

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30</i>				1. REQUISITION NUMBER 96311M-3101-3927		PAGE 1 OF 42	
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NUMBER		5. SOLICITATION NUMBER DACW31-03-T-0068	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME GLORIA J FROST		b. TELEPHONE NUMBER (No Collect Calls) 410-962-3534		6. SOLICITATION ISSUE DATE 30-May-2003	
9. ISSUED BY CONTRACTING DIVISION PO BOX 1715 BALTIMORE MD 21203-1715  TEL: 410-962-5638 FAX: 410-962-0933		CODE CW31		10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> SMALL DISADV. BUSINESS <input type="checkbox"/> 8(A)  SIC: 3699 SIZE STANDARD: 500 PERSONS		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE	
15. DELIVER TO WATERWORKS/ELECTRICAL/ENVIRONN RANDY HILL 5900 MACARTHUR BLVD NW WASHINGTON DC 20315-0220 TEL: (202) 764-2727 FAX:		CODE		16. ADMINISTERED BY		12. DISCOUNT TERMS	
17a. CONTRACTOR/ OFFEROR		CODE		18a. PAYMENT WILL BE MADE BY		CODE	
TEL.		FACILITY CODE					
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM					
19. ITEM NO.		20. SCHEDULE OF SUPPLIES/ SERVICES		21. QUANTITY		22. UNIT	23. UNIT PRICE
		SEE SCHEDULE					
24. AMOUNT							
25. ACCOUNTING AND APPROPRIATION DATA						26. TOTAL AWARD AMOUNT	
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1. 52.212-4. FAR 52.212-3. 52.212-5 ARE ATTACHED.						ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED	
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED.						ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED	
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>2</u> COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				29. AWARD OF CONTRACT: REFERENCE <input type="checkbox"/> OFFER DATED . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)		31c. DATE SIGNED	
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)		30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)			
				TEL:		EMAIL:	
32a. QUANTITY IN COLUMN 21 HAS BEEN <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED				33. SHIP NUMBER		34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR
				PARTIAL	FINAL		
32b. SIGNATURE OF AUTHORIZED GOVT. REPRESENTATIVE		32c. DATE		36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL			37. CHECK NUMBER
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT				38. S/R ACCOUNT NUMBER		39. S/R VOUCHER NUMBER	40. PAID BY
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER		41c. DATE		42a. RECEIVED BY (Print)			
				42b. RECEIVED AT (Location)			
				42c. DATE REC'D (YY/MM/DD)		42d. TOTAL CONTAINERS	

Section SF 1449 - CONTINUATION SHEET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	PROVIDE IMPRESSED CURRENT PROTECTION SYS FFP P.O.C.: PATRICIA GAMBY @ 202-764-2639 WAYNE SMALLS @ 202-764-2641 BUYER: GLORIA FROST @ 410-962-3534 PROVIDE AN IMPRESSED CURRENT CATHODIC PROTECTION SYSTEM FOR AN ELEVATED STEEL WATER TANK AND REMOVE THE EXISTING TANK CATHODIC PROTECTION SYSTEM IN STRICT ACCORDANCE WITH THE ENCLOSED STATEMENT OF WORK: ATTACHMENTS: 1. STATEMENT OF WORK 2. WAGE DETERMINATION DECISION NO. 94-2103 (REV. 28) DATED 04 OCTOBER 2002 OF THE SECRETARY OF LABOR IS APPLICABLE FOR THIS REQUIREMENT. PURCHASE REQUEST NUMBER: 96311M-3101-3927	1	Lump Sum		

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NET AMT

FOB: Destination

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	N/A	N/A	N/A	Government

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC

0001	POP 23-JUN-2003 TO 24-SEP-2003	N/A	WATERWORKS/ELECTRICAL/ENVIRONN RANDY HILL 5900 MACARTHUR BLVD NW WASHINTON DC 20315-0220 (202) 764-2727 FOB: Destination
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## CLAUSES INCORPORATED BY REFERENCE

52.202-1 Alt I	Definitions (Dec 2001) --Alternate I	MAY 2001
52.207-4	Economic Purchase Quantity-Supplies	AUG 1987
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUL 1995
52.211-13	Time Extensions	SEP 2000
52.211-17	Delivery of Excess Quantities	SEP 1989
52.211-18	Variation in Estimated Quantity	APR 1984
52.214-34	Submission Of Offers In The English Language	APR 1991
52.214-35	Submission Of Offers In U.S. Currency	APR 1991
52.219-3	Notice of Total HUBZone Set-Aide	JAN 1999
52.219-14	Limitations On Subcontracting	DEC 1996
52.222-3	Convict Labor	AUG 1996
52.222-7	Withholding of Funds	FEB 1988
52.222-12	Contract Termination-Debarment	FEB 1988
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	FEB 1988
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	APR 2002
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	DEC 2001
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era and Other Eligible Veterans	DEC 2001
52.223-11	Ozone-Depleting Substances	MAY 2001
52.225-13	Restrictions on Certain Foreign Purchases	JUL 2000
52.232-27	Prompt Payment for Construction Contracts	FEB 2002
52.232-28	Invitation to Propose Performance-Based Payments	MAR 2000
52.233-3	Protest After Award	AUG 1996
52.236-5	Material and Workmanship	APR 1984
52.237-3	Continuity Of Services	JAN 1991
52.242-14	Suspension of Work	APR 1984
52.242-15	Stop-Work Order	AUG 1989
52.243-5	Changes and Changed Conditions	APR 1984
52.246-1	Contractor Inspection Requirements	APR 1984
52.247-34	F.O.B. Destination	NOV 1991
52.252-5	Authorized Deviations In Provisions	APR 1984
52.252-6	Authorized Deviations In Clauses	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992

252.209-7001	Disclosure of Ownership or Control by the Government of a Terrorist Country	MAR 1998
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	MAR 1998
252.219-7011	Notification to Delay Performance	JUN 1998
252.225-7001	Buy American Act And Balance Of Payments Program	MAR 1998
252.225-7002	Qualifying Country Sources As Subcontractors	DEC 1991
252.225-7012	Preference For Certain Domestic Commodities	APR 2002
252.225-7016	Restriction On Acquisition Of Ball and Roller Bearings	DEC 2000
252.225-7031	Secondary Arab Boycott Of Israel	JUN 1992
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7001	Contract Drawings, Maps, and Specifications	AUG 2000
252.236-7006	Cost Limitation	JAN 1997
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.246-7000	Material Inspection And Receiving Report	DEC 1991
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000

#### CLAUSES INCORPORATED BY FULL TEXT

##### 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within **TEN (10)** calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than **NINETY TWO (92) CALENDAR DAYS**. The time stated for completion shall include final cleanup of the premises.

(End of clause)

##### 52.212-1 INSTRUCTIONS TO OFFERORS--COMMERCIAL ITEMS (OCT 2000)

(a) North American Industry Classification System (NAICS) code and small business size standard. The NAICS code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) Submission of offers. Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, offers must show--

- (1) The solicitation number;
- (2) The time specified in the solicitation for receipt of offers;
- (3) The name, address, and telephone number of the offeror;
- (4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;
- (5) Terms of any express warranty;

- (6) Price and any discount terms;
  - (7) "Remit to" address, if different than mailing address;
  - (8) A completed copy of the representations and certifications at FAR 52.212-3;
  - (9) Acknowledgment of Solicitation Amendments;
  - (10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and
  - (11) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.
- (c) Period for acceptance of offers. The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.
- (d) Product samples. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.
- (e) Multiple offers. Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.
- (f) Late submissions, modifications, revisions, and withdrawals of offers:
- (1) Offerors are responsible for submitting offers, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that offers or revisions are due.
  - (2)(i) Any offer, modification, revision, or withdrawal of an offer received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--
    - (A) If it was transmitted through an electronic commerce method authorized by the solicitation, 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 offers; or
    - (B) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or
    - (C) If this solicitation is a request for proposals, it was the only proposal received.
  - (ii) However, a late modification of an otherwise successful offer, that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

- (3) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (4) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers 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.
- (5) Offers may be withdrawn by written notice received at any time before the exact time set for receipt of offers. Oral offers in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for receipt of offers, subject to the conditions specified in the solicitation concerning facsimile offers. An offer may be withdrawn in person by an offeror or its authorized representative if, before the exact time set for receipt of offers, the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.
- (g) Contract award (not applicable to Invitation for Bids). The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.
- (h) Multiple awards. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.
- (i) Availability of requirements documents cited in the solicitation. (1) The Index of Federal Specifications, Standards and Commercial Item Descriptions and the documents listed in it may be obtained from the General Services Administration, Federal Supply Service Bureau, Specifications Section, Suite 8100, 470 L'Enfant Plaza, SW, Washington, DC 20407 ((202) 619-8925).
- (2) The DOD Index of Specifications and Standards (DODISS) and documents listed in it may be obtained from the Standardization Documents Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094 (telephone (215) 697-2569).
- (i) Availability of requirements documents cited in the solicitation. (1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to--GSA Federal Supply Service Specifications Section, Suite 8100, 470 East L'Enfant Plaza, SW, Washington, DC 20407, Telephone (202) 619-8925, Facsimile (202) 619-8978.
- (ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i)(1)(i) of this provision. Additional copies will be issued for a fee.
- (2) The DoD Index of Specifications and Standards (DoDISS) and documents listed in it may be obtained from the--Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.
- (i) Automatic distribution may be obtained on a subscription basis.

(ii) Order forms, pricing information, and customer support information may be obtained--

(A) By telephone at (215) 697-2667/2179; or

(B) Through the DoDSSP Internet site at <http://assist.daps.mil>.

(3) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication, or maintenance.

(j) Data Universal Numbering System (DUNS) Number. (Applies to offers exceeding \$25,000.) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet to obtain one at no charge. An offeror within the United States may call 1-800-333-0505. The offeror may obtain more information regarding the DUNS number, including locations of local Dun and Bradstreet Information Services offices for offerors located outside the United States, from the Internet home page at <http://www.customerservice@dnb.com/>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at [globalinfo@mail.dnb.com](mailto:globalinfo@mail.dnb.com).

(End of provision)

#### 52.212-2 EVALUATION--COMMERCIAL ITEMS (JAN 1999)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

##### **PRICE, QUALITY OF WORK AND BEST VALUE**

Technical and past performance, when combined, are SIGNIFICANT.

(b) Options. The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of clause)

#### 52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (MAY 2002) ALTERNATE I (APR 2002)

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

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

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

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

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

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 its stock is owned by one or more women; or

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

"Women-owned business concern" means a concern which 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 whose management and daily business operations are controlled by one or more women.

(b) Taxpayer Identification Number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) 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 Internal Revenue Service (IRS).

(2) 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.

(3) 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.

(4) 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-----

(5) Common parent.

\_\_\_ Offeror is not owned or controlled by a common parent;

\_\_\_ Name and TIN of common parent:

Name-----

TIN-----

(c) Offerors must complete the following representations when the resulting contract is to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia. Check all that apply.

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

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

(3) Service-disabled veteran-owned small business concern. (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(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.

(5) Women-owned small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents that it ( ) is, ( ) is not a women-owned small business concern.

Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). (Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents that it ( ) is, a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

\_\_\_\_\_

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. (Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.)

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).) The offeror represents as part of its offer that it ( ) is, ( ) is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

Average Annual

Number of Employees Gross Revenues

\_\_\_ 50 or fewer \_\_\_ \$1 million or less

\_\_\_ 51 - 100 \_\_\_ \$1,000,001 - \$2 million

\_\_\_ 101 - 250 \_\_\_ \$2,000,001 - \$3.5 million

\_\_\_ 251 - 500 \_\_\_ \$3,500,001 - \$5 million

\_\_\_ 501 - 750 \_\_\_ \$5,000,001 - \$10 million

751 - 1,000  \$10,000,001 - \$17 million

Over 1,000  Over \$17 million

(9) (Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.)

(i) General. The offeror represents that either--

(A) It (  ) is, (  ) is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, 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); or

(B) It (  ) has, (  ) has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. (The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: \_\_\_\_\_.)

(10) HUBZone small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(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 place of ownership, 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 (c)(10)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating on 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.

(11) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(9) of this provision.) (The offeror shall check the category in which its ownership falls):

Black American.

Hispanic American.

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

Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the

Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

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

\_\_\_ Individual/concern, other than one of the preceding.

(d) Certifications and representations required to implement provisions of Executive Order 11246--

(1) Previous Contracts and Compliance. The offeror represents that--

(i) It ( ) has, ( ) has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the and

(ii) It ( ) has, ( ) has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that--

(i) It ( ) has developed and has on file, ( ) has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR Subparts 60-1 and 60-2), or

(ii) It ( ) has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror 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 his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act--Balance of Payments Program Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act--Balance of Payments Program--Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product as defined in the clause of this solicitation entitled ``Buy American Act --Supplies" and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

(2) Foreign End Products:

Line Item No.:-----

Country of Origin:-----

(List as necessary)

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act--North American Free Trade Agreement--Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act'' and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States.

(ii) The offeror certifies that the following supplies are NAFTA country end products or Israeli end products as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act'':

NAFTA Country or Israeli End Products

Line Item No.:-----  
Country of Origin:-----

(List as necessary)

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act.'' The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products

Line Item No.:-----  
Country of Origin:-----

(List as necessary)

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act--North American Free Trade Agreements--Israeli Trade Act Certificate, Alternate I (May 2002). If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act'':

Canadian End Products:

Line Item No.  
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(List as necessary)

(3) Buy American Act--North American Free Trade Agreements--Israeli Trade Act Certificate, Alternate II (May 2002). If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--North American Free Trade Agreement--Israeli Trade Act":

Canadian or Israeli End Products:

Line Item No.

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Country of Origin

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(List as necessary)

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made, designated country, Caribbean Basin country, or NAFTA country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products.

Other End Products

Line Item No.:-----

Country of Origin:-----

(List as necessary)

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items subject to the Trade Agreements Act, the Government will evaluate offers of U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals--

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

(2) ( ) 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 Federal, state or local government contract or subcontract; violation of Federal or state

antitrust statutes relating to the submission of offers; or Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(3) ( ) Are, ( ) are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]

(1) Listed end products.

Listed End Product

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Listed Countries of Origin

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(2) Certification. (If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.)

( ) (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

( ) (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). The offeror certifies, to the best of its knowledge and belief, that--

(1) The offeror and/or any of its principals ( ) are, ( ) are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; and

(2) ( ) 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 Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and ( ) are, ( ) are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

(End of provision)

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. The Government must exercise its post-acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable delays. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement or any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice. The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized,) to the address designated in the contract to receive invoices. An invoice must include--

(1) Name and address of the Contractor;

(2) Invoice date;

(3) Contract number, contract line item number and, if applicable, the order number;

(4) Description, quantity, unit of measure, unit price and extended price of the items delivered;

(5) Shipping number and date of shipment including the bill of lading number and weight of shipment if shipped on Government bill of lading;

(6) Terms of any prompt payment discount offered;

(7) Name and address of official to whom payment is to be sent; and

(8) Name, title, and phone number of person to be notified in event of defective invoice.

Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. Contractors are encouraged to assign an identification number to each invoice.

(h) Patent indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. If the Government makes payment by Electronic Funds Transfer (EFT), see 52.212-5(b) for the appropriate EFT clause. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(j) Risk of loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) Limitation of liability. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) Other compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) Compliance with laws unique to Government contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 327, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) Order of precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order: (1) the schedule of supplies/services; (2) the Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause; (3) the clause at 52.212-5; (4) addenda to this solicitation or contract, including any license agreements for computer software; (5) solicitation provisions if this is a solicitation; (6) other paragraphs of this clause; (7) the Standard Form 1449; (8) other documents, exhibits, and attachments; and (9) the specification.

(End of clause)

#### 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (APR 2001) (DEVIATION)

(a) Comptroller General Examination of Record. The Contractor agrees to comply with the provisions of this paragraph (a) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-5, Audit and Records-Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times, the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. 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. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of form. This does not require the Contractor to create or maintain any record that the contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(b) The Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components –

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);

(3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately-Owned U.S.- Flag Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).

(5) 52.222-41, the Service Contract Act as Amended (41 U.S.C. 351, et seq.) Subcontracts for certain commercial services may be exempt from coverage if they meet the criteria in FAR 22.1103-4(c) or (d) (see DoD class deviation number 2000-O0006).

(End of clause)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2002) - ALTERNATE I (APR 2002)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 335999.

(2) The small business size standard is 500 PERSONS.

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

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

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

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

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

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

(6) [Complete only if 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)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

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

\_\_\_ Black American.

\_\_\_ Hispanic American.

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

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

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

\_\_\_ 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 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)

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION  
Employee Class Monetary Wage-Fringe Benefits

<b>CIVIL ENGINEERING TECHNICIAN</b>	<b>\$15.69 PER HOUR</b>
<b>PLUMBER, MAINTENANCE</b>	<b>\$19.17 PER HOUR</b>
<b>ELECTRICIAN, MAINTENANCE</b>	<b>\$10.10 PER HOUR</b>
<b>LABORER</b>	<b>\$10.39 PER HOUR</b>

(End of clause)

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

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

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

- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

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

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

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

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

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

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

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

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

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

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

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

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

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

(End of Clause)

#### 52.236-7 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)

#### 52.249-4 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (SERVICES) (SHORT FORM) (APR 1984)

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Government shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

(End of clause)

#### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil>

(End of provision)

#### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil>

(End of clause)

#### 252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION (NOV 2001)

(a) Definitions.

As used in this clause--

- (1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.
  - (2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.
  - (3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.
  - (4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.
- (b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.
- (2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.
  - (3) Lack of registration in the CCR database will make an offeror ineligible for award.
  - (4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.
- (c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

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

(End of clause)

252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (APR 2001) (DEVIATION)

(a) In addition to the clauses listed in paragraph (b) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items (DEVIATION) clause of this contract, the Contractor shall include the terms of the following clause, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014	Preference for Domestic Specialty Metals, Alternate I (MAR 1998) (10 U.S.C. 2533a).
252.247-7023	Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631)
252.247-7024	Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631)

(End of clause)

STATEMENT OF WORK

**Statement Of Work**

**1.0 Description of Work:**

**1.1 Project title:** Washwater Tank Improvements.

**1.2 Work to be Completed:** The Contractor shall furnish all labor, equipment, and materials to design and construct an impressed current cathodic protection system for an elevated steel water tank. The contractor shall use the design in replacing the existing tank cathodic protection system.

**1.3 Work Site:** The location of work to be completed is the Dalecarlia Water Treatment Plant at 5900 MacArthur Boulevard, NW, Washington, DC 20016.

**1.4 Contract Period:** The Contract Period shall be **92 calendar days**.

**1.5 Contact:** Any questions on the technical specifications, site visits or physical layout prior to delivery should be addressed to:

Mr. Wayne Smalls  
 (alt. Ms. Patty Gamby)  
 5900 MacArthur Boulevard, NW  
 Washington, DC 20016  
 Ph. (202)764-2641 or -2639

**2.0 Submittals:** The Contractor shall submit to the Government for approval four sets of descriptive material to describe the following:

Per attached specification section 13111.

### **3.0 Technical Specifications:**

#### **3.1 Preparation**

The Contractor shall design a new cathodic protection system for the steel wash water tank. The Contractor will demolish the existing cathodic protection system and install and test a new cathodic protection system. All work shall be performed in accordance with specification section 13111.

#### **3.2 Payment**

Payment shall be lump sum in accordance with the PRICE SCHEDULE, to include all costs necessary for completion of the contract.

#### **3.3 Shutdown period**

Shutdown of the existing wash water tank to execute cathodic protection system will occur anytime within the Contract Period. The Contracting Officer will give the Contractor a minimum of two weeks notice for the shutdown. However, the Contracting Officer reserves the right to cancel a scheduled shutdown if conditions warrant. No compensation for the cancellation shall be considered except for a possible time extension.

The shutdown period shall be measured from the time when the Contracting Officer signals that the Contractor can start demolishing the existing cathodic protection system to the time when the new cathodic protection is test, accepted and put into service. This shutdown period is limited to a maximum of 30 calendar days. The Contractor shall work continuously during the shutdown period to complete the work.

#### **3.4 Execution**

The Contractor shall execute the work in accordance with the Contract Drawings and Specification section attached.

The Contractor shall provide material, labor and equipment to perform the following:

Design a new cathodic protection for an elevated steel water tank. The tank is subject to extreme weather conditions including icing. The cathodic protection must occur via impressed current from an automatic rectifier. The current must be applied to anodes installed in the bowl and riser.

Demolish existing cathodic protection. All equipment demolished shall be turned over to the contracting officer.

Install, test and commission the new cathodic protection system. The Contractor shall make all necessary connections.

Provide training and other services required in specification section 13111.

#### **3.5 Warranty:**

The Contractor shall warrant all work performed under this contract against defects in contractor supplied material and workmanship for a period of one (1) year from final acceptance of the work, except for defects of the Government provided materials.

The Contractor shall promptly remedy, at his own expense, the defects under warranty.

## SECTION 13111

### CATHODIC PROTECTION SYSTEM (STEEL WATER TANKS)

#### PART 1 GENERAL

##### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

#### AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 1248	(1998) Polyethylene Plastic Molding and Extrusion Materials
ASTM C135.30	(1988) Zinc-Coated Ferrous Ground Rods for Overhead or Underground Line Construction
A518	Corrosion-Resistant High Silicon Cast Iron

#### INSULATED POWER CABLE ENGINEERS ASSOCIATED (IPCEA) PUBLICATIONS

S-61-402	Thermoplastic Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy
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#### AMERICAN WATERWORKS ASSOCIATION (AWWA)

AWWA Standard D104-01                      Automatically Controlled, Impressed-Current  
Cathodic Protection for the Interior of Steel  
Water Tanks

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE Std 81                                      (1983) Guide for Measuring Earth Resistivity,  
Ground Impedance, and Earth Surface Potentials  
of Ground System (Part 1)

TC 3    PVC Fittings for Use with Rigid PVC Conduit  
and Tubing

250      Enclosures for Electrical Equipment

NACE INTERNATIONAL (NACE)

NACE RP-03-88                                  (1995) Impressed Current Cathodic Protection  
of Internal Submerged Surfaces or Steel Water  
Storage Tanks

NACE RP-02-85                                  Cathodic Protection of Metallic  
Structures

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA FU 1                                      (1986) Low Voltage Cartridge Fuses

NEMA TC 2                                      (1998) Electrical Polyvinyl Chloride (PVC) Tubing  
(EPT) and Conduit (EPC-40 and EPC-80)

NEMA WC 5                                      (1992; Rev 2 1996) Thermoplastic-Insulated Wire  
and Cable for the Transmission and Distribution  
of Electrical Energy

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70    (1999) National Electrical Code

UNDERWRITERS LABORATORIES (UL)

UL 6    (1997) Rigid Metal Conduit

83      Thermoplastic-Insulated Wires

UL 467    (1993; Rev thru Apr 1999) Grounding and  
Bonding Equipment

UL 506    (1994; Rev Oct 1997) Specialty Transformers

UL 510    (1994; Rev thru Apr 1998) Polyvinyl Chloride,

	Polyethylene, and Rubber Insulating Tape
UL 514A	(1996; Rev Dec 1999) Metallic Outlet Boxes
UL 486A	Wire Connectors and Soldering Lugs for use with copper conductors

## 1.2 SUBMITTALS

Government approval is required for submittals having 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. WA indicates that the review will be performed at the Washington Aqueduct Office. The following shall submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

### SD-02 Shop Drawings

#### Detail Drawings; G, WA

Within 45 days after the date of award of the contract, and before commencement of any Work four (4) copies of detail drawings consisting of a complete list of equipment and materials including manufacturer’s descriptive and technical literature, catalog cuts, and installation instructions. The drawings shall provide tank dimensions and show anode arrangement for both elevated and sectional views of the tank, anode size and number, anode material, anode-suspension details, conduit size, wire size, rectifier size and location, handhole details, wiring diagram, and any other pertinent information considered necessary for the proper installation and performance of the system. Shop drawings shall also contain complete wiring and schematic diagrams and any other details required to demonstrate that the system has been coordinated and will function as a unit. The list of materials and equipment shall include catalog cuts diagrams, and other descriptive data for the following list of material. Partial lists submitted from time to time will not be allowed.

- a. Water resistivity and water analysis
- b. Conductors
- c. Anodes and anode configuration
- d. Coating material in areas where welding and other work is accomplished.
- e. Insulated resistance wire.
- f. Layout of anodes in tanks, system layout
- g. Special details
- h. Certified experience data of installing firm
- i. Exothermic weld equipment, material and detail. Hardware layout.
- j. Test station and isolation points, and grounding
- k. Welding method for electrical connections and steel ring connections.
- l. Calculations for

- (1) Total current required for system
- (2) Life of the anodes
- (3) Anode geometry (showing areas of coverage)

m. Catalog cuts for

- (1) Rectifiers and Wiring Diagram
- (2) Anode Material
- (3) Wire and Cable
- (4) Permanent Reference Cells
- (5) Suspension Rope
- (6) Flotation Buoys
- (7) Splice Kits
- (8) Pressure Entrance Fitting

All detail drawings shall be submitted at one time, as a single submittal, in order to demonstrate that the items have been properly coordinated and will function properly as a unit. A notation shall be made on each shop drawing submitted as to the item's specific use, either by a particular type number referenced on the drawings or in the specifications, or by a description of its specific location.

Contractors Modifications; G, WA

Four (4) copies of detail drawings, showing proposed changes in location and scope or performance, indicating any variations from, additions to, or clarifications of contract drawings. The drawing shall show proposed changes in anode arrangement, anode size and number, anode materials and layout details, conduit size, wire size, mounting details, wiring diagram, and any other pertinent information to the proper installation and performance of the system.

SD-03 Product Data

Miscellaneous Materials; G, WA  
Equipment; G WA

Within 45 days after receipt of notice to proceed, an itemized list of equipment and materials including item number, quantity, and manufacturer of each item. This list shall be accompanied by a description of procedures for each type of testing and adjustment, including spot testing of coating for the thickness and holidays. Installation of materials and equipment shall not commence until this submittal is approved.

Spare Parts; G, WA

Spare parts data for each different item of material and equipment specified, after approval of the detail drawings and not later than 3 months prior to the date of beneficial occupancy. The data shall include a complete list of parts, special tools, and supplies with current unit prices and source of supply.

As-Built Drawing; G WA

The as-built drawings shall be a record of the construction as installed. The as-built drawings shall be jointly inspected for accuracy and completeness by the Contractor's quality control representative and by the Contracting Officer prior to the submission of each monthly pay estimate. Upon completion of the work, the Contractor shall submit three full sized sets of the marked prints to the Contracting Officer for approval. If upon review, the as-built drawings are found to contain errors and/or omissions, they will be returned to the Contractor for correction. The Contractor shall correct and return the as-built drawings to the Contracting Officer for approval within ten calendar days from the time the drawings are returned to the Contractor.

#### SD-06 Test Reports

Testing, Adjusting, and Placing in Service; G, WA

Test reports in booklet from tabulating all field tests and measurements performed, upon completion and testing of the installed system and including potential survey, final system test verifying protection, and holiday coating test. Each test report shall indicate the final position of controls. A certified test report showing that the connecting method has passed a 12-day laboratory test without failure at the place of connection, wherein the anode is subjected to maximum recommended current output while immersed in a 3 percent sodium chloride solution.

Contractor's Modifications; G, WA

Final report including measurements throughout the tank area, indicating that the addition of anodes corrected the conditions which made the additional anodes necessary. The following are required: Installation and testing procedures, anode number, life, and parameters to achieve protective potential.

#### SD-07 Certificates

Cathodic Protection System; G, WA

Proof that the materials and equipment furnished under this section conform to the specified requirements contained in the referenced standards or publications. In addition, the Contractor must submit a copy of ANSI/NSF 61 classification for all system components located within the tank.

Services of "Corrosion Expert"; G, WA

Evidence of qualifications of the "corrosion expert."

a. The "corrosion expert's" name and qualifications shall be certified in writing to the Contracting Officer prior to the start of construction.

b. Certification shall be submitted giving the name of the firm, the number of years of experience, and a list of not less than five (5) of the firm's installations three (3) or more years old that have been tested and found satisfactory.

#### SD-10 Operation and Maintenance Data

##### Cathodic Protection System; G, WA

Four (4) copies of operating manual outlining the step-by-step procedures required for system startup, operation, adjustment of current flow, and shutdown. The manuals shall include the manufacturer's name, model number, service manual, parts list, and brief description of all equipment and their basic operating features. Six (6) copies of maintenance manual listing routine maintenance procedures, recommendation for maintenance testing, possible breakdowns and repairs, and troubleshooting guides. The manuals shall include single line diagrams for the system as installed, instructions in making tank to reference cell potential measurements, and describe the frequency of monitoring. The instructions shall include precautions to ensure safe conditions during repair of system.

##### Training; G, WA

The proposed Training Course Curriculum (including topics and dates of discussion) indicating that all of the items contained in the operating and maintenance instructions, as well as demonstrations of routine maintenance operations, including testing procedures included in the maintenance instructions, are to be covered.

### 1.3 GENERAL REQUIREMENTS

The cathodic protection design/install construction shall provide all engineering services, materials, equipment, labor, and supervision, necessary to produce a continuous flow of direct current from electrodes in the electrolyte to the metal tank surfaces; and placing the cathodic protection system in operable status. The Contractor shall install complete automatic cathodic protection to prevent corrosion on the interior submerged surface of the water tank. The Contractor's installation shall meet the criteria and protection outlined in paragraph CRITERIA OF PROTECTION for a 20 year life. The purpose of the system is to adequately and efficiently protect the surfaces of the metal against corrosion where the surfaces are in contact with water; this is in addition to the protective coating on the tank. The contact drawings indicate the location and size of the tank. The design of this system is based on an impressed current system. The Contractor may modify the cathodic protection system after site verification and analysis if the proposed modification will provide equal or better overall system performance. This modification must be fully described and submitted by the Contractor and approved by the Contracting Officer. Modifications or additional anodes shall be at no additional cost to the Government. Any modifications shall incorporate all requirements of this specification. The intent of this specification is to use this impressed current system as described with anodes as are found necessary in calculation and submitted data to meet this specification. Anodes shall be installed in sufficient number and of the required type, size and spacing to obtain a uniform current distribution of 0.5 milliampere per 0.09 square meters (1 square foot) 1 square foot to all submerged surfaces in the tank when filled with water to the over-flow level. The anode suspension system shall be designed to be resistant to ice damage and in accordance with AWWA Standard D104-97, Section 4.2.4.1.1 Type A, Horizontal System. The anode suspension system shall consist of a minimum 5/16" polyester cord. The cord shall be secured to steel anchors welded to the side wall of the tank bowl or to the exterior of the dry access column of spheroidal type tanks and the side wall of wet risers which are 30" diameter or larger. All cord to cord connections shall be tied and taped.

All materials in contact with the water, or exposed to the interior of the tank, shall be classified in accordance with ANSI/NSF 61 "Drinking Water System Components."

### 1.3.1 Contractor's Modifications

The Contractor may modify the cathodic protection system after review of the project, site verification and analysis if the proposed modifications include impressed current anodes and rectifiers and will provide better overall system performance. The modifications shall be fully described, shall be approved by the Contracting Officer and shall meet the following criteria. The proposed system shall achieve a minimum "Instant Off" potential of minus 850 millivolts with references to a saturated copper-copper sulfate reference cell on the tank components. The Contractor shall take measurements and the current and voltage of the rectifier shall be adjusted as required to produce a minimum of minus 850 millivolts "Instant Off" potential between the structure being tested and the reference cell. This potential shall be obtained over 95 percent of the metallic area without the "Instant Off" potential exceeding 1100 millivolts.

### 1.3.2 Services of "Corrosion Expert"

The Contractor shall obtain the services of a "corrosion expert" to supervise and inspect the installation and performance of the cathodic protection system. "Corrosion expert" refers to a person, who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by professional education and related practical experience, is qualified to engage in the practice of corrosion control on steel water tanks. Such a person must be accredited or certified by the National Association of Corrosion Engineers (NACE) as a NACE Accredited Corrosion Specialist or a NACE certified Cathodic Protection (CP) Specialist or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on steel water tanks, if such certification or licensing includes 5 years experience in corrosion control on steel water tanks of the type under this contract. The "corrosion expert" shall ensure that the cathodic protection system is installed, tested, and placed into service in accordance with the requirements specified; and shall also design, make calculations, and assure quality control as required.

The system shall be installed by personnel specifically trained by the constructor to provide all workmanship required for corrosion control performance. All personnel shall be subject to Federal Substance Abuse and Testing Regulations.

### 1.3.3 Verification of Site Conditions

The Contractor shall coordinate and properly relate this work to the work of all trades. The general locations of the structures to receive protection are shown. The Contractor shall visit the premises and become familiar with all details of the work and working conditions, shall verify existing conditions to the field, determine the exact locations of structures to be protected, and advise the Contracting Officer of any discrepancy before performing any work. The Contractor shall take resistivity measurement of the water and analysis of the water and provide this data with detail drawings of the system for approval.

## PART 2 PRODUCTS

All hardware used in conjunction with the system shall be protected against corrosion.

### 2.1 IMPRESSED CURRENT ANODES

#### 2.1.1 Precious Metal Anodes

##### 2.1.1.1 Selection Requirements

Precious metal anodes shall be wire in form. Selection of the configuration should be left to the designer of the system. Long, continuous wire from lengths of precious metal anodes may have an attenuating effect. This can be overcome by using parallel feeder cable connected to segmented lengths of precious metal anodes at intervals. Such assemblies shall be factory assembled with factory sealed and tested electrical connections to the anode.

The anode materials shall be selected in accordance with the design and shall consist of one of the following:

1. Minimum .062" diameter titanium with a precious metal oxide coating.  
connections. Anode material shall have a minimum rating of twenty (20) year life, 100 (mA/Ft<sup>2</sup>).
2. **Anode Connecting Cables:** Anode wire shall be connected to a common header/circuit cable using copper crimp connectors or butt splices. All connections shall be soldered and encapsulated within an epoxy splice kit.
3. **Header/Circuit Wires:** Insulated for 600 volts with RHW/USE in accordance with ASTM, D1248, Type I, Class C, Grade 5, and IPCEA S-61-402. The conductor shall be stranded copper, not less than No. 10 AWG.
4. **Header/Circuit Wire Connection:** Copper crimp connector or butt splice, flood soldered, encapsulated in epoxy.
5. **Anode Suspension System:** The anode suspension system shall consist of 5/16" polyester rope supports secured to anchors welded to the tank. The system shall incorporate buoyant flotation devices to allow the anode hoop to float below the surface of the water.

All anode to header cable connections shall be sealed to prevent water migration.

## 2.2 RECTIFIERS AND ASSOCIATED EQUIPMENT

### 2.2.1 Rectifier Unit

The rectifier unit shall perform in accordance with ANSI/AWWA Standard D104-97 Section 4: 4.1.1.1.1, Type A, IR drop free system, and include:

1. Automatic potential control.
2. DC Output Manual Control: Transformer taps, 4 coarse, 5 fine.
3. Selenium or silicon rectifying elements
4. Variable resistors
5. Terminal block
6. **Overload and Short Circuit Protection:** Molded case circuit breaker thermal-magnetic type.
7. Lighting, surge, and overload protection
8. Voltmeter(s) and ammeter(s)
9. Enclosure: NEMA ICS, Type 4X, air cooled, fiberglass, aluminum or stainless steel, suitable for tank wall mounting. Enclosure shall include hinged door padlock hasp and mounting bracket.
10. Provision to vary current output from 0% to 100% of rated capacity
11. Provisions for mounting, grounding, and locking equipment, devices and enclosures
12. Electrical Ratings: As follows: Input voltage at 60 Hz: 115 volts single phase.

13. Voltmeters – DC output capacity in volts in accordance with design
14. Ammeters – DC output capacity in amperes in accordance with design. One ammeter shall indicate rider cathodic protection current and another shall indicate bowl cathodic protection current.
15. Number of circuits or separate rectifiers in accordance with design.
16. Fuse holders with fuses for each DC circuit.
17. DC Output Automatic Controller: To be housed within the rectifier unit or in a separate weatherproof enclosure, solid-state circuitry, capable of maintaining a constant tank-to-water potential of  $-900 \text{ mV} \pm 25 \text{ mV}$ , must include circuitry which compensates for "IR" drop, Harco/CPS Waterworks TASC VII or approved equal.
18. Metering: Panel meters for current, voltage, and potential, not less than 2-1/2 inch square, two percent full scale accuracy or a combined digital meter.
19. Surge Protection: Over voltage protection shall be provided the input and output circuits.

The overall efficiency of the rectifier shall be not less than 65 percent when operated at nameplate rating and shall be capable of supplying continuous full rated output at an ambient temperature of 44 degrees C 112 degrees F in full sunlight with expected life in excess of 10 years.

#### 2.2.1.1 Transformer

Transformer shall conform to UL 506.

#### 2.2.1.2 Rectifying Elements

Rectifying elements shall be silicone diodes or selenium cells connected to provide full-wave rectification. Silicone diodes shall be protected by selenium surge cells or varistors against over-voltage surges and by current limiting devices against over-current surges.

#### 2.2.1.3 Meters

Meters shall be accurate to within plus or minus 2 percent of full scale at 27 degree C, 80 degrees F, and shall possess temperature stability above and below 27 degrees 80 degrees F of at least 1 percent per 5 degrees C. 10 degrees F. Separate meters shall be 2-1/2-inch nominal size or larger.

#### 2.2.1.4 Circuit Breakers

A single pole, flush-mounted, fully magnetic, properly rated nonterminal type circuit breaker shall be installed in the primary circuit of the rectifier supply transformer.

#### 2.2.1.5 Fuses

Cartridge-type fuses conforming to NEMA FU 1 with suitable fuse holders shall be provided in each leg of the dc circuit.

#### 2.2.1.6 Automatic Cathodic Protection Control

The system shall be capable of maintaining a tank-to-water potential criterion of protection within plus or minus 25 millivolts regardless of changes in water chemistry, temperature, or water level in the tank. Provision shall be made for readily changing the range and limits of the criterion. The controller NEMA 4X housed integrally with the rectifier or in a separate cabinet with provisions for locking. The automatic controller shall be a completely solid-state design, and shall be capable of automatically maintaining the tank-to-water potential at minus 900 millivolts

with respect to a copper-copper sulfate reference electrode within an accuracy of 25 millivolts. The tank-to-water potential measured and maintained by the controller shall be free of "IR" drop error.

#### 2.2.1.7 Tank to Water Potential Meter

The controller shall be equipped with a calibrated voltmeter having an internal impedance exceeding 1 megohm which shall be so connected to read, from the system reference cell, the tank-to-water potential being maintained by the cathodic protection system. This voltage reading shall be free of "IR" drop error.

### 2.2.2 Cabinet

Cabinet shall be constructed of NEMA 4X molded fiberglass reinforced polyester, and shall be provided with a full door. The enclosure shall have oil-resistant gasket. The door shall be hinged and have a hasp that will permit the use of padlock. Holes, conduit knockouts, or threaded hubs of sufficient size and number shall be conveniently located.

#### 2.2.2.1 Wiring Diagram

A complete wiring diagram of the power unit showing both the ac supply and the dc connections to anodes shall be on the inside of the cabinet door. All components shall be shown and labeled.

#### 2.2.2.2 Grounding

Grounding provisions shall comply with NFPA 70 and UL 467 including a ground terminal in the cabinet. The grounding conductor from the terminal to the earth grounding system shall be solid or stranded copper not smaller than No. 4 AWG. The earth grounding system shall consist of one or more rods. Ground rods shall be copper-class steel conforming to UL 467 not less than ¾-inch in diameter by 10 feet in length. Rods shall have driven full length into the earth. Sectional type rods may be used.

### 2.2.3 Wiring

Wiring shall be installed in accordance with NFPA 70 utilizing type TW or RHW or polyethylene insulation. Fittings for conduit and cable work shall conform to UL 514A. Outlets shall be of the threaded hub type with gasketed covers. Conduit shall be securely fastened at 8 foot intervals or less. Splices shall be made in outlet fitting only. Conductors shall be color coded for identification. Cable for anode header and distribution shall be No. 6 AWG stranded copper wire with type cathodic protection high molecular weight polyethylene insulation.

## 2.3 MISCELLANEOUS MATERIALS

### 2.3.1 Reference Electrodes

The electrodes shall be copper-copper sulphate with No. 14 AWG/RHW-USE lead wire attached. A minimum of four reference electrodes shall be part of this system. Electrodes shall be designed for 15 year life.

### 2.3.2 Electrical Wire and Associated Materials

#### 2.3.2.1 Anode Connecting Wire

Anode connecting wire shall be No. 10 AWG stranded copper wire with type CP high molecular weight polyethylene insulation 7/64-inch thick, 600 volt rating, in accordance with NEMA WC 5. Cable-to-anode contact resistance shall be 0.003 ohms maximum.

#### 2.3.2.2 Anode Header Cable

Cable for anode header and distribution shall be 6 AWG stranded copper wire with type CP high molecular weight polyethylene, 7/64-inch thick insulation, 600-volt rating, in accordance with NEMA WC 5. Cable-to-anode contact resistance shall be 0.003 ohms maximum.

#### 2.3.2.3 Reference Electrode Wire

Reference electrode wire shall be stranded copper wire with NFPA 70 type RHW-USE or polyethylene insulation.

#### 2.3.3 Conduit

Rigid galvanized steel conduit and accessories shall conform to UL 6. Nonmetallic conduit shall conform to NEMA TC 2.

#### 2.3.4 Test Boxes and Junction Boxes

Boxes shall be outdoor type conforming to UL 514A.

#### 2.3.5 Polyethylene Insulation

Polyethylene insulation shall comply with the requirements of ASTM D 1248 and the following types, classes, and grades:

##### 2.3.5.1 High Molecular Weight Polyethylene

High molecular weight polyethylene shall be Type I, Class C, Grade E5.

##### 2.3.5.2 High Density Polyethylene

High density polyethylene shall be Type III, Class C, Grade E3.

#### 2.3.6 Pressure-Sensitive Vinyl Tape

Tape shall conform to UL 510.

#### 2.3.7 Pressure Entrance Fitting

Pressure Entrance Fitting: The fitting shall accommodate all anode and reference wires and shall be manufactured to prevent leakage through the fitting and water migration through the wiring. The fitting shall be 1-1/2" diameter. Type THHN copper shall be utilized from the pressure fitting to the rectifier unit and from the rectifier unit to the negative ground connections.

#### 2.3.8 Permanent Reference Cell

Permanent Reference Cell shall be suitable for use with rectifier controller. No rechargeable reference cells will be accepted.

#### 2.3.9 Hardware

All steel hardware used in conjunction with this system that is required to be welded to the tank shall be installed prior to the tank being coated and shall be coated with the same paint system being applied to the tank.

## PART 3 EXECUTION

### 3.1 ANODES

#### 3.1.1 Anode Installation:

1. The components of the cathodic protection system shall be installed in the manner and at the locations as shown on the design drawings associated with this project.
2. The pressure entrance fitting shall be installed in accordance with AWWA D100-84 or latest revision, Section 3.13.
3. Welding, cutting and coating shall be in accordance with AWWA Standards D100, D102 and D105.
4. All materials and equipment shall be inspected prior to installation. Any defective component shall be repaired or replaced.
5. Electrical work shall be in accordance with the National Electric Code.
6. All lead wire shall be installed to prevent any damage caused by abrasion.
7. Electrical connections within the tank shall be sealed to prevent water migration.
8. The rectifier shall be mounted on wet riser pipe and/or at a convenient height (eye level) above grade for monitoring and service purposes.

### 3.2 RECTIFIERS

#### 3.2.1 Rectifier and Control Installation

Mounting shall be of the cross-arm mounted type. Mounting shall be suitable for installing on the rear wall of enclosure cabinet. Cabinet shall be mounted on one support column of the tank. Cabinet shall be mounted at location of existing rectifier enclosure (base approximately 36" above grade).

### 3.3 PERMANENT REFERENCE ELECTRODES

#### 3.3.1 Calibration

Permanent reference electrodes shall be calibrated against a standard electrode before installation. Calibration shall be done in a test tank containing water with the same composition as the tank to be protected. The permanent electrodes shall measure reference voltage agreeing with that measured by the standard electrode within plus or minus 0.005 volt when the sensing windows of the two electrodes being compared are not more than 1/6 inch apart but not touching.

#### 3.3.2 Installation

Reference electrodes shall be operable under the same icing conditions as the anodes system. Installation of permanent reference electrodes shall be made at points in the tank which will monitor minimum and maximum tank-

to-water potentials and as otherwise needed for automatic control system. Sensing windows of reference electrodes shall be located between ¼ inch and ½ inch away from the steel surface sensed and shall be fixed in position preventing contact with tank steel.

### 3.3.3 Components of Cathodic Protection System

All work shall be in accordance with the following requirements:

1. Components of the cathodic protection system shall be installed in the manner and at the locations as shown on the drawings prepared by the Contractor.
2. Pressure entrance fitting shall be installed in accordance with AWWA D100-96, Section 3.1.3.
3. Welding of steel coupling and anchors for horizontal anode suspension and rectifier mounting bracket shall be furnished by the Contractor.
4. Any damages to existing tank coating shall be repaired and primed and repainted by the Contractor.
5. Electrical continuity of all sections of bolted or riveted tanks shall be furnished by the Contractor.
6. Materials and equipment shall be inspected prior to installation. Any defective component shall be repaired or replaced.
7. Lead wires shall be installed to prevent damage from abrasion.
8. Electrical connections within the tank shall be sealed to prevent water migration.
9. AC power (source) to the rectifier shall be supplied by the Government.
10. Disinfecting shall be the responsibility of the Government.

## 3.4 CRITERIA OF PROTECTION

Acceptance criteria for determining the adequacy of protection on the internal submerged surfaces of steel water tanks shall be in accordance with NACE RP0388 and as specified below.

### 3.4.1 Minimum

The criterion of protection shall be a negative voltage of at least minus 850 millivolts as measured between the tank and saturated copper-copper-sulphate reference electrode. Determination of this voltage shall be made with the cathodic protection system in operation. Voltage drops shall be considered for valid interpretation of this voltage measurement. A minimum of minus 850 millivolts "instant off" potential between the tank surface being tested and the reference cell shall be achieved over 95 percent of the area of the structure. Adequate number of measurements shall be obtained over the entire tank surface to verify and record achievement of minus 850 millivolts "instant off." This potential shall be obtained over 95 percent of the total metallic area without the "instant off" potential exceeding the maximum limit indicated below.

### 3.4.2 Maximum

In order to mitigate disbonding of the interior coating in the tank, potential between a copper-copper-sulfate reference electrode and the tank at any point shall not be more than minus 1.07 volt measured with the electrode located between ½ inch and ½ inch and away from the steel surface but not touching it.

## 3.5 TESTING, ADJUSTING, AND PLACING IN SERVICE

### 3.5.1 Electrode Potential Measurements

Upon completion of this installation, the tank shall be filled to maximum working level and with the entire cathodic protection system in operation; electrode potential measurements shall be made using a copper-copper-sulphate reference electrode and a potentialmeter-voltmeter, or a direct current voltmeter having an input impedance of not less than 1,000,000 ohms per volt and a full scale of 10 volts. The locations of these measurements shall be identical to the locations used for baseline potentials. The values obtained and the date, time, and locations of measurements shall be recorded.

#### 3.5.1.1 Tank-to-Water Potential Measurements

A series of "native", "on", and "instant off" tank-to-water potential measurements with a portable reference electrode placed not more than ½ inch away from but not touching the tank shall be performed:

- a. On a vertical line midway between two anode strings beginning at a point 1 foot below water level and continuing at points 3 feet apart until the bottom of the tank is reached.
- b. On a second vertical line midway between two anode strings on the opposite side of the tank from the first vertical line beginning at a point 1 foot below water level and continuing at points 3 feet apart until the bottom of the tank is reached.
- c. Across the bottom of the tank in a line between the two vertical lines at 3 foot intervals.
- d. In at least four places which are closest to anodes.

#### 3.5.1.2 Reference Electrode Calibration

The portable reference electrode used for the test shall be calibrated against the standard electrode specified in paragraph 3.3, PERMANENT REFERENCE ELECTRODES.

#### 3.5.1.3 Test Measurement Recording

All test measurements and their locations, as well as measurements made with the permanent electrodes simultaneously with the test measurements, shall be recorded.

#### 3.5.2 Adjusting

Final adjustment of the rectifier output current shall be made so that repeated voltage readings taken as specified for testing meet the criteria in paragraph 3.4, CRITERIA OF PROTECTION.

#### 3.5.3 Placing in Service

After final adjustment, the cathodic protection system shall be placed in service and the condition of the system as left by the Contractor shall be recorded and shall indicate transformer tap settings; voltage readings from reference electrode to tank, readings both horizontal and vertical; automatic control differential setting; ac supply voltage; adjusted dc output voltage; and total protective current.

### 3.6 TRAINING

The Contractor shall conduct a training course for the operating staff as designated by the Contracting Officer. The training period shall consist of a total of 4 hours of normal working time and shall start after the system is functionally complete but prior to final acceptance tests. The field instructions shall cover all of the items contained in the operating and maintenance instructions, as well as demonstrations of routine maintenance operations. The Contracting Officer shall be notified at least 14 days prior to date of proposed starting of the training course.

### 3.7 GUARANTEE

All workmanship, materials, and equipment shall be guaranteed for a period of one (1) year from the date of final acceptance or beneficial use. The Contractor shall guarantee that the cathodic protection system, when maintained and operated in accordance with the manufacturer's instructions, shall provide protection against corrosion of the submerged surface inside the tank. In the event corrosion is not prevented, the Contractor shall, at his own expense, make whatever changes are necessary in the cathodic protection system to prevent corrosion.

### 3.8 OPERATING AND MAINTENANCE INSTRUCTIONS

The Contractor shall submit four (4) copies of the data in report form along with detailed operation and maintenance instructions. The cathodic protection system shall be kept in operation in accordance with the test results and the supplier's recommendations. The Government shall monitor the operating conditions monthly and notify the contractor upon finding irregularities. The contractor shall provide price for Government's option for annual inspection services after expiration of the one year guarantee. The annual inspection will include a complete inspection of the entire cathodic protection system's major components and a potential profile to determine any necessary changes.

### 3.9 ACCEPTANCE

Final acceptance will not be given until the Contractor has successfully completed all tests and after all defects in installation, material or operation have been corrected.

-- End of Section --

WAGE DETERMINATION DECISION  
OF THE SECRETARY OF LABOR

The following wage determination will be used to conform With the requirements of the Service Contract Act of 1965(29 CFR 4) of the General Provisions:

Decision No. 94-2103 (Rev. 28) dated 4 October 2002

State(s): District of Columbia, Maryland, Virginia  
Areas: Maryland COUNTIES of Calvert, Charles, Frederick, Montgomery, Prince George's, St. Mary's.  
Virginia COUNTIES of Arlington, Fairfax, Fauquier, King George, Loudoun, Prince William, Stafford, Alexandria, Falls Church

WAGE DETERMINATION NO: 94-2103 REV (28) AREA: DC,DISTRICT-WIDE

WAGE DETERMINATION NO: 94-2103 REV (28) AREA: DC,DISTRICT-WIDE  
REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF  
LABOR

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DOL\*\*\*

WASHINGTON D.C. 20210

2103

William W.Gross  
Director  
10/04/2002

Division of  
Wage Determinations

Wage Determination No.: 1994-

Revision No.: 28  
Date Of Last Revision:

States: District of Columbia, Maryland, Virginia  
Area: District of Columbia Statewide  
Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince  
George's, St Mary's  
Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church,  
Fauquier, King George, Loudoun, Prince William, Stafford

\*\*Fringe Benefits Required Follow the Occupational Listing\*\*

OCCUPATION TITLE	MINIMUM WAGE RATE
Administrative Support and Clerical Occupations	
Accounting Clerk I	10.16
Accounting Clerk II	11.88
Accounting Clerk III	14.04
Accounting Clerk IV	16.37
Court Reporter	14.94
Dispatcher, Motor Vehicle	14.63
Document Preparation Clerk	11.29
Duplicating Machine Operator	11.29
Film/Tape Librarian	14.65
General Clerk I	11.68
General Clerk II	13.72
General Clerk III	15.32
General Clerk IV	18.74
Housing Referral Assistant	17.82
Key Entry Operator I	10.40
Key Entry Operator II	11.62
Messenger (Courier)	9.30
Order Clerk I	14.74
Order Clerk II	16.29
Personnel Assistant (Employment) I	13.05
Personnel Assistant (Employment) II	14.24
Personnel Assistant (Employment) III	16.42
Personnel Assistant (Employment) IV	19.60
Production Control Clerk	17.28
Rental Clerk	15.42
Scheduler, Maintenance	14.06
Secretary I	14.71
Secretary II	15.35

Secretary III	18.49
Secretary IV	19.57
Secretary V	22.79
Service Order Dispatcher	14.04
Stenographer I	14.68
Stenographer II	16.47
Supply Technician	19.57
Survey Worker (Interviewer)	14.94
Switchboard Operator-Receptionist	10.96
Test Examiner	15.35
Test Proctor	15.35
Travel Clerk I	11.63
Travel Clerk II	12.49
Travel Clerk III	13.41
Word Processor I	11.80
Word Processor II	14.22
Word Processor III	16.65
Automatic Data Processing Occupations	
Computer Data Librarian	11.69
Computer Operator I	13.30
Computer Operator II	15.67
Computer Operator III	18.60
Computer Operator IV	18.94
Computer Operator V	22.94
Computer Programmer I (1)	19.64
Computer Programmer II (1)	23.05
Computer Programmer III (1)	26.99
Computer Programmer IV (1)	27.62
Computer Systems Analyst I (1)	26.99
Computer Systems Analyst II (1)	27.62
Computer Systems Analyst III (1)	27.62
Peripheral Equipment Operator	14.06
Automotive Service Occupations	
Automotive Body Repairer, Fiberglass	21.38
Automotive Glass Installer	17.03
Automotive Worker	17.03
Electrician, Automotive	18.05
Mobile Equipment Servicer	14.94
Motor Equipment Metal Mechanic	19.03
Motor Equipment Metal Worker	17.03
Motor Vehicle Mechanic	19.11
Motor Vehicle Mechanic Helper	16.01
Motor Vehicle Upholstery Worker	17.03
Motor Vehicle Wrecker	17.03
Painter, Automotive	18.05
Radiator Repair Specialist	17.03
Tire Repairer	14.43
Transmission Repair Specialist	19.03
Food Preparation and Service Occupations	
Baker	11.87
Cook I	10.41
Cook II	11.87
Dishwasher	8.76
Food Service Worker	9.01
Meat Cutter	16.07
Waiter/Waitress	8.17
Furniture Maintenance and Repair Occupations	
Electrostatic Spray Painter	18.05
Furniture Handler	12.55
Furniture Refinisher	18.05
Furniture Refinisher Helper	13.85
Furniture Repairer, Minor	16.01
Upholsterer	18.05

General Services and Support Occupations	
Cleaner, Vehicles	9.67
Elevator Operator	9.79
Gardener	12.98
House Keeping Aid I	9.02
House Keeping Aid II	9.28
Janitor	9.64
Laborer, Grounds Maintenance	10.75
Maid or Houseman	9.28
Pest Controller	11.85
Refuse Collector	10.88
Tractor Operator	12.73
Window Cleaner	10.51
Health Occupations	
Dental Assistant	14.36
Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	11.95
Licensed Practical Nurse I	14.43
Licensed Practical Nurse II	16.20
Licensed Practical Nurse III	18.13
Medical Assistant	11.76
Medical Laboratory Technician	13.93
Medical Record Clerk	13.57
Medical Record Technician	14.21
Nursing Assistant I	8.46
Nursing Assistant II	9.52
Nursing Assistant III	11.94
Nursing Assistant IV	13.40
Pharmacy Technician	11.84
Phlebotomist	11.21
Registered Nurse I	22.54
Registered Nurse II	25.08
Registered Nurse II, Specialist	25.08
Registered Nurse III	32.38
Registered Nurse III, Anesthetist	32.38
Registered Nurse IV	38.81
Information and Arts Occupations	
Audiovisual Librarian	18.95
Exhibits Specialist I	16.79
Exhibits Specialist II	20.99
Exhibits Specialist III	25.84
Illustrator I	17.03
Illustrator II	21.29
Illustrator III	26.20
Librarian	22.33
Library Technician	15.03
Photographer I	13.93
Photographer II	15.64
Photographer III	19.56
Photographer IV	24.08
Photographer V	26.50
Laundry, Dry Cleaning, Pressing and Related Occupations	
Assembler	8.71
Counter Attendant	8.71
Dry Cleaner	9.83
Finisher, Flatwork, Machine	8.71
Presser, Hand	8.71
Presser, Machine, Drycleaning	8.71
Presser, Machine, Shirts	8.71
Presser, Machine, Wearing Apparel, Laundry	8.71
Sewing Machine Operator	10.63
Tailor	12.43
Washer, Machine	9.31
Machine Tool Operation and Repair Occupations	

Machine-Tool Operator (Toolroom)	18.05
Tool and Die Maker	21.95
<b>Material Handling and Packing Occupations</b>	
Forklift Operator	14.58
Fuel Distribution System Operator	19.38
Material Coordinator	16.97
Material Expediter	16.97
Material Handling Laborer	11.50
Order Filler	13.21
Production Line Worker (Food Processing)	12.80
Shipping Packer	12.21
Shipping/Receiving Clerk	13.09
Stock Clerk (Shelf Stocker; Store Worker II)	12.69
Store Worker I	8.89
Tools and Parts Attendant	16.99
Warehouse Specialist	15.01
<b>Mechanics and Maintenance and Repair Occupations</b>	
Aircraft Mechanic	21.95
Aircraft Mechanic Helper	14.51
Aircraft Quality Control Inspector	23.11
Aircraft Servicer	16.78
Aircraft Worker	17.84
Appliance Mechanic	18.05
Bicycle Repairer	14.43
Cable Splicer	20.93
Carpenter, Maintenance	18.05
Carpet Layer	17.61
Electrician, Maintenance	22.59
Electronics Technician, Maintenance I	16.08
Electronics Technician, Maintenance II	20.88
Electronics Technician, Maintenance III	22.73
Fabric Worker	15.76
Fire Alarm System Mechanic	19.03
Fire Extinguisher Repairer	14.94
Fuel Distribution System Mechanic	20.93
General Maintenance Worker	16.46
Heating, Refrigeration and Air Conditioning Mechanic	19.03
Heavy Equipment Mechanic	19.03
Heavy Equipment Operator	19.31
Instrument Mechanic	19.03
Laborer	10.70
Locksmith	18.05
Machinery Maintenance Mechanic	20.51
Machinist, Maintenance	21.52
Maintenance Trades Helper	13.85
Millwright	19.24
Office Appliance Repairer	18.05
Painter, Aircraft	20.76
Painter, Maintenance	18.05
Pipefitter, Maintenance	19.04
Plumber, Maintenance	18.05
Pneudraulic Systems Mechanic	19.03
Rigger	19.03
Scale Mechanic	17.03
Sheet-Metal Worker, Maintenance	19.03
Small Engine Mechanic	20.05
Telecommunication Mechanic I	19.41
Telecommunication Mechanic II	20.45
Telephone Lineman	20.93
Welder, Combination, Maintenance	19.03
Well Driller	19.03
Woodcraft Worker	19.03
Woodworker	15.32

Miscellaneous Occupations	
Animal Caretaker	8.97
Carnival Equipment Operator	11.11
Carnival Equipment Repairer	11.97
Carnival Worker	7.48
Cashier	8.53
Desk Clerk	9.78
Embalmer	19.04
Lifeguard	9.67
Mortician	21.63
Park Attendant (Aide)	12.15
Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	9.03
Recreation Specialist	15.94
Recycling Worker	14.06
Sales Clerk	10.04
School Crossing Guard (Crosswalk Attendant)	10.34
Sport Official	11.24
Survey Party Chief (Chief of Party)	14.92
Surveying Aide	9.27
Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	14.18
Swimming Pool Operator	13.21
Vending Machine Attendant	10.20
Vending Machine Repairer	13.24
Vending Machine Repairer Helper	10.77
Personal Needs Occupations	
Child Care Attendant	11.37
Child Care Center Clerk	15.86
Chore Aid	8.05
Homemaker	16.45
Plant and System Operation Occupations	
Boiler Tender	20.85
Sewage Plant Operator	19.15
Stationary Engineer	20.85
Ventilation Equipment Tender	13.85
Water Treatment Plant Operator	19.72
Protective Service Occupations	
Alarm Monitor	15.04
Corrections Officer	17.69
Court Security Officer	18.84
Detention Officer	18.29
Firefighter	19.72
Guard I	9.51
Guard II	12.53
Police Officer	20.54
Stevedoring/Longshoremen Occupations	
Blocker and Bracer	16.46
Hatch Tender	15.74
Line Handler	15.74
Stevedore I	15.47
Stevedore II	17.45
Technical Occupations	
Air Traffic Control Specialist, Center (2)	28.96
Air Traffic Control Specialist, Station (2)	19.97
Air Traffic Control Specialist, Terminal (2)	21.99
Archeological Technician I	14.57
Archeological Technician II	16.29
Archeological Technician III	20.20
Cartographic Technician	22.73
Civil Engineering Technician	19.56
Computer Based Training (CBT) Specialist/ Instructor	23.94
Drafter I	12.22
Drafter II	15.30
Drafter III	17.18

Drafter IV	21.49
Engineering Technician I	15.50
Engineering Technician II	17.99
Engineering Technician III	21.63
Engineering Technician IV	24.82
Engineering Technician V	30.35
Engineering Technician VI	36.72
Environmental Technician	19.29
Flight Simulator/Instructor (Pilot)	27.76
Graphic Artist	20.36
Instructor	23.34
Laboratory Technician	15.98
Mathematical Technician	23.39
Paralegal/Legal Assistant I	16.71
Paralegal/Legal Assistant II	21.31
Paralegal/Legal Assistant III	26.07
Paralegal/Legal Assistant IV	31.54
Photooptics Technician	21.06
Technical Writer	23.99
Unexploded (UXO) Safety Escort	18.40
Unexploded (UXO) Sweep Personnel	18.40
Unexploded Ordnance (UXO) Technician I	18.40
Unexploded Ordnance (UXO) Technician II	22.27
Unexploded Ordnance (UXO) Technician III	26.69
Weather Observer, Combined Upper Air and Surface Programs (3)	16.64
Weather Observer, Senior (3)	19.38
Weather Observer, Upper Air (3)	16.64
Transportation/ Mobile Equipment Operation Occupations	
Bus Driver	15.09
Parking and Lot Attendant	8.62
Shuttle Bus Driver	12.94
Taxi Driver	10.60
Truckdriver, Heavy Truck	17.52
Truckdriver, Light Truck	11.78
Truckdriver, Medium Truck	14.97
Truckdriver, Tractor-Trailer	17.52

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ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:  
HEALTH & WELFARE: \$2.15 an hour or \$86.00 a week or \$372.67 a month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Does not apply to employees employed in a bona fide executive, administrative, or

professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) **APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL:** An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.

3) **WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY:** If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

**HAZARDOUS PAY DIFFERENTIAL:** An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges. A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

### **\*\* UNIFORM ALLOWANCE \*\***

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

**\*\* NOTES APPLYING TO THIS WAGE DETERMINATION \*\***

**Source of Occupational Title and Descriptions:**

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

**REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE  
{Standard Form 1444**

***(SF 1444)***

**Conformance Process:**

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section

4.6 ©(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
  - 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
  - 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
  - 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
  - 5) The contracting officer transmits the Wage and Hour decision to the contractor.
  - 6) The contractor informs the affected employees.
- Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.



PLATE 1 OF 4

**SEE ATTACHED FOR PLATE 1 OF 4**

PLATE 2 OF 4

**SEE ATTACHED FOR PLATE 2 OF 4**

PLATE 3 OF 4

**SEE ATTACHED FOR PLATE 3 OF 4**

PLATE 4 OF 4

**SEE ATTACHED FOR PLATE 4 OF 4**