seaward edge of berm and to the foreshore slope indicated on the drawings, however, with Contracting Officer approval, the Contractor may adjust the construction template by advancing the edge of berm seaward (at the same elevation) and modifying the foreshore slope to achieve the required placement quantity within the footprint of the beachfill template shown on the drawings. An example of an adjusted construction template is attached to this section.

c. In the event that the dune elevation, berm elevation, the minimum seaward edge of berm or the required placement quantities are not met, recommence beachfill operations until the requirements are met. The Contractor will not be required to recommence beachfill operations in the event of erosion and/or storm damage in areas where beachfill has been completed and the survey data demonstrates compliance with the contract requirements.

3.3.11 Payment Tolerances

For payment, there will be no vertical tolerance permitted on the berm or dune portion of the beach. Payment will be made for placement, only to the lines and grades shown on the contract drawings (see Measurement and Payment paragraph below). In the event the Contractor adjusts the construction template as specified herein, payment will be made for measured quantity, not exceeding the required placement quantity. Payment will not be made for material placed above the required dune or berm elevation, or placed seaward of the toe of slope. The toe of slope shall be defined as the point of intersection of the template as shown on the drawings with the before-placement survey profile.

3.4 CONTRACTOR QUALITY CONTROL

3.4.1 Contractor Reports

Prepare and maintain Daily Report of Operations forms, and submit signed copies thereof with the daily Quality Control Records required in Section 01 45 00 CONTRACTOR QUALITY CONTROL. Copies of the Daily Report of Operations forms to be used are included at the end of this Section. Indicate on the daily forms, the location and depth of dredging in the borrow area. Include a map showing the location of the borrow area.

3.4.2 Samples and Testing

Obtain samples of beachfill material from the finished beach at 500 foot intervals not more than two days following placement and final grading of beachfill and have them tested for grain size distribution in accordance with ASTM D422. Perform testing by a Corps of Engineers approved laboratory as specified in Section 01 45 00 QUALITY CONTROL. Obtain

samples at approximately elevation +7.00 NAVD 88 on the foreshore slope. Record test results on ENG Form 2087, a copy of which is included in Section 00 73 90. Also record on ENG Form 2087 the location of the dredge within the borrow area and the depth of dredging at the time of placement of the sand sampled.

3.4.3 Form Preparation

Instructions regarding the preparation of all required forms will be provided at the Contractor Quality Control Coordination Meeting.

3.5 MEASUREMENT AND PAYMENT

3.5.1 Mobilization and Demobilization

All costs connected with the mobilization and demobilization of the Contractor's plant and equipment for dredging and beachfill operations will be paid for at the contract lump sum price for Base Bid Item titled, "Mobilization and Demobilization". Sixty percent of the lump sum price will be paid to the Contractor upon completion of his mobilization at the work site. The remaining forty percent will be included in the final payment for work under this contract. Mobilization and demobilization costs for other work under this contract (ex. crossover, outfalls, etc.) shall be included in the costs of the bid items to which the mobilization and demobilization is incidental.

a. Mobilization: include all costs for operations accomplished prior to commencement of actual beachfill placement; that is transfer of all plant and equipment to the work site, initial installation of pipelines, and all other incidentals in advance of beachfill placement operations.

b. Demobilization: include general preparation for transfer of the plant and equipment to the Contractor's home or standby base, removal of pipelines, cleanup, and the transfer of plant and equipment to the home or standby base.

3.5.1.1 Contractor Furnished Cost Data

In the event the Contracting Officer considers that the amount in this item (sixty percent) which represents mobilization, does not bear a reasonable relation to the cost of the work in this contract, the Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid price. Failure to justify such price to the satisfaction of the Contracting Officer will result in the payment of actual mobilization costs, as determined by the Contracting Officer, at the completion of mobilization, and the payment of the remainder of this item will be included in the final payment under the contract. The determination of the Contracting Officer in these circumstances is not subject to appeal.

3.5.1.2 Mobilization and Demobilization Costs for Options

All costs in connection with any additional mobilization and demobilization of the Contractor's plant and equipment in connection with Option Bid Items, shall be included in the contract unit price for the respective Bid Items.

3.5.2 Placement of Beachfill

All beachfill material placed in the designated areas, and placed to the lines and grades shown on the contract drawings and within the payment tolerances specified herein, will be measured for payment by the cubic yard in place on the beach. Payment will be made at the contract unit prices per cubic yard for the Bid Items titled "Beachfill". Payment for the Bid Items shall also include, but not be limited to, full compensation to the Contractor for removing all existing debris (including sand fence, posts, wood and any other miscellaneous items), performing all project surveys, providing public safety personnel, and performing all material testing required. If the Contractor fails to remove boulders, cobbles, clay balls, or other debris from the beach, that completed fill section will not be accepted for payment.

a. The total number of cubic yards placed will be computed by the average-end-area method from the before- and after-beachfill profile surveys obtained by the Contractor as specified in Section 01 71 23 SURVEY REQUIREMENTS and as required by Special Clause: QUANTITY SURVEYS. The volume so computed, up to a quantity not to exceed the bid quantity, will be the pay quantity for the contract. A deduction of one cubic yard will be made from the pay quantity for every cubic yard of material removed from below the maximum allowable elevation indicated for the borrow areas (i.e., the maximum allowable depth plus 1 foot overdepth), or from outside the borrow area limits shown. Any deductions will be based on before-dredging surveys conducted prior to dredging the borrow area and after-dredging surveys conducted following dredging of the borrow area as specified in Section 01 71 23 SURVEY REQUIREMENTS.

3.5.2.1 Progress Payments

For the purposes of payment for beachfill, the Government will not consider the progress of beachfill satisfactory until the satisfactory completion of the work, specified in Section 32 15 00 DUNE CROSSOVERS, in areas of beachfill for which progress payment are to be made.

-- End of Section --

DAILY REPORT OF OPERATIONS -- HOPPER DREDGES

DISTRICT		DREDGE
EXACT LOCATION OF WORK	☐ MAINTENANCE ☐ NEW WORK	DATE NUMBER OF PERSONS IN CREW

AV. LENGTH OF CUT FT.	CHARACTER OF MATERIAL	HOPPER CAPACITY CU. YDS.
AV. WIDTH OF CUT FT.	DENSITY OF MAT. IN PLACE GMS/LITER	AV. VOL. OF BIN WATER CU. YDS.
AV. DIST. TO DUMP MILES	DENSITY OF WATER GMS/LITER AT °F	AV. UNFILLED CAPACITY CU. YDS.

NAVIGATION AND OTHER DREDGING AIDS *(Describe and include statement on adequacy and recommendations)*

WORK PERFORMED

DREDGING AND HAULING			AGITATING
NO. OF LOADS	TOT. CU. YDS.	DISPOSAL AREA	TOT. CU. YDS.

DRAFT FOR LOAD NO. *(for one load only)*

	LIGHT	LOADED
FORWARD		
AFT		

DRAG DEPTH MAX. MIN.

INDICATORS LAST CHECKED ON

GAS EJECTORS USED % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

	AGITATING *(Minutes)*	DREDGING AND HAULING *(Minutes)*	MILES RUN *(Stat. Miles)*
EFFECTIVE WORKING TIME			
PUMPING			
TURNING			
TO DUMP			
DUMPING			
TO CUT			
TOTALS			
NON-EFFECTIVE WORKING TIME			
TAKING ON FUEL AND SUPPLIES			
TO AND FROM WHARF OR ANCHORAGE			
LOSS DUE TO NATURAL ELEMENTS			
LOSS DUE TO TRAFFIC AND BRIDGES			
MINOR OPERATING REPAIRS			
TRANSFERRING BETWEEN WORKS			
LAY TIME			
FIRE AND BOAT DRILLS			
MISCELLANEOUS			
TOTALS			
LOST TIME			
MAJOR REPAIRS AND ALTERATIONS			
CESSATION			
COLLISIONS			
TOTAL LOST TIME			
TOTAL TIME IN PERIOD			

AVERAGE SPEED OF DREDGE		MINUTES RADAR IN USE	
LOADING	FEET/MINUTE	TIDE DATA WAS OBTAINED BY MEANS OF	
AGITATING		WEATHER	
GALS. OF FUEL OIL CONSUMED		NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL	
GALS. OF WATER CONSUMED		FIELD	OFFICE

REMARKS

SUBMITTED BY

(SEE REVERSE SIDE)

ENG FORM 27A, Apr 73 REPLACES COST FORM 27A, 1 SEP 63, WHICH MAY BE USED. (Proponent: CECW-OD

BREAKDOWN OF LOADS DREDGED AND HAULED																	DATE		
		TIME PUMP		MINUTES						CUBIC YARDS RETAINED (In terms of in place material)						MID-DEPTH SAMPLES		
LOAD NO	UNWATERED *	STARTED	STOPPED	PUMPING	TURNING	TO DUMP	DUMPING	TO CUT	TOTAL	SETTLED SOLIDS * * *	SUSPENDED SOLIDS * * *	BIN WATER SOLIDS	TOTAL **	PER PUMPING MINUTE	PER ELAPSED MINUTE	GMS/LITER DENSITY * * *	% SOLIDS *(in place)* * * *	MATE AND DRAGTENDERS
AVERAGE																		

ECONOMIC LOAD DATA			
PUMPING TIME *(Minutes)*	ECONOMIC LOAD *(Cu Yds)*	TEST LOAD NO.	DATE OF TEST

REMARKS

NOTE: *WHEN LOAD IS DREDGED WITH HOPPERS UNWATERED, INDICATE BY LETTER "U".
**TOTAL CUBIC YARDS RETAINED = SETTLED SOLIDS + SUSPENDED SOLIDS - BIN WATER SOLIDS OR DETERMINED DIRECTLY BY YARDAGE METER.
***NOT NECESSARY WHEN MEASURING LOAD BY YARDAGE METER.

DAILY REPORT OF OPERATIONS

CONTRACT NO.		DATE	RCS ENGKW-31 [Feeder]
DREDGE	CONTRACTOR		
LOCATION OF WORK (Range, Stationing, Longitudinal Position)		CHARACTER OF WORK [ ] Maintenance [ ] New	
DISPOSAL AREA OR REHANDLING BASIN	LENGTH OF DISCHARGE OF PIPELINE: Pontoon Ft. Shore Ft. Total Length Submerged Ft.		
CHARACTER OF MATERIAL AND PERCENTAGE OF EACH			
AVERAGE DEPTH (Feet and Tenths) Before Dredging / After Dredging / Payment Depth		WEATHER	
NUMBER OF MEN	MAN HOURS	MAN HOURS TO DATE	

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. width of cut	Feet		
Area dredged	Sq. Ft.		
Distance advanced this period	Feet		
Distance advanced previously	Feet		
Distance advanced to date	Feet		
Amt. dredged this period	Cu. Yds.		
Amt. dredged previously	Cu. Yds.		
Total amt. dredged to date	Cu. Yds.		

ATTENDANT PLANT

ITEM	NAME	HOURS
Tugboat		
Tugboat		
Launch		
Barges		
Barges		
Scows		
Derrick		

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel oil	Gals.	
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

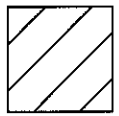
DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging		
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipe lines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessals		
Minor operating repairs <4hr		
Secure for weekend		
Miscelaneous (Explain in remarks)		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying /relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD		

No. of Supervisory Inspections: By field personnel By office personnel

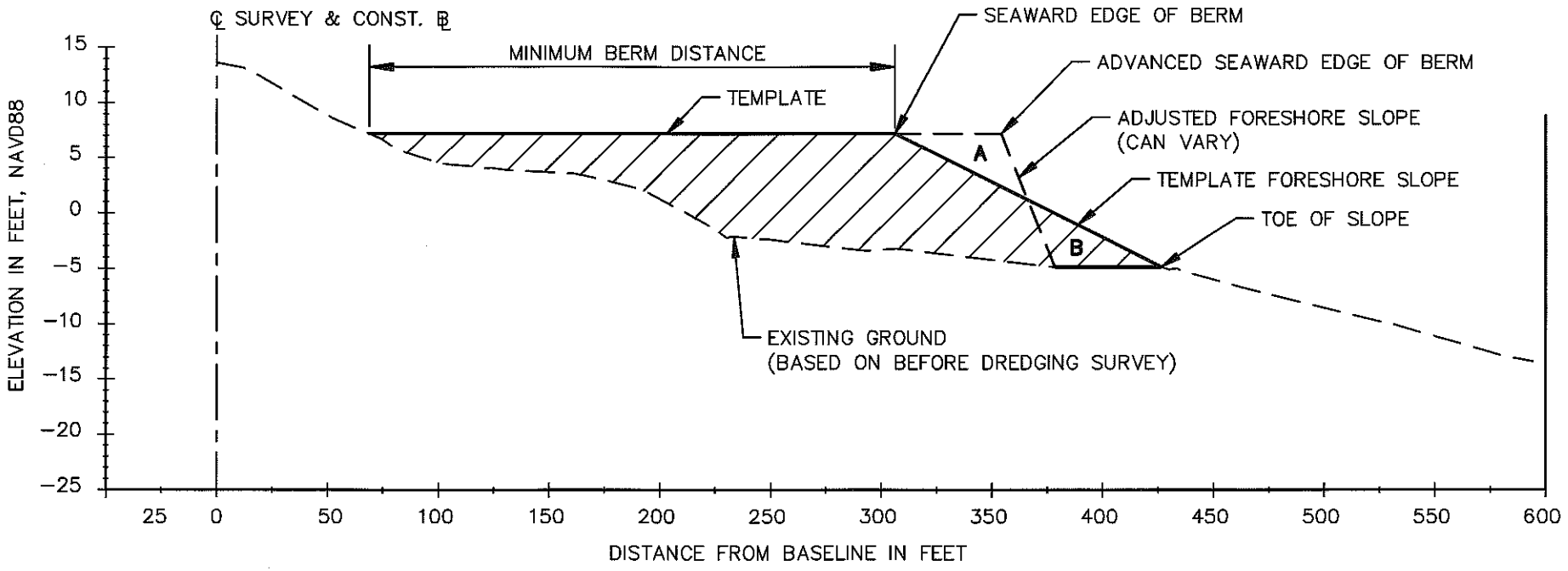
REMARKS (Attach additional aheet, if necesary)

This page was intentionally left blank for duplex printing.



– REQUIRED PLACEMENT QUANTITY

AREA "A" = AREA "B"



ADJUSTED CONSTRUCTION TEMPLATE

This page was intentionally left blank for duplex printing.