



US Army
Corps
of Engineers
Fort Worth District

Request For Proposal

Ft. Hood Job Order Contract (JOC)
FY2016

Fort Hood, TX

W9126G-16-R-0048
October 2016

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SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO. W9126G-16-R-0048	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 17-Oct-2016	PAGE OF PAGES 1 OF 120
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IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO.
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7. ISSUED BY US ARMY CORPS OF ENGINEERS FORT WORTH 819 TAYLOR ST, RM 2A17 FORT WORTH TX 76102-0300 TEL: (817) 886-1077 FAX: (817) 886-6403	CODE W9126G	8. ADDRESS OFFER TO <i>(If Other Than Item 7)</i> CODE See Item 7 TEL: FAX:
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9. FOR INFORMATION CALL:	A. NAME AKIBA T MULDROW	B. TELEPHONE NO. <i>(Include area code) (NO COLLECT CALLS)</i> 817 886 1025
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SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS *(Title, identifying no., date):*

Solicitation Number W9126G-16-R-0048, Job Order Contracting (JOC) for Sustainment, Restoration, and Modernization projects at Fort Hood, Killeen, Texas.

NAICS Code: 236220 SIC: 1542 This is a 100% 8(a) Set-Aside.

It has been determined that competition will be limited to 8(a) firms located within the geographical area serviced by SBA's district offices in region six, and the other 8(a) construction firms with bona fide place of business within the geographical competitive area, and the assigned NAICS Code. All other 8(a) BD Participants are deemed ineligible to submit offers.

Contractor shall begin performance within 10 calendar days upon receipt of the Notice to Proceed for each Task Order and complete each Task Order within the number of calendar days negotiated between the Contracting Officer or Ordering Officer.

The minimum quantity of work will be required under this contract during the base period and options will be initiated by one or more task orders and will not be less than \$2,500. The maximum dollar value of this contract's capacity shall not exceed \$30 Million for the base and two 12-month option periods. The Government intends to exercise Options Period 1 and 2.

Proposal Submission due by 12 Noon Central Standard Time (CST) on 21 November 2016.

11. The Contractor shall begin performance within 10 calendar days and complete it within 365 calendar days after receiving award, notice to proceed. This performance period is mandatory, negotiable. (See Task Order _____.)

12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	12B. CALENDAR DAYS 10
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13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 1 copies to perform the work required are due at the place specified in Item 8 by 12:00 PM (hour) local time 21 Nov 2016 (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee is, is not required.

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

D. Offers providing less than 90 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

SOLICITATION, OFFER, AND AWARD (Continued)*(Construction, Alteration, or Repair)***OFFER (Must be fully completed by offeror)**14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*15. TELEPHONE NO. *(Include area code)*16. REMITTANCE ADDRESS *(Include only if different than Item 14)***See Item 14**

CODE

FACILITY CODE

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

AMOUNTS

SEE SCHEDULE OF PRICES

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

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

AMENDMENT NO.

DATE

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

20B. SIGNATURE

20C. OFFER DATE

AWARD (To be completed by Government)

21. ITEMS ACCEPTED:

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN
*(4 copies unless otherwise specified)***ITEM**

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO

 10 U.S.C. 2304(c) 41 U.S.C. 253(c)

26. ADMINISTERED BY

CODE

27. PAYMENT WILL BE MADE BY:

CODE

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE 28. NEGOTIATED AGREEMENT *(Contractor is required to sign this document and return _____ copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract. 29. AWARD *(Contractor is not required to sign this document.)*

Your offer on this solicitation, is hereby accepted as to the items listed. This award commutes the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

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

31A. NAME OF CONTRACTING OFFICER

(Type or print)

30B. SIGNATURE

30C. DATE

TEL:

EMAIL:

31B. UNITED STATES OF AMERICA
BY

31C. AWARD DATE

Section 00 11 00 - Standard Form (SF) 1442 and CLIN Schedule

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0001		10,000,000.00	Job	\$1	\$10,000,000.00

Fort Hood JOC - Base Period
FFP

Job Order Contract (JOC) for maintenance, repair, upgrade and construction of real property facilities at Fort Hood, Killeen, Texas.

Contractor shall provide, upon receipt of a task order, all work, materials, supplies, parts (to include system components), plant, supervision, labor, transportation, and equipment (except when specified as Government Furnished) for maintenance, repair, upgrade and construction of real property facilities for Army and civil facilities, and the related services as specified in strict accordance with all the terms, conditions, special contract requirements, specifications, drawings, attachments, and exhibits.

Base Period – 15 January 2017 through 14 January 2018, 12 months of performance.

FOB: Destination

\$10,000,000.00

MAX
NET AMT

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1001 OPTION	Fort Hood JOC - Option Year 1 FFP	10,000,000	Job	\$1	\$10,000,000.00

Job Order Contract (JOC) for maintenance, repair, upgrade and construction of real property facilities at Fort Hood, Killeen, Texas.

Option Year 1 - 15 January 2018 through 14 January 2019, 12 months of performance.

Contractor shall provide, upon receipt of a task order, all work, materials, supplies, parts (to include system components), plant, supervision, labor, transportation, and equipment (except when specified as Government Furnished) for maintenance, repair, upgrade and construction of real property facilities for Army and civil facilities, and the related services as specified in strict accordance with all the terms, conditions, special contract requirements, specifications, drawings, attachments, and exhibits.

The minimum size of a task order is \$2,500.00 and the estimated maximum size of a task order is \$750,000.00.

FOB: Destination

\$10,000,000.00

MAX
NET AMT

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
2001 OPTION	Fort Hood JOC Option Year 2 FFP	10,000,000.00	Job	\$1	\$10,000,000.00

Job Order Contract (JOC) for maintenance, repair, upgrade and construction of real property facilities at Fort Hood, Killeen, Texas.

Option Year 2 -15 January 2019 through 14 January 2020, 12 months of performance .

Contractor shall provide, upon receipt of a task order, all work, materials, supplies, parts (to include system components), plant, supervision, labor, transportation, and equipment (except when specified as Government Furnished) for maintenance, repair, upgrade and construction of real property facilities for Army and civil facilities, and the related services as specified in strict accordance with all the terms, conditions, special contract requirements, specifications, drawings, attachments, and exhibits.

The minimum size of a task order is \$2,500.00 and the estimated maximum size of a task order is \$750,000.00.

FOB: Destination

\$10,000,000.00

MAX
NET AMT

Pricing Schedule

Item	Description	Coefficient Factor
0001	Normal Working Hours: BUILDING Construction Offerors shall perform all functions called out in any Task order during normal working hours for the unit price sum specified in the Unit Price Book, for any work required to be performed, multiplied times the coefficient factor	_____
0002	Other Than Normal Working Hours: BUILDING CONSTRUCTION Offerors shall perform all functions called out in any Task Order during other than normal working hours for the unit price sum specified in the Unit Price Book, for any work required to be performed, multiplied times the coefficient factor	_____
0003	Non-Prepriced Items: Overhead and profit rate for all non-prepriced items on task order. Overhead and profit is defined as all items associated with performing the tasks, other than direct labor, equipment, and material costs. Coefficient Factor	_____
0004	Hazardous Material Abatement - Prepriced Items: Offerors shall perform all functions called out in any Task Order for the unit price sum specified in the unit price book for any work required to be performed for the removal and disposal of asbestos and lead-based paint, multiplied times the coefficient factor	_____

Low price will be evaluated by normalizing the numbers as follows:

- 0001 will be factored as 85% of the work.
- 0002 will be factored at 10% of the work.
- 0003 will be factored at 2.5% of the work.
- 0004 will be factored at 2.5% of the work.

COEFFICIENT INCLUSIONS PAGE

NOTES:

1. The offeror's Construction price coefficient factor(s) SHALL include all prime and sub contractor **profit, home office overhead, jobsite overhead, and other costs not included in the bare labor,**

material, and equipment costs from the unit price book or in the non- prepriced items. These costs include, but are not limited to, the following:

- (a) Corporate, Regional, and Site offices (i.e. Office buildings, office spaces, office trailers, office management, office equipment and supplies, etc)
- (b) Profit
- (c) Performance and Payment Bonds (per Army Federal Regulation Supplement (AFARS) 17.9004 2(h))
- (d) Insurance
- (e) Compliance with environmental laws, protection and safety
- (f) Tax Laws
- (g) Protection for moving of Government property
- (h) Submittals (i.e. preparation and distribution of Work Plans, Risk Analyses and weekly reports, as-builts, CQC Plans, Safety Plans, Accident Prevention Plans, Hazard Analyses, Test Procedures, Tests, Test Reports, Status Reports, Catalog Cut Sheets, Technical Data Sheets, Shop Drawings, Schedules, O&M Manuals, etc.)
- (i) Price quotations
- (j) Contractor adjustments to Government Unit Prices
- (k) Clean-up shall be applicable per each task order.
- (l) All waste and excess materials
- (m) Permits, licenses and fees
- (n) Mobilization, such as heavy equipment and equipment not usually required to be delivered to jobsite, shall be negotiated with each task order whereas work trucks (and lower tier work trucks) small trailers, etc shall be included in the coefficient
- (o) Bulletin Board and Project and Safety Signs "if required/applicable" should be amended to include the statement "local barricades (i.e. construction safety fence in and around work site, construction safety tape, etc) shall also be included in Contractor's coefficient whereas more substantial signage/barricade effort (i.e. traffic safety plan and controls) shall be negotiated with each task order if applicable.
- (p) Principles, project management, supervision and construction supervision
- (q) Technical support staff (i.e. estimator, draftsman/CADD operator, etc.)
- (r) Administrative support staff (i.e. clerks, secretaries, assistants, etc.)
- (s) Quality Control and Quality Control Staff
- (t) Travel (includes all associated costs for all personnel)
- (u) Marketing and Training (i.e. videos, user guides, brochures, promotions, associated travel, etc)
- (v) Collaboration/face-to-face meetings with all Program/Project stakeholders (i.e. progress reviews, negotiations, etc.)
- (w) Interest associated with funding of equipment and payroll
- (x) Employee payroll taxes, insurance and fringe benefits
- (y) Risk of lower than expected contract dollar volume
- (z) Risk of high inflation costs for option periods
- (aa) Risk of poor subcontractor performance and re-performance
- (bb) Other risks of doing business
- (cc) Business taxes, contributions, memberships, corporate headquarters support (legal, financial, etc.)
- (dd) Cost of using electronic payroll software.
- (ee) Toilet Facilities
- (ff) DD1354
- (gg) Utility Locations

- (hh) Warranty Tag
- (ii) O&M Training
- (jj) O&M Manual

2. The unit prices stated in the UPB include labor, materials and equipment.

3. 5152.237-9000 ADJUSTMENT TO CONTRACTOR'S
COEFFICIENT FOR OPTION YEARS (JOB ORDER CONTRACTS) AFARS

"Pricing" of option periods, include consideration of any adjustments must be performed by an economic price adjustment for those periods, as follows:

An economic adjustment will be applied to the contract coefficient(s) addressing changes in The cost of labor, equipment and material in the Unit Price Book (UPB) (this includes consideration of Davis Bacon issues). This allows for economic increase or decrease of the prices in the UPB and serves to adjust line item prices by the percentage increase or decrease of the economic trend in the construction market. The economic price adjustment will be based on the Building Cost Index (BCI) found in the Market Trend pages of the Engineering News Record (ENR). The economic adjustment is not applied to the cost items comprising the coefficient. No upward adjustment can apply to task orders awarded prior to the effective date of the adjustment, regardless of the date of commencement of work thereunder.

The adjustment will be made in accordance with the following equation. The resulting revised coefficient(s) must be applied throughout the option year.

$$N = C + i$$

Where: N = New Coefficient

C = Base Year Coefficient

i = Change Factor (% increase or decrease from base to option year) The Index Factor, i, shall be computed according to the following equation:

$$i = \frac{BCIN}{BCIC} - 1$$

Where:

BCIN is the Building Cost Index, published in the ENR, for the month prior to the effective date of the option period.

BCIC is the Building Cost Index, as published in the ENR, on the date of the award of the contract. The BCIC is _____, based on the award date of _____.

If the BCI or the ENR ceases to be published, the parties shall agree on substitute indices.

EXAMPLE: For the base year of a contract the coefficient (C) is 1.10. The cost to the government for a line item whose cost is \$100.00 is 1.10 x \$100.00 = \$110.00.

Option Year 1. For the first option year the coefficient will be adjusted as follows:

$$i = \frac{BCIN}{BCIC} - 1 = \frac{3111.86}{3071.10} - 1 = 1.0133 - 1 = .0133$$

The new coefficient would be calculated as follows:

$$N = C + i = 1.10 + 0.0133 = 1.1133$$

The above line item under the option period would be $1.1133 \times \$100.00 = \111.33 .

Option Year 2. For the second option year, if the BCI for the month prior to the effective date of the option period was 3002.99, the coefficient will be adjusted as follows:

$$i = \frac{\text{BCIN} - 1}{\text{BCIC}} = \frac{3062.99}{3071.10} - 1 = .9974 - 1 = -0.0026$$

The new coefficient would be calculated as follows:

$$N = C + i = 1.10 - 0.0026 = 1.0974$$

The above line item under the option period would be $1.0974 \times \$100.00 = \109.74 .

Note 1. Round calculations for the Change Factor (i) to the nearest ten thousandth

Note 2. ENR indices for calculation of coefficients for the option years are taken from the McGraw Hill publication, ENR, published during the month prior to the effective date of the option. The ENR Index for the base year (contract award) is the most recent ENR Index published for the month prior to initial contract award.

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	Destination	Government
1001	Destination	Government	Destination	Government
2001	Destination	Government	Destination	Government

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	POP 15-JAN-2017 TO 14-JAN-2018	N/A	CENTRAL TEXAS AREA OFC COR / ACO / OO POC BLDG 4617 SANTE FE AND 72ND STREET FORT HOOD TX 76544 254-285-3210 FOB: Destination	967425
1001	POP 15-JAN-2018 TO 14-JAN-2019	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	967425
2001	POP 15-JAN-2019 TO 14-JAN-2020	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	967425

Section 00 21 00 - Instructions, Conditions and Notices to Offerors

INSTRUCTION TO OFFERORS

Section 00 21 00

INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS

- 1.0 GENERAL INFORMATION**
- 1.1 GENERAL DESCRIPTION OF WORK**
- 1.2 CONTRACT COST LIMITATION FOR DESIGN AND CONTRUCTION COSTS**
- 1.3 COPIES OF SOLICITATION DOCUMENTS AND AMENDMENTS**
- 1.4 OFFEROR'S QUESTIONS AND COMMENTS**
- 1.5 SMALL BUSINESS SIZE STANDARD/NAICS CODE**
- 1.6 PROPOSAL EXPENSES AND PRE-CONTRACT COSTS**
- 1.7 ACCURACY IN PROPOSALS**
- 1.8 PROPOSAL SUBMITTAL**
- 1.9 PROPOSAL FORMAT & GENERAL INSTRUCTIONS**
- 1.10 JOINT VENTURE PROPOSAL REQUIREMENTS**
- 1.11 BID GUARANTEE**
- 1.12 CONTRACT PRICES - BIDDING SCHEDULE**

1.0 GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF WORK

The scope of this acquisition includes maintenance, repair, upgrade and construction of real property facilities at Fort Hood, Killeen, Texas. This will include a wide variety of services such as minor new construction, sustainment, restoration and/or modernization services to include the following:

- Repair and Alteration of real and personal property facilities, e.g., maintenance, repair and minor construction services relating to the following :
 - Mechanical,
 - Plumbing,
 - Structural,
 - Electrical,
 - Heating, ventilation and air conditioning (HVAC)
- Instrumentation repair incidental to construction
- Asbestos and lead based paint abatement, and other environmental remediation incidental to the construction
- Anti-terrorism and force protection systems upgrades, repairs, and installation
- Repair of roadways, parking areas, and pedestrian walkways.
- Lighting installation or repair,
- Interior or exterior painting of buildings or structures,
- Storm water system improvement and repair,
- Other site work including site grading and drainage, landscape plantings, exterior irrigation systems, and retaining walls incidental to the construction.

The JOC includes a comprehensive collection of detailed repair, maintenance and minor construction task descriptions and/or specifications, units of measure and pre-established unit prices for each of these discrete tasks. Each project or job ordered under the JOC is normally comprised of a number of pre-described and pre-priced tasks. Individual task order price will be determined by determining Unit Price Book (UPB) line items and the necessary quantities. The line items and quantities will determine the project bare cost. Based on the type of work being performed, four bare cost adjustment coefficients will be used to determine the total price. The four are provided by CLINS to include Normal Working Hours, Other Than Normal Working Hours, Non-Prepriced Items, and Abatement & Remediation Work.

1.2. CONTRACT COST CEILING LIMITATION FOR DESIGN AND CONSTRUCTION COSTS

The total JOC contract value is \$30,000,000 to include a 12-month base contract period and two, 12-month option periods for a total of three years. An additional option of 6-months under FAR 52.217-8 is also included and will be exercised if required. Individual task orders will be awarded between \$2,500 and \$750,000 per task order, but may exceed the stated estimated task order amount if such award is deemed to be in the best interests of the Government and the requirements of AFARS Part 5117 and controlling regulations/policies are satisfactorily met.

1.3. COPIES OF SOLICITATION DOCUMENTS AND AMENDMENTS

Copies of the solicitation and all amendments will be submitted through the AMRDEC SAFE website.

The Offeror shall submit in its proposal all requested information as specified in this solicitation. There will be no public opening of the proposals received as a result of this solicitation.

1.4. OFFEROR'S QUESTIONS AND COMMENTS

1.4.1 Bidder Inquiry

1.4.1.1 Technical inquiries and questions relating to proposal procedures or bonds are to be submitted via Bidder Inquiry in ProjNet at <http://www.projnet.org/projnet>.

1.4.1.1.1 To submit and review bid inquiry items, bidders will need to be a current registered user or self-register into system. To self-register go to web page, click BID tab select Bidder Inquiry, select agency USACE, enter Key for this solicitation listed below, and your e-mail address, click login. Fill in all required information and click create user. Verify that information on next screen is correct and click to continue.

1.4.1.1.2 From this page you may view all bidder inquiries or add inquiry. Only one question will be allowed per inquiry. If multiple questions are included in a single inquiry, only the first question will be answered. All others will remain unanswered until entered in as single inquiries.

1.4.1.1.3 Bidders will receive an acknowledgement of their question via email, followed by an answer to their question after it has been processed by our technical team.

1.4.1.1.4 The Solicitation Number is: **W9126G-16-R-0048**

1.4.1.1.5 The Bidder Inquiry Key is: **VJY4E6-S5QVDU**

1.4.1.2 The Bidder Inquiry System will be closed to new inquiries seven (7) calendar days prior to proposal submission in order to ensure adequate time is allotted to form an appropriate response and amend the solicitation, if necessary. If the System is not closed in a timely manner, an inquiry posted within seven calendar days of the receipt of proposals will still be regarded as untimely and will not be afforded a substantive response.

1.4.1.3 Offerors are requested to review the specification in its entirety, review the Bidder Inquiry System for answers to questions prior to submission of a new inquiry.

1.4.1.4 The bidder call center operates weekdays from 8am to 5pm U.S. Central Time Zone (Chicago). The telephone number for the Call Center is 800-428-HELP.

1.4.2 Offers will NOT be publicly opened. Information concerning the status of the evaluation and/or award will NOT be available after receipt of proposals.

1.5. SMALL BUSINESS SIZE STANDARD/NAICS CODE

The Small Business Size is \$36.5M and the NAICS Code is 236220.

1.6. PROPOSAL EXPENSES AND PRE-CONTRACT COSTS

This solicitation does not commit the Government to pay as a direct charge any costs incurred by the Offeror in the preparation and submission of its proposal or revisions. A stipend is not authorized for unsuccessful Offerors in accordance with Section 00 22 20.

1.7. ACCURACY IN PROPOSALS

Proposals must set forth with full, accurate, and complete information as required by this solicitation, (including attachments). The penalty for making false statements is prescribed in 18 U.S.C.1001.

1.8. PROPOSAL SUBMITTALS

1.8.1 In an effort to reduce paperwork and cost, ALL proposals shall be submitted electronically via the AMRDEC SAFE website at: <https://safe.amrdec.army.mil/safe/Default.aspx>

At the AMRDEC SAFE website, select the link: *I do not have a CAC or this machine is not configured to read my CAC and I would like to access SAFE as the Guest User, to register, access the site and submit your proposal(s).* When completing the information for transmittal at the AMRDEC SAFE website, notification should be submitted to Contract Specialist, Akiba Muldrow, email Akiba Muldrow akiba.t.muldrow@usace.army.mil and Contracting Officer, Marc H. Nguyen, email Marc.h.Nguyen@usace.army.mil.

1.8.2 Offers received by telegraph, modifications thereto, or cancellations of offers will not be accepted.

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

1.8.4 Offers received by e mail, modifications thereto, or cancellations of offers will not be accepted.

1.8.5 SITE VISIT:

A site visit to award the base contract is not necessary. Site visits for individual task orders will be performed as needed after award of the base contract and with the successful offeror.

1.9. PROPOSAL FORMAT & GENERAL INSTRUCTIONS

1.9.1 **Submit only the electronic documents.** Submit only the electronic files specifically authorized and/or required elsewhere in this section. Do not submit excess information, to include audio-visual materials, electronic media, etc. *All pages shall be numbered. A single side of a sheet of paper equals one page.*

1.9.2 PDF pages shall be formatted to print on 8 ½ by 11 inch paper, unless another paper size is specifically authorized elsewhere in this section for a particular submission. Spreadsheets must fit to 11” x 14” or 11” x 17” paper size unless specifically authorized in this section for a particular submission. Do not use a font size smaller than 10, an unusual font style such as script, or condensed print for any submission. All page margins must be at least 1 inch wide, but may include headers and footers of the solicitation, project title and company.

1.9.3 “Confidential” projects cannot be submitted to demonstrate capability unless all of the information required for evaluation as specified herein can be provided to the Government as part of the Offeror’s technical proposal. Offerors that include in their proposals information that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, must be clearly marked in accordance with the instructions at FAR 52.215-1, Instructions to Offerors— Competitive Acquisition”, paragraph (e), “Restriction on disclosure and use of data”.

1.9.4 In the case of an Offeror that is part of a large, multi-segmented business concern, provide information directly pertaining to the specific segment of the business concern (i.e., the division, group, unit, etc.) that will perform work under the prospective contract.

1.9.5 Proposal revisions shall be submitted as page replacements with revised text readily identifiable, e.g., bold face print or underlining. The source of the revision or amendment, e.g., Error, Omission or Clarification shall be included and be annotated for each revision. Proposal replacement pages shall be numbered and clearly marked “REVISED”, with the date of revision. Revised page will be submitted in a different color than the original pages being replaced.

1.9.6 Within three (3) days of contract award, the awarded contractors shall submit their conformed proposal via the AMRDEC SAFE website at: <https://safe.amrdec.army.mil/safe/Default.aspx>

1.10. VENTURE PROPOSAL REQUIREMENTS

When proposing as a joint venture, all members of the joint venture shall sign the bid bond unless a written agreement by the joint venture is furnished with the proposal designating one firm with the authority to bind the other member(s) of the joint venture. In addition, a copy of the joint venture agreement shall be submitted with the proposal. Failure to comply with the foregoing requirements may eliminate the proposal from further consideration. If this is an 8(a) or 8(a) joint venture, the Offeror shall ensure that it complies with the applicable requirements of 13 CFR Part 124 respectively.

1.11. BID GUARANTEE

A Bid Guarantee will be required for this solicitation. The penal sum of the bond for the task order will be required as stated in provision 52.228-1, Bid Guarantee. **Scanned copy submission of the bid bond is required.**

1.12. CONTRACT PRICES - BIDDING SCHEDULE

Payment for the various items listed in the Bidding Schedule shall constitute full compensation for furnishing all plant, labor, equipment, appliances, materials and bonds (performance and payment),

and for performing all operations required to complete the work in conformity with the drawings and specifications. All costs for work not specifically mentioned in the Bidding Schedule shall be included in the contract prices for the items listed.

End of Section 00 21 00

CLAUSES INCORPORATED BY REFERENCE

52.214-34	Submission Of Offers In The English Language	APR 1991
52.215-1	Instructions to Offerors--Competitive Acquisition	JAN 2004
52.215-16	Facilities Capital Cost of Money	JUN 2003
52.215-22	Limitations on Pass-Through Charges--Identification of Subcontract Effort	OCT 2009
52.216-27	Single or Multiple Awards	OCT 1995
52.217-5	Evaluation Of Options	JUL 1990
52.225-25	Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-- Representation and Certifications.	OCT 2015
52.236-28	Preparation of Proposals--Construction	OCT 1997
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

52.204-7 SYSTEM FOR AWARD MANAGEMENT (JULY 2013)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) Company legal business.

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

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

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

(v) Company Telephone Number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

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

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

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

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

(End of clause)

52.209-5 CERTIFICATION REGARDING RESPONSIBILITY MATTERS (OCT 2015)

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

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

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

(B) Have (____) have not (____), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property (if offeror checks "have", the offeror shall also see 52.209-7, if included in this solicitation); and

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

(D) Have _____, have not _____, within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds \$3,500 for which the liability remains unsatisfied.

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of provision)

52.211-14 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE, EMERGENCY PREPAREDNESS, AND ENERGY PROGRAM USE (APR 2008)

Any contract awarded as a result of this solicitation will be DX rated order; DO rated order certified for national defense, emergency preparedness, and energy program use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation. [Contracting Officer check appropriate box.]

(End of provision)

52.215-20 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN CERTIFIED COST OR PRICING DATA (OCT 2010)

(a) Exceptions from certified cost or pricing data. (1) In lieu of submitting certified cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Commercial item exception. For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold in the commercial market that is adequate for evaluating the reasonableness of the price for this acquisition. Such information may include--

(A) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities;

(B) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market;

(C) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for certified cost or pricing data. If the offeror is not granted an exception from the requirement to submit certified cost or pricing data, the following applies:

(1) The offeror shall prepare and submit certified cost or pricing data, data other than certified cost or pricing data, and supporting attachments in accordance with the instructions contained in Table 15-2 of FAR 15.408, which is incorporated by reference with the same force and effect as though it were inserted here in full text. The instructions in Table 15-2 are incorporated as a mandatory format to be used in this contract, unless the Contracting Officer and the Contractor agree to a different format and change this clause to use Alternate I.

As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm fixed price contract resulting from this solicitation.

(End of provision)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (FEB 2016)

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

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 60 calendar days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 42 months.

52.225-10 NOTICE OF BUY AMERICAN REQUIREMENT--CONSTRUCTION MATERIALS (MAY 2014)

(a) Definitions. "Commercially available off-the-shelf (COTS) item," "construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American --Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American statute should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American statute before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American statute, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

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

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--

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

(ii) May be accepted if revised during negotiations.

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

(a) Definitions. "Commercially available off-the-shelf (COTS) item," "construction material," "designated country construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American -- Construction Materials Under Trade Agreements" (Federal Acquisition Regulation (FAR) clause 52.225-11).

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

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

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

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

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

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material, and the offeror shall be required to furnish such domestic or designated country construction material. An offer based on use of the foreign construction material for which an exception was requested-- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

52.228-1 BID GUARANTEE (SEP 1996)

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

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and

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

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$1,000,000.00 whichever is less.-

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

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

(End of provision)

52.233-2 SERVICE OF PROTEST (SEP 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

U.S. Army Engineer District Fort Worth Contracting Division
Marc H. Nguyen
Contracting Officer
P.O. Box 17300
819 Taylor Street Rm 2A19
Fort Worth TX 76102

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

(End of provision)

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

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

(b) Site visits may be arranged during normal duty hours by contacting:

Site visits will be scheduled per individual task order requirement. A site visit for award of the base contract will not occur.

(End of provision)

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):

<https://www.acquisition.gov/far/>

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

(End of provision)

Section 00 22 11 - Proposal Submission Requirements, Evaluation Criteria, and Basis of Award One Step - Best Value, Design-Build (Single Award)

SECTION 00 22 11

PROPOSAL SUBMISSION REQUIREMENTS, EVALUATION CRITERIA, AND BASIS OF AWARD

- 1.0 OVERVIEW
- 2.0 BASIS OF AWARD
- 3.0 PROPOSAL CONTENTS AND RELATED EVALUATION FACTORS
- 4.0 VOLUME 1, FACTOR 1 MANAGEMENT APPROACH
 - 4.1 GENERAL
 - 4.2 SUBMISSION REQUIREMENTS
 - 4.3 EVALUATION CRITERIA
- 5.0 VOLUME 1, FACTOR 2 QUALITY CONTROL PROGRAM
 - 5.1 SUBMISSION REQUIREMENTS
 - 5.2 EVALUATION CRITERIA
- 6.0 VOLUME 1, FACTOR 3 PAST PERFORMANCE
 - 6.1 SUBMISSION REQUIREMENTS
 - 6.2 RELEVANCY DETERMINATION
 - 6.3 EVALUATION CRITERIA
- 7.0 VOLUME 1, FACTOR 4 SMALL BUSINESS UTILIZATION
 - 7.1 GENERAL
 - 7.2 SUBMISSION REQUIREMENTS
 - 7.3 EVALUATION CRITERIA
- 8.0 DEFINITIONS

9.0 VOLUME 2, FACTOR 5 - PRICE AND OTHER REQUIRED INFORMATION

9.1 GENERAL

9.2 Volume 2, TAB A - PRICE (CONTRACT LINE ITEM SCHEDULE)

9.3 Volume 2, TAB B – BID GUARANTEE

9.4 Volume 2, TAB C – REQUIRED PRE-AWARD INFORMATION

9.5 Volume 2, TAB D – REPRESENTATIONS AND CERTIFICATIONS

10.0 EVALUATION PROCEDURES

10.1 GENERAL

10.2 DISCUSSIONS (IF NECESSARY)

1.0 OVERVIEW

The Government will evaluate the proposals in accordance with the evaluation criteria described herein, using the evaluation rating systems outlined for selection procedures. Price information will be evaluated for fairness, reasonableness, and for material unbalancing, as described herein. Evaluation will be conducted in accordance with FAR Part 15.

2.0 BASIS OF AWARD

2.1 The Contracting Officer will award a firm fixed-price contract to that responsible Offeror whose proposal the Source Selection Authority determines conforms to the RFP, is fair and reasonable, and offers the best overall value to the Government, considering the non-price factors described herein, and price (coefficient). **All evaluation factors, other than price (coefficient), when combined, are considered significantly more important than the price (coefficient).** The intent of this RFP is to obtain the best value proposal. After the Government individually evaluates each proposal, the Contracting Officer/Source Selection Authority will compare proposals to determine which proposal represents the best value. The Government reserves the right to accept other than the lowest priced (coefficient) offer or to reject all offers. The Government will not award a contract to an Offeror whose proposal contains a deficiency, as defined in FAR 15.001. If there is a lower priced (coefficient), conforming offer(s), the Contracting Officer/Source Selection Official must determine that the added value of a more expensive proposal would justify award to that Offeror.

3.0 PROPOSAL CONTENTS AND RELATED EVALUATION FACTORS

VOLUME 1 – TECHNICAL FACTORS, MANAGEMENT APPROACH, QUALITY CONTROL PROGRAM, PAST PERFORMANCE, AND SMALL BUSINESS UTILIZATION

Factor	Location	Description	Relative Importance
FACTOR1	Vol. 1	Management Approach	Most important Factor
FACTOR 2	Vol. 1	Quality Control Program	2nd Most Important Factor, less important than Factor 1, more important than Factors 3 and 4
FACTOR 3	Vol. 1	Past Performance	3 rd Most Important Factor. Less important than Factors 1 and 2 and more important to Factor 4
FACTOR 4	Vol. 1	Small Business Utilization	4 th Most Important Factor. Less important than Factors 1, 2 and 3.

VOLUME 2 – PRICE AND OTHER REQUIRED INFORMATION

Factor	Location	Description	Relative Importance
FACTOR 5	Vol. 2 TAB A	Coefficient Factor (CLIN 0001 - 0004 Pricing Schedule)	Rated for price fair and reasonableness. Significantly less important than all technical factors combined.
	Vol. 2 TAB B	Bid Guarantee	Acceptable/Unacceptable
	Vol. 2 TAB C	Required Pre-Award Information	
	Vol. 2 TAB D	Representations and Certifications	

4.1 VOLUME 1, FACTOR 1 – MANAGEMENT APPROACH

4.2 GENERAL: Offerors shall describe their **Plan, Resources and Understanding** for execution of a Job Order Contract (JOC). Offerors shall possess an overall management capability to manage and execute JOC task orders. Describe management of work scope systematically and efficiently in order to maximize operational performance & financial performance, and minimize project risk. Offerors shall understand JOC processes and line item estimating and proposal procedures utilizing appropriate CLIN 0001, 0002, 0003 and 0004 coefficients.

4.3 Submission Requirements:

4.3.1 PLAN: Describe your plan and capabilities to respond to the Government's notification of a proposed Task Order requirement. Include your plan and capabilities to estimate, prepare, submit and negotiate Task Order proposals within the range anticipated under the awarded contract; your plan to interface with the Government for informational, collaborative and historical purposes regarding a wide variety of construction, maintenance and repair projects constructed simultaneously; your plan for task order management under the awarded contract, including your plan for conducting meetings and tracking a high volume of task order projects simultaneously.

4.3.2 RESOURCES: Describe your corporate systems and capabilities to maintain the execution and completion of a JOC contract. Demonstrate your corporate reach-back capabilities for successful JOC task order execution, i.e.: plan of action for providing corporate support in a timely manner by providing resources from other parts of the corporation for unusual needs such as increased workload in a compressed timeframe, and how the Government will benefit. Demonstrate the ability to manage/construct (i.e. as many as 20 or more) small to medium-scale construction, maintenance and repair projects, in different locations, simultaneously. Resumes of staffing personnel are not required.

4.3.3 UNDERSTANDING: Demonstrate your understanding on the utilization of a unit price book for task order proposals. Explain how you developed your coefficients for the appropriate CLINS for the States of Texas and describe how the coefficients will be applied to each task order proposal.

4.3.4 Offerors will complete the below, sample JOC task order and apply the supplied, sample coefficients to the line items. Once the coefficients have been applied to the line items, the total cost proposal shall be summated and provided. Use only the sample coefficients provided. Do not use your coefficients provided under Volume 1 – Price/Cost proposal.

4.3.5 Sample Problem – A customer located in a maintenance building at Fort Hood has been approved to make renovations to their break room. A HAZMAT survey has been performed to determine that there is asbestos under the existing VCT flooring. The building will be occupied during construction. A portion of the work must be performed after regular work hours. The features of work have already been determined and the line items have been totaled. Apply the appropriate coefficient to the supplied line item totals. Provide the total cost proposal for the project. Show all work and inclusions. Reference the Coefficient Inclusions page listed in the RFP. Additional line items added to the sample problem, which included in the coefficient inclusions, will result in a deficiency.

Sample Coefficients

CLIN 0001 – Normal Working Hours	1.123
CLIN 0002 – Other Than Normal Working Hours	1.13
CLIN 0003 – Non-Prepriced Items	1.19
CLIN 0004 – Asbestos and Lead-Based Paint	1.14

Bare Cost Item Totals – (All below totals are applicable to this sample project)

Normal Working Hours Total	\$	23,000.00
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Other Than Normal Working Hours Total	\$	9,500.00
Non-Prepriced Items	\$	600.00
Asbestos Abatement Total	\$	4,500.00

4.4 EVALUATION CRITERIA:

4.4.1 PLAN – The Government will review the clarity, adequacy, capabilities and strengths of the Offeror’s described plan to respond to the Government’s notification of a proposed task order requirement. The plan will be evaluated to determine the Offeror’s understanding to estimate, prepare, submit and negotiate task order proposals within the range anticipated under the awarded contract, the Offeror’s plan to interface with the Government for informational, collaborative and historical purposes regarding a wide variety of construction, maintenance and repair projects constructed simultaneously; the Offeror’s plan for task order management under the awarded contract, including their plan for conducting meetings and tracking a high volume of task order projects simultaneously. Offeror’s who describe a clear understanding of the JOC process plan may receive a higher rating for this factor. Limit the Plan description to **two (2) pages**. Failure to provide descriptions listed will result in a deficiency for Factor 1.

4.4.2 RESOURCES – The Government will evaluate the Offeror’s proposed corporate systems and capabilities to maintain the execution and completion of a JOC contract. An Offeror must clearly demonstrate their existing corporate resources and plan to procure new resources in a timely manner for unusual needs such as increased workload in a compressed timeframe. Offerors will be evaluated on their ability to manage/construct as many as 20 or more small to medium-scale construction, maintenance and repair projects in different locations, simultaneously. The Government will evaluate strengths and weaknesses of the Offeror’s description of their corporate systems and proposed personnel dedicated to the JOC team and the Offeror’s plan to manage and staff the JOC team during low volume proposal and construction periods and high volume proposal and construction periods. Limit the Resources description to **two (2) pages**. Failure to provide descriptions listed will result in a deficiency for Factor 1

4.4.3 UNDERSTANDING – The Government will evaluate the Offeror’s narrative on their clear understanding and description of utilizing the Unit Price Book (UPB). Offerors will be evaluated on their understanding of the utilization and application of the provided CLINS listed in the sample problem. Offerors will also be evaluated on the correct application of the coefficients to the line item totals listed in the sample problem. Offerors will be evaluated to ensure that items listed in the Coefficient Inclusions (Section 00 11 00) were not added to the total cost in the sample problem. Limit the Understanding description and problem to **five (5) pages**. Failure to provide descriptions listed, or the inclusion of Coefficient Inclusions as a separate line item will result in a deficiency for Factor 1.

5.1 VOLUME 1, FACTOR 2 – QUALITY CONTROL PROGRAM

5.2 Submission Requirements:

5.2.1 Do not submit a quality control plan. Offeror shall describe their plan for inspection and

acceptance of work. Address how QC plans will be made project specific and provide pertinent information regarding inspection of work, correction of nonconforming work, and acceptance and close-out procedures for task order projects.

5.2.2 Offeror shall describe their plan to communicate and enforce task order requirements, workmanship and safety standards to work force (i.e. in house and subcontractors).

5.2.3 Offeror shall describe their plan for submittals and conformance to a Job Order Contract and its individual task order specifications.

5.2.4 Offeror shall provide information on how it will handle internal and external requests for information, shop drawings, progress meetings, site visits, contract completion, closeout, as-built and completion documentation.

5.2.5 Offeror shall describe their plan for providing testing, quality control reporting, and shop drawing support. Proposed plan for quality control staffing levels and quality control responsibilities. How will it staff multiple awarded task orders to ensure proper oversight, safety and quality control?

Offeror shall explain the development of the Job Order Contract safety plan as a living document and how Activity Hazard Analysis for individual task orders will be implemented into the safety plan.

5.3 Evaluation Criteria:

5.3.1 The Offeror will be evaluated on the following items and how they relate to JOC. Evaluations will be based on their narrative plan for inspection and acceptance of work, how the QC plans will be made project specific and provide pertinent information regarding inspection of work, correction of nonconforming work, and acceptance and close-out procedures for task order projects.

5.3.2 Offeror will be evaluated on their plan to communicate and enforce task order requirements, workmanship and safety standards to work force (i.e. in house and subcontractors).

5.3.3 Offeror will be evaluated on the description of their plan for submittals and conformance to a Job Order Contract and its individual task order specifications.

5.3.4 Offeror will be evaluated on provided information on how they will handle internal and external requests for information, shop drawings, progress meetings, site visits, contract completion, closeout, as-built and completion documentation.

5.3.5 Offeror will be evaluated on the description of their plan for providing testing, quality control reporting, and shop drawing support. Proposed plan for quality control staffing levels and quality control responsibilities. How they will staff multiple awarded task orders to ensure proper oversight, safety and quality control.

5.3.6 Offeror will be evaluated on their explanation on the development of the Job Order Contract safety plan as a living document and how Activity Hazard Analysis for individual task orders will be implemented into the safety plan.

5.3.7 The page limitation for Factor 2 is limited to fifteen (15) pages. Offers exceeding the page

limitation for this factor will not be reviewed past the fifteenth page. Strengths and weaknesses of the Offeror's proposal will be documented to determine the overall Factor 2 rating. Material failures will result in a deficiency for Factor 2.

6.1 VOLUME 1, FACTOR 3 – PAST PERFORMANCE

6.2 Submission Requirements:

6.2.1 The Offeror shall demonstrate past performance through the submission of similar projects, using the Construction – Past Performance Assessment Worksheet – (Attachment 2). If the Offeror is a joint venture, provide past performance information for construction projects relevant to each of the proposed roles on this project. If any firm has multiple functions or divisions, limit the project examples to those performed by the division or unit submitting the offer. Offeror shall submit a minimum of three (3) and no more than five (5) projects completed or substantially completed within 6 years from the date of this solicitation that best represent their experience similar to the scope of work for this solicitation. Two (2) of the five (5) projects submitted may be current construction projects with at least 50% construction progress completed. If Offeror is proposing as a Joint Venture (JV) and past performance cannot be provided as a JV, each partner shall submit past performance information, with no more than five (5) projects each.

6.2.2 The Past Performance Questionnaire (PPQ) included in the solicitation (Attachment 1) is provided for the Offeror to submit to the client for each project the Offeror included in its proposal for Factor 3, Past Performance that does not have a final CCASS or ACASS evaluation or is a non-Federal Government project. Ensure correct phone numbers and email addresses are provided for the client point of contact. Completed PPQ should be submitted with your proposal. If the Offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the Offeror should complete and submit with the proposal the first page of the PPQ, which will provide contract and client information for the respective project(s). Offerors should follow-up with clients/references to ensure timely submittal of questionnaires. If any negative past performance information is received to which the Offeror has not previously had an opportunity to respond, the contractor will be given an opportunity to provide rebuttal. If the client requests, questionnaires may be submitted directly to the Government's point of contact, Akiba Muldrow, via e-mail at: akiba.t.muldrow@usace.army.mil prior to proposal closing date. Offerors shall not incorporate by reference into their proposals PPQ's previously submitted for other RFPs. However, this does not preclude the Government from utilizing previously submitted PPQ information in the past performance evaluation.

6.2.3 Do not request past performance questionnaires (PPQ) on projects that have final CCASS evaluations. If a final CCASS evaluation exists and a PPQ is provided for the same project, the CCASS evaluation will be reviewed as the official past performance record for the project, and the PPQ will not be considered by the Source Selection Board or the Source Selection Authority.

6.2.4 For USACE or other DoD projects which are underway but do not yet have an interim or final CCASS evaluation, one PPQ per contract may be submitted; to be considered, the PPQ shall be signed by the Administrative Contracting Officer (ACO) for the contract.

6.2.5 Offerors are not required to submit any additional past performance information. The Government will utilize CCASS, CPARS and any other information deemed relevant to assess

confidence in the Offeror's ability to perform.

6.2.6 Offerors may submit performance recognition documents received within the last six (6) years such as awards, award fee determinations, customer letters of commendation, and any other forms of performance recognition relevant to the submitted projects to demonstrate the Offeror's performance capabilities and customer satisfaction.

6.2.7 Offerors may submit information on past performance issues and corrective actions taken to prevent these issues from reoccurring. Discuss whether these corrective actions have been implemented on contracts awarded subsequent to the performance issues, the effectiveness of the corrective actions, and POC information for the subsequent contracts.

6.2.8 In addition to the above, the Government may review any other sources of information for evaluation of past performance. Other sources may include, but are not limited to, past performance information retrieved through the Past Performance Information Retrieval System (PPIRS), including Contractor Performance Assessment Reporting System (CPARS), using all CAGE/DUNS number of team members (Partnership, joint venture, teaming arrangement, or parent company/subsidiary/affiliate) identified in the offeror's proposal, inquires of owner representative(s), Federal Awardees Performance and Integrity Information System (FAPIS), Electronic Subcontract Reporting System (eSRS), and any other known sources not provided by the offeror. While the Government may elect to consider data from other sources, the burden of providing detailed, current, accurate and complete past performance information rest with the Offeror.

6.2.9 Projects will be considered relevant to this procurement if they are similar in complexity, in type, scope, or magnitude. Relevancy is defined as:

- (a) Job Order Contracts, Saber Contracts, IDIQ type contracts. Contracts identified as JOC, Saber or IDIQ contracts may increase the factor rating for Factor 3.
- (b) Construction, Repair, Renovation, SRM type contracts of at least \$2 Million.
- (c) Additionally, projects should reflect the following feature in terms of complexity:
 - (1) Concurrent construction on multiple projects performed simultaneously.

6.2.10 The Offeror may provide a supplemental narrative (not project lists), **not to exceed two (2) pages**, explaining how any corporate past performance that is not directly related to the specific projects above is applicable to this project and how the Government will benefit.

6.3 RELEVANCY DETERMINATION:

The Government will evaluate the Offeror's past performance to determine how relevant the past performance is to the project under consideration. Past performance on the projects identified in the project forms will receive more consideration than past performance provided in the supplemental narrative. The Government will place greater value on projects performed as a prime contractor than as a subcontractor, depending upon overall role and relevancy considerations. Federal Government project past performance will not be rated inherently more important than non-Federal Government project past performance.

6.3.1 More relevant past performance will typically be a stronger predictor of future success and have more influence on the past performance confidence assessment than past performance of lesser relevance.

6.3.2 Contracts with lower degrees of relevance will not be as strong of predictors of likely future contract performance success and will typically have less influence on the final past performance confidence rating.

6.3.3 Contracts that have little or no relevance typically do not influence the performance confidence rating; however, any contracts with adverse past performance could reflect larger company-wide concerns and may impact upon the past performance confidence rating.

6.3.4 Based on the relevancy of the projects submitted, an overall relevancy determination will be assessed as an interim step prior to establishing a confidence rating. For an overall relevancy determination of “relevant” or higher, the Offeror must demonstrate past performance that meets all defined aspects of relevancy on this project.

6.4 CONFIDENCE EVALUATION CRITERIA:

6.4.1 The Government will review the past performance information available, to include CCASS, CPARS and other past performance information deemed relevant, to determine the quality and usefulness as it applies to performance confidence assessment. If any firm has multiple functions or divisions, the Government will only evaluate past performance of the division or unit submitting the offer. If the Government cannot establish the Offeror’s relevant past performance, it reserves the right to utilize the Past Performance Questionnaire to conduct telephone interviews on any source it deems relevant to the evaluation. Owners/references may be asked to comment on items such as quality of construction, timeliness, management of the work, subcontractor management, including timely payment to subs or suppliers, safety, relations between owner and contractor, level of support for such things as as-built documentation, O&M manuals, training, correcting construction errors, warranty work, etc. The Government will not release the information gathered to the Offeror at any time, in order for the Government to solicit candid, unbiased interview comments. The Government’s evaluation is not limited to past performance information on the cited example projects.

6.4.2 In determining the performance confidence rating for Past Performance, the degree of relevancy/recency of all of the considered efforts; the overall performance record of the offeror on each contract assessed; number and severity of problems, the demonstrated effectiveness of corrective actions taken (not just planned or promised); and trend data will be considered. Contracts with higher degrees of relevance will typically have a greater influence on the final performance confidence rating. Contracts with lower degrees of relevance will typically have less influence on the final performance confidence rating however, any contracts with adverse past performance could reflect larger company-wide concerns and may impact upon the past performance confidence rating. Contracts which are comparatively more recent may be better predictors of likely future success than older contracts. The resulting relevant/recent assessment conclusions will then be combined, along with the assessed quality of performance on prior contracts, to arrive at a single performance confidence rating for the Past Performance Factor 3.

6.4.3 The confidence rating will be established based on the past performance of the firms or that of its predecessor, if applicable. An entity may not establish past performance based on the past

performance of its key personnel apart from that of the entity. If the Government does not obtain past performance information and cannot establish a past performance record for the Offeror through other sources, a rating of Unknown (Neutral) confidence will be assigned.

If negative information is received, the Offeror will be given an opportunity to provide input as required by FAR 15. CCASS and CPARs that are part of the official record will be utilized as if the Offeror has already had an opportunity to respond.

ATTACHMENT 1

PAST PERFORMANCE ASSESSMENT WORKSHEET <i>(To be completed for each project submitted)</i>		
SERVICES OR PRIME CONTRACTOR		PROJECT #
Offeror:		
Project and Location:		
Owner:		
Owner's Point of Contact for Reference:		Telephone:
Awarded Services Cost:		Final Services Cost:
Explain Cost Growth, if any:		
Date of Award:	Original Completion Date:	Revised Completion Date:
Explain Time Growth, if any:		
General Scope of Services and Offeror's Role:		
Work Your Company Self-Performed:		Extent and Type of Work You Subcontracted Out:
<p>Describe extent of relevancy of the project by checking all applicable boxes below and provide any additional narrative to support relevancy assessment (in terms of scope, magnitude and complexity as compared to the scope of the RFP). Higher relevancy will be assessed based on ability to meet multiple relevancy criteria listed below.</p> <p><input type="checkbox"/> Job Order Contracts, Saber Contracts, IDIQ type contracts. Contracts identified as JOC, Saber or IDIQ contracts may increase the factor rating for Factor 3.</p> <p><input type="checkbox"/> Construction, Repair, Renovation, SRM type contracts of at least \$2 Million.</p> <p><input type="checkbox"/> Additionally, projects should reflect the following feature in terms of complexity:</p> <ul style="list-style-type: none"> ▪ Concurrent construction on multiple projects performed simultaneously. 		
Your Performance Evaluation by Owner, if known :		

NAVFAC/USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)				
CONTRACT INFORMATION (Contractor to complete Blocks 1-4)				
1. Contractor Information				
Firm Name:	CAGE Code:			
Address:	DUNs Number:			
Phone				
Email				
Address:				
City:				
Point of Contact:	Contact Phone Number:			
2. Work Performed as:				
	Prime Contractor	Sub Contractor	Joint Venture	Other
(Explain) Percent of project work performed:				
If subcontractor, who was the prime (Name/Phone #):				
3. Contract Information				
Contract Number:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delivery/Task Order Number (if applicable):				
Contract Type:	Firm Fixed Price	Cost Reimbursement	Other	
(Please specify): Contract Title:				
Contract Location:				
Award Date (mm/dd/yy):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Contract Completion Date				
(mm/dd/yy): Actual				
Completion Date				
(mm/dd/yy): Explain				
Differences:				
Original Contract Price (Award Amount):				
Final Contract Price (to include all modifications,				
4. Project Description:				
Complexity of Work High Med Routine				
How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.)				
CLIENT INFORMATION (Client to complete Blocks 5-8)				
5. Client Information				
Name				
Address				
City				
State				
6. Describe the client's role in the project:				
7. Date Questionnaire was completed (mm/dd/yy):				
8. Client's Signature:				

(M) Marginal	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

TO BE COMPLETED BY CLIENT

**PLEASE CIRCLE THE ADJECTIVE RATING
WHICH BEST REFLECTS YOUR
EVALUATION OF THE CONTRACTOR'S**

1. QUALITY:	
a) Quality of technical data/report preparation efforts	E VG S M U N
b) Ability to meet quality standards specified for technical performance	E VG S M U N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E VG S M U N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E VG S M U N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:	
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below)</i>	E VG S M U N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E VG S M U N
3. CUSTOMER SATISFACTION:	
a) To what extent were the end users satisfied with the project?	E VG S M U N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E VG S M U N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	E VG S M U N
d) Overall customer satisfaction	E VG S M U N
4. MANAGEMENT/PERSONNEL/LABOR	
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	E VG S M U N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E VG S M U N
c) Government Property Control	E VG S M U N
d) Knowledge/expertise demonstrated by contractor personnel	E VG S M U N

e) Utilization of Small Business concerns	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple	E	VG	S	M	U	N

disciplines						
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	E	VG	S	M	U	N
5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of	E	VG	S	M	U	N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>		Yes			No	
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>		Yes			No	
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>		Yes			No	
6. SAFETY/SECURITY						
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	E	VG	S	M	U	N
b) Contractor complied with all security requirements for the project and personnel security requirements.	E	VG	S	M	U	N
7. GENERAL						

a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	E VG S M U N
b) Compliance with contractual terms/provisions (explain if specific issues)	E VG S M U N
c) In summary, provide an overall rating for the work performed by this contractor.	E VG S M U N

Please provide responses to the questions above (if applicable) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk (please attach additional pages if necessary):

7.1 VOLUME 1, FACTOR 4 – SMALL BUSINESS UTILIZATION

7.2 GENERAL: In accordance with FAR 52.219-8, Utilization of Small Business Concerns, it is the policy of the United States that small business concerns, veteran- owned small business concerns, service-disabled veteran-owned small business concerns, 8(a) and 8(a) Joint Venture small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems.

It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, 8(a) and 8(a) Joint Venture small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Size determination, as defined by the North American Industry Classification System (NAICS) Code, for this solicitation is: 236220

7.2. Submission Requirements:

In accordance with FAR 52.219-8, All Offerors are to provide:

- 7.2.1**
- (a) A narrative statement describing the Offeror's compliance with FAR 52.219-8, Utilization of Small Business Concerns as stated above (required for small and large business firms).
 - (b) A narrative statement describing established procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with all small business concerns. (required for small and large business firms)
 - (c) A narrative statement affirming the policy compliance of providing maximum practicable opportunity to all small business concerns in the performance of this solicitation. (required for small and large business firms)
 - (d) Evidence of past performance of small business utilization. The small business Offeror shall provide 3 (three) completed projects over the past three years. The Offeror is to utilize Attachment 2 when complying with this requirement (required for small business firms only).

7.3 Evaluation Criteria:

7.3.1 The Government request that you submit one form per project with actual percentages from the documentation provided in response to Factor 4. Offerors must demonstrate all of the requirements

identified in (a) through (d) above for compliance with FAR 52.219-8. All forms will be evaluated to receive an "Acceptable" on this factor. The rating for this factor will be either "Acceptable" or "Unacceptable".

ATTACHMENT 2 - SMALL BUSINESS PARTICIPATION PLAN

INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

All Offerors (both large and small businesses) are required to complete a Small Business Participation Plan to be evaluated under Small Business Participation Evaluation Factor. The Offeror shall articulate how the Offeror intends to meet the small business objectives described in the Small Business Evaluation Factor.

Small Business Participation Plan (Form)

(1) Check the applicable size and categories for the PRIME Offeror -- Check all applicable boxes:

- Large Prime
- or
- Small Business Prime; also categorized as a
 - 8(a) Small Businesses
 - Woman-Owned Small Business
 - HUB Zone Small Business
 - Veteran Owned Small Business
 - Service Disabled Veteran Owned Small Business
 - HBCU/MIs

(2) Submit the total combined percentage (must equal 100%) of work to be performed by both large and small businesses (include the percentage of work to be performed both by Prime and Subcontractors):

Example: If Prime proposes a price of \$1,000,000 (including all options), and small business (es) will provide \$250,000 in services/supplies as a prime or subcontractor,

The % planned for small businesses is 25%; and 75% for large business equaling 100%.

Percentage of Total Contract Dollars

Total Percentage planned for Large Business (es) _____%

Total Percentage planned for Small Business (es) _____%

Total: 100%

(3) Please indicate the total percentage of participation to be performed by each type of small business. The percentage of work performed by Small Businesses that qualify in multiple small

business categories may be counted in each category:

Example: Victory Prop Mgt (WOSB and SDVOSB) performing 2%; and Gentleman Concierge (HUBZone WOSB) performing 3%. Results equate to: HUBZone 3%; WOSB 5%; SDVOSB 2%; VOSB 2%;). SDVOSBs are also VOSBs automatically; however VOSBs are not automatically SDVOSBs.

8(a) Small Businesses	_____%
HUB Zone Small Business	_____%
Woman Owned Small Business	_____%
Service Disabled Veteran Owned SB	_____%
Veteran Owned Small Business	_____%
HBCU/MIs	_____%

(4) List principle supplies/services to be performed by Small Businesses:

Example: If a Small Business qualifies also as a WOSB and a SDVOSB, and you can add them to each category below in which they qualify.

Name of Company	Identify Type of Service/Supply
Small:	_____

8(a):	_____

Women-Owned Small:	_____

HUB Zone Small:	_____

Veteran Owned Small:

Service Disabled Veteran Owned Small:

HBCU/MI:

(5) Describe the extent of commitment to use small businesses (for example, what types of commitments if any are in place for this specific acquisition either -- written, verbal, enforceable, non-enforceable, joint venturing, mentor- protégé, etc.)

(6) Large Business Subcontracting Past Performance: Describe the extent to which you attained applicable goals for contracts that required you to submit a Subcontracting Plan. You may include copies of up to three ISRs (Individual Subcontracting Reports) or SSRs (Summary Subcontract Report) to validate your past performance. You may also submit an explanation of your efforts, where you failed to meet goals.

Additional Important Note for Large Businesses only.

Small Business Sub-Contracting Plans (52.219-9)

Separate from the Small Business Participation Plan, large business Offerors must also submit a Subcontracting Plan (Individual Contract Plan) as required by FAR 52.219-9. Large businesses will not be eligible for award if they fail to submit an acceptable Subcontracting Plan. Subcontracting Plans shall reflect and be consistent with the commitments offered in the Small Business Participation Plan. In accordance with DFARS 215.304(c), when an evaluation assesses the extent that small businesses are specifically identified in proposals, the small businesses considered in the evaluation shall be listed in any subcontracting plan submitted.

Example Calculation:

As committed in the Small Business Participation Plan:
 Small Business participation 30% of total contract
 value Large Business participation 70% of total
 contract value

As reflected in the CLIN
 Schedule: Offeror's Price
 \$1,000,000

Small Business subcontracted dollars must be \$300,000 to reflect the commitment made in the Small Business Participation Plan and they must be calculated as a percentage of the subcontracted dollars in the subcontracting plan.

As reflected in the Subcontracting
 Plan: Offeror's Price \$1,000,000
 Subcontracted Dollars \$ 750,000
 Small Business Dollars \$ 300,000 = 40% subcontracted to small business
 60% subcontracted to large business

8.0 Definitions

8.1 Deficiency. A deficiency is a material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level. See FAR 15.001.

8.2 Weakness. A flaw in the proposal that increases the risk of unsuccessful contract performance. See FAR 15.001.

8.3 Significant Weakness. A flaw in the proposal that significantly increases the risk of unsuccessful contract performance. See FAR 15.001.

8.4 Strength. Any aspect of an Offeror's proposal that has merit or exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance.

8.5 Significant Strength. An aspect of an Offeror's proposal that has appreciable merit or appreciably exceeds specified performance or capability requirements in a way that will be appreciably advantageous to the Government during contract performance.

8.6 Uncertainty. Any aspect of a non-cost/price factor proposal for which the intent of the offer is unclear (e.g. more than one way to interpret the offer or inconsistencies in the proposal indicating that there may have been an error, omission, or mistake).

8.7 Outstanding. Proposal meets requirements and indicates an exceptional approach and understanding of the requirements. Strengths far outweigh any weaknesses. Risk of unsuccessful performance is very low.

8.8 Good. Proposal meets requirements and indicates a thorough approach and understanding of the requirements. Proposal contains strengths which outweigh any weaknesses. Risk of unsuccessful performance is low.

8.9 Acceptable. Proposal meets requirements and indicates an adequate approach and understanding of the requirements. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. Risk of unsuccessful performance is no worse than moderate.

8.10 Marginal. Proposal does not clearly meet requirements and has not demonstrated an adequate approach and understanding of the requirements. The proposal has one or more weaknesses which are not offset by strengths. Risk of unsuccessful performance is high.

8.11 Unacceptable. Proposal does not meet requirements and contains one or more deficiencies. Proposal is unawardable.

8.12 Performance Ratings. A single confidence rating shall be assigned to Past Performance.

8.12.1 The relevancy determination will assess the Offeror's past performance to determine how relevant a recent effort accomplished by the Offeror is to the effort to be acquired under this solicitation.

8.12.2 The confidence rating assesses the risks associated with each Offeror's likelihood of success in performing the requirements stated in the RFP based on the Offeror's demonstrated performance on recent contracts. SSEB members and the SSA may use personal knowledge or information from other sources in its evaluation of an Offeror's past performance, provided such information is consistent with the established evaluation criteria of the RFP. Offeror's that have no relevant performance record will be given a neutral/unknown confidence rating.

8.13 Relevancy Determination Definitions

8.14 Very Relevant. Present/past performance effort involved essentially the same scope and magnitude of effort and complexities this solicitation requires.

8.15 Relevant. Present/past performance effort involved similar scope and magnitude of effort and complexities this solicitation requires.

8.16 Somewhat Relevant. Present/past performance effort involved some of the scope and magnitude of effort and complexities this solicitation requires.

8.17 Not Relevant. Present/past performance effort involved little or none of the scope and magnitude of effort and complexities this solicitation requires.

8.18 Confidence Rating System

8.19 Unknown Confidence (Neutral). No relevant performance record is identifiable upon which to base a meaningful performance risk prediction. A search was unable to identify any relevant past performance information for the Offeror or key team members/subcontractors. This is neither a

negative or positive assessment.

8.20 **Substantial Confidence.** Based on the Offeror's recent/relevant performance record, the Government has a high expectation that the Offeror will successfully perform the required effort.

8.21 **Satisfactory Confidence.** Based on the Offeror's recent/relevant performance record, the Government has a reasonable expectation that the Offeror will successfully perform the required effort.

8.22 **Limited Confidence.** Based on the Offeror's recent/relevant performance record, the Government has a low expectation that the Offeror will successfully perform the required effort.

8.23 **No Confidence.** Based on the Offeror's recent/relevant performance record, the Government has no expectation that the Offeror will be able to successfully perform the required effort.

9.0 VOLUME 2 – FACTOR 5 – PRICE AND OTHER REQUIRED INFORMATION

9.1 VOLUME 2 -TAB A – Coefficient Factor (CONTRACT LINE ITEM NUMBER PRICE SCHEDULE)

9.1.1 Submission Requirements:

Submit the properly filled out CLIN 0001-0004 Pricing Schedule, containing proposed line item and total pricing, as well as the proposed contract duration. See instructions in Section 00 21 00, "Instructions to Offerors". All elements of the Offeror's technical proposal shall be included in the total price for the project. Submit the other required information in a separate electronic file labeled: "Volume 2 – Price and Other Required Information."

9.2 Evaluation Criteria:

Price will not be rated, but will be evaluated for fairness and reasonableness through the use of a price analysis. The price evaluators will also check for appearance of unbalanced line item prices. Offerors are cautioned to distribute direct costs, such as material, labor, equipment, subcontracts, etc. and to evenly distribute indirect costs, such as job overhead, home office overhead, bond, etc., to the appropriate contract line items. Both parties shall presume that field overhead costs through the proposed contract duration are inclusive in the offered price for the contract. If deemed necessary, the supplemental price breakdown information will be used to assist the Government in performing the price evaluations described above. All pricing should be included in the coefficients. The Government considers a coefficient below 1 to be unreasonable and that Offerors proposal with coefficients below 1 will not be considered for award. Award may not be made for an Offeror's proposal for design and construction that exceeds the cost limitation described herein.

9.4 VOLUME 2, TAB B – BID GUARANTEE

9.4.1 Submission Requirements:

Submit the Bid Bond in accordance with the Instructions in Section 00 21 00, Provision 52.228-1 Bid Guarantee. Scan copy of the bid bond shall be submitted electronically as part of Volume 2. Hard copy submission of the bid bond is **not** required.

9.4.2. Evaluation requirement

This item is not rated. The Government will review the Bid Bond for legal sufficiency. The Bond must be legally sufficient. Failure to submit a bid bond may will receive an “unacceptable” rating. f. The rating for this factor will be either “Acceptable” or “Unacceptable”.

9.5 VOLUME 2, TAB C – REQUIRED PRE-AWARD INFORMATION**9.5.1. Submission Requirements:**

9.5.2. Submit this information for the Contracting Officer’s determination of Offeror responsibility, which includes, but is not limited to the following:

- (a) A list of present commitments, including the dollar value thereof, and name of the organization under which the work is being performed. Include names and telephone numbers of personnel within each organization who are familiar with the prospective contractor’s performance.
- (b) A certified statement listing; (1) each contract awarded within the preceding three month period exceeding \$750,000.00 in value with a brief description of the contract; and (2) each contract awarded within the preceding three year period not already physically completed and exceeding \$5,000,000.00 in value with a brief description of the contract.
- (c) If the prospective contractor is a joint venture, each joint venture member will be required to submit the above defined certification.

9.5.3. Evaluation Requirements:

In addition to the other proposal information, the Contracting Officer shall use this information in making an affirmative responsibility determination for award to the Successful Offerors, in accordance with FAR Part 9. Failure to achieve an affirmative responsibility determination will receive an “unacceptable” rating. The rating for this factor will be either “Acceptable” or “Unacceptable”

9.6 VOLUME 2, TAB D – REPRESENTATIONS AND CERTIFICATIONS**9.6.1. Submission Requirements:**

Confirm that the Offeror’s is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically in accordance with FAR 52.204-7.

9.6.2. Evaluation Criteria

The representations and certifications submitted under this requirement as well as online will be reviewed to ensure the Offeror’s representations are consistent, accurate and in accordance with regulation. The rating for this factor will be either “Acceptable” or “Unacceptable”.

10.1 EVALUATION PROCEDURES

10.2 GENERAL:

The Source Selection Evaluation Board will evaluate the proposals and assign a consensus rating for each evaluation factor, utilizing the evaluation and rating system described in section 00 21 00.

10.3 DISCUSSIONS (If Necessary) –

10.3.1 The Government intends to award without discussions. A “Competitive Range” is a subjective determination of the most highly rated proposals in the event that discussions with Offerors are required. In such an event, the SSA will approve a competitive range of all the most highly rated proposals.

10.3.2 If discussions are held, the Government may engage in a broad give and take with each Offeror in the competitive range, in accordance with FAR 15.306 (d). The Government will provide the Offeror an advance agenda for the discussions. During discussions, the Government may ask the Offeror to further explain its proposal and to answer questions about it.

10.3.3 Upon conclusion of discussions, those Offerors still considered the most highly rated, will be afforded an opportunity to submit their proposal revisions for final evaluation and selection.

In addition to the other proposal information, the Contracting Officer shall use this information in making an affirmative responsibility determination for award to the Successful Offerors, in accordance with FAR Part 9. Failure to achieve an affirmative responsibility determination will make the Offeror ineligible for award.

End of Section 00 22 11

Section 00 45 00 - Representations and Certifications

CLAUSES INCORPORATED BY REFERENCE

52.204-3	Taxpayer Identification	OCT 1998
52.209-7	Information Regarding Responsibility Matters	JUL 2013

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (APR 2016)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 236220.
- (2) The small business size standard is \$36.5M.
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.
- (2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
- () Paragraph (d) applies.
- () Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.
- (c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:
- (i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—
- (A) The acquisition is to be made under the simplified acquisition procedures in Part 13;
- (B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or
- (C) The solicitation is for utility services for which rates are set by law or regulation.
- (ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.
- (iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.
- (iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

- (A) Are not set aside for small business concerns;
 - (B) Exceed the simplified acquisition threshold; and
 - (C) Are for contracts that will be performed in the United States or its outlying areas.
- (v) 52.209-2; Prohibition on Contracting with Inverted Domestic Corporations--Representation.
- (vi) 52.209-5; Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (vii) 52.209-11, Representation by Corporations Regarding delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.
- (viii) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.
- (ix) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (x) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.
- (A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.
 - (B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.
- (xi) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.
- (xii) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.
- (xiii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.
- (xiv) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.
- (xv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.
- (xvi) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.
- (xvii) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.
- (xviii) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225- 3.
- (A) If the acquisition value is less than \$25,000, the basic provision applies.
 - (B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.
 - (C) If the acquisition value is \$50,000 or more but is less than \$77,533, the provision with its Alternate II applies.

(D) If the acquisition value is \$77,533 or more but is less than \$100,000, the provision with its Alternate III applies.

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

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

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

(xxii) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

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

[Contracting Officer check as appropriate.]

(i) 52.204-17, Ownership or Control of Offeror.

(ii) 52.204-20, Predecessor of Offeror.

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

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

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

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

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

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

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

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

(End of provision)

252.203-7996 PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRE CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS—REPRESENTATION (DEVIATION 2016-O0003)(OCT 2015)

(a) In accordance with section 101(a) of the Continuing Appropriations Act, 2016 (Pub. L. 114-53) and any subsequent FY 2016 appropriations act that extends to FY 2016 funds the same restrictions as are contained in section 743 of division E, title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), none of the funds appropriated (or otherwise made available) by this or any other Act may be used for a contract with an entity that requires employees or subcontractors of such entity seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contactors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(b) The prohibition in paragraph (a) of this provision does not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(c) *Representation.* By submission of its offer, the Offeror represents that it does not require employees or subcontractors of such entity seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contactors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(End of provision)

252.204-7007 ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2015)

Substitute the following paragraphs (d) and (e) for paragraph (d) of the provision at FAR 52.204-8:

(d)(1) The following representations or certifications in the System for Award Management (SAM) database are applicable to this solicitation as indicated:

(i) 252.209-7003, Reserve Officer Training Corps and Military Recruiting on Campus--Representation. Applies to all solicitations with institutions of higher education.

(ii) 252.216-7008, Economic Price Adjustment--Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

(iii) 252.222-7007, Representation Regarding Combating Trafficking in Persons, as prescribed in 222.1771. Applies to solicitations with a value expected to exceed the simplified acquisition threshold.

(iv) 252.225-7042, Authorization to Perform. Applies to all solicitations when performance will be wholly or in part in a foreign country.

(v) 252.225-7049, Prohibition on Acquisition of Commercial Satellite Services from Certain Foreign Entities--Representations. Applies to solicitations for the acquisition of commercial satellite services.

(vi) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of \$150,000 or more.

(vii) 252.229-7012, Tax Exemptions (Italy)--Representation. Applies to solicitations when contract performance will be in Italy.

(viii) 252.229-7013, Tax Exemptions (Spain)--Representation. Applies to solicitations when contract performance will be in Spain.

(ix) 252.247-7022, Representation of Extent of Transportation by Sea. Applies to all solicitations except those for direct purchase of ocean transportation services or those with an anticipated value at or below the simplified acquisition threshold.

(2) The following representations or certifications in SAM are applicable to this solicitation as indicated by the Contracting Officer: [Contracting Officer check as appropriate.]

___ (i) 252.209-7002, Disclosure of Ownership or Control by a Foreign Government.

___ (ii) 252.225-7000, Buy American--Balance of Payments Program Certificate.

___ (iii) 252.225-7020, Trade Agreements Certificate.

___ Use with Alternate I.

___ (iv) 252.225-7031, Secondary Arab Boycott of Israel.

___ (v) 252.225-7035, Buy American--Free Trade Agreements--Balance of Payments Program Certificate.

___ Use with Alternate I.

___ Use with Alternate II.

___ Use with Alternate III.

___ Use with Alternate IV.

___ Use with Alternate V.

(e) The offeror has completed the annual representations and certifications electronically via the SAM Web site at <https://www.acquisition.gov/>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in FAR 52.204-8(c) and paragraph (d) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below ___ [offeror to insert changes, identifying change by provision number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR/DFARS Clause #	Title	Date	Change
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Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications located in the SAM database.

(End of provision)

Section 00 72 00 - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	NOV 2013
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	MAY 2014
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	MAY 2014
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	MAY 2014
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	MAY 2014
52.203-13	Contractor Code of Business Ethics and Conduct	OCT 2015
52.203-17	Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights	APR 2014
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	OCT 2015
52.204-13	System for Award Management Maintenance	JUL 2013
52.204-18	Commercial and Government Entity Code Maintenance	JUL 2016
52.204-19	Incorporation by Reference of Representations and Certifications	JAN 2015
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	OCT 2015
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	JUL 2013
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	NOV 2015
52.211-10	Commencement, Prosecution, and Completion of Work	APR 1984
52.211-12	Liquidated Damages--Construction	SEP 2000
52.211-15	Defense Priority And Allocation Requirements	APR 2008
52.215-2	Audit and Records--Negotiation	OCT 2010
52.215-11	Price Reduction for Defective Certified Cost or Pricing Data-- Modifications	AUG 2011
52.215-13	Subcontractor Certified Cost or Pricing Data--Modifications	OCT 2010
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data -- Modifications	OCT 2010
52.216-19	Order Limitations	OCT 1995
52.216-22	Indefinite Quantity	OCT 1995
52.216-27	Single or Multiple Awards	OCT 1995
52.217-7	Option For Increased Quantity-Separately Priced Line Item	MAR 1989
52.217-8	Option To Extend Services	NOV 1999
52.217-9	Option To Extend The Term Of The Contract	MAR 2000
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns	OCT 2014
52.222-1	Notice To The Government Of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards- Overtime Compensation	MAY 2014
52.222-6	Construction Wage Rate Requirements	MAY 2014
52.222-7	Withholding of Funds	MAY 2014

52.222-8	Payrolls and Basic Records	MAY 2014
52.222-9	Apprentices and Trainees	JUL 2005
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	MAY 2014
52.222-12	Contract Termination-Debarment	MAY 2014
52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	MAY 2014
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	MAY 2014
52.222-21	Prohibition Of Segregated Facilities	APR 2015
52.222-23	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction	FEB 1999
52.222-26	Equal Opportunity	APR 2015
52.222-27	Affirmative Action Compliance Requirements for Construction	APR 2015
52.222-35	Equal Opportunity for Veterans	OCT 2015
52.222-36	Equal Opportunity for Workers with Disabilities	JUL 2014
52.222-37	Employment Reports on Veterans	FEB 2016
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
52.222-50	Combating Trafficking in Persons	MAR 2015
52.222-54	Employment Eligibility Verification	OCT 2015
52.223-2	Affirmative Procurement of Biobased Products Under Service and Construction Contracts	SEP 2013
52.223-5	Pollution Prevention and Right-to-Know Information	MAY 2011
52.223-6	Drug-Free Workplace	MAY 2001
52.223-17	Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts	MAY 2008
52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
52.225-5	Trade Agreements	FEB 2016
52.225-11	Buy American--Construction Materials Under Trade Agreements	FEB 2016
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.226-1	Utilization Of Indian Organizations And Indian-Owned Economic Enterprises	JUN 2000
52.227-1	Authorization and Consent	DEC 2007
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	DEC 2007
52.227-4	Patent Indemnity-Construction Contracts	DEC 2007
52.228-2	Additional Bond Security	OCT 1997
52.228-11	Pledges Of Assets	JAN 2012
52.228-12	Prospective Subcontractor Requests for Bonds	MAY 2014
52.228-14	Irrevocable Letter of Credit	NOV 2014
52.228-15	Performance and Payment Bonds--Construction	OCT 2010
52.229-3	Federal, State And Local Taxes	FEB 2013
52.230-3	Disclosure And Consistency Of Cost Accounting Practices	OCT 2015
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 2014
52.232-17	Interest	MAY 2014
52.232-18	Availability Of Funds	APR 1984
52.232-23	Assignment Of Claims	MAY 2014
52.232-27	Prompt Payment for Construction Contracts	MAY 2014
52.232-33	Payment by Electronic Funds Transfer--System for Award Management	JUL 2013

52.232-39	Unenforceability of Unauthorized Obligations	JUN 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	DEC 2013
52.233-1	Disputes	MAY 2014
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-4	Physical Data	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.236-14	Availability and Use of Utility Services	APR 1984
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21	Specifications and Drawings for Construction	FEB 1997
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	JUN 2007
52.246-12	Inspection of Construction	AUG 1996
52.246-21	Warranty of Construction	MAR 1994
52.248-3	Value Engineering-Construction	OCT 2015
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	APR 2012
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (Apr 2012) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.249-10 Alt I	Default (Fixed-Price Construction) (Apr 1984) Alternate I	APR 1984
52.252-2	Clauses Incorporated By Reference	FEB 1998
52.252-4	Alterations in Contract	APR 1984
52.252-6	Authorized Deviations In Clauses	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.203-7004	Display of Fraud Hotline Poster(s)	OCT 2015
252.203-7997 (Dev)	Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements (Deviation 2016-O0003)	OCT 2015
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	System for Award Management Alternate A	FEB 2014
252.204-7006	Billing Instructions	OCT 2005
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting.	DEC 2015

252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Country that is a State Sponsor of Terrorism	OCT 2015
252.215-7000	Pricing Adjustments	DEC 2012
252.219-7009	Section 8(a) Direct Award	SEP 2007
252.219-7010	Notification of Competition Limited to Eligible 8(A) Concerns--Partnership Agreement	MAR 2016
252.223-7006	Prohibition On Storage, Treatment, and Disposal of Toxic or Hazardous Materials	SEP 2014
252.225-7012	Preference For Certain Domestic Commodities	AUG 2016
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	SEP 2004
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7010	Levies on Contract Payments	DEC 2006
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7001	Contract Drawings, and Specifications	AUG 2000
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	DEC 2012
252.244-7000	Subcontracts for Commercial Items	JUN 2013
252.246-7004	Safety of Facilities, Infrastructure, and Equipment for Military Operations	OCT 2010
252.247-7023	Transportation of Supplies by Sea	APR 2014

Section 00 73 10 - Supplemental Contract Requirements

SUPPLEMENTAL CONTRACT REQUIREMENT

W9126G-16-R-0048

Fort Hood 8(a) Job Order Contract

UAI SCR 22.406-6-100**Contractor Supply and Use of Electronic Software for Processing Davis-Bacon Act Certified Labor Payrolls – April 2011**

- (a) The contractor is encouraged to use a commercially-available electronic system to process and submit certified payrolls electronically to the Government. The requirements for preparing, processing and providing certified labor payrolls are established by the Davis-Bacon Act as stated in [FAR clause 52.222-8, Payrolls and Basic Records](#) and [FAR clause 52.222-13, Compliance with Davis-Bacon and Related Act Regulations](#).
- (b) If the contractor elects to use an electronic Davis-Bacon Act payroll processing system, then the contractor shall be responsible for obtaining and providing for all access, licenses, and other services required to provide for receipt, processing, certifying, electronically transmitting to the Government, and storing weekly payrolls and other data required for the contractor to Comply with Davis-Bacon and Related Act Regulations. When the contractor uses an electronic Davis-Bacon Act payroll system, the electronic payroll service shall be used by the contractor to prepare, process, and maintain the relevant payrolls and basic records during all work under this construction contract and the electronic payroll service shall be capable of preserving these payrolls and related basic records for the required 3 years after contract completion. If the contractor chooses to use an electronic Davis-Bacon Act payroll system, then the contractor shall obtain and provide electronic system access to the Government, as required to comply with the Davis-Bacon and Related Act Regulations over the duration of this construction contract. The access shall include electronic review access by the Government contract admin office to the electronic payroll processing system used by the contractor.
- (c) The contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria: commercially available; compliant with appropriate Davis Bacon Act payroll provisions in the FAR; able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract; capable of producing an Excel spreadsheet-compatible electronic output of weekly payroll records (format at <http://rms.usace.army.mil/guides.aspx>) for export in an Excel spreadsheet to be imported into the contractor's Quality Control System (QCS) version of Resident Management System (RMS), that in turn shall export payroll data to the Government's Resident Management System (RMS); demonstrated security of data and data entry rights; ability to produce contractor-certified electronic versions of weekly payroll data; ability to identify erroneous entries and track the data/time of all versions of the certified Davis-Bacon Act payrolls submitted to the government over the life of the contract; capable of generating a durable record copy, that is, a CD or DVD and PDF file record of data from the system database at end of the contract closeout. This durable record copy of data from the electronic D-B payroll processing system shall be provided to the Government during contract closeout.
- (d) All contractor-incurred costs related to the contractor's provision and use of an electronic payroll processing service shall be included in the contractor's price for the overall work under the contract. The costs for Davis-Bacon Act compliance using electronic payroll processing services shall not be a separately bid or reimbursed item under this contract.

(End of special contract requirement)

UAI 52.24-5000**Basis for Settlement of Proposals**

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

- (1) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.
 - (2) If equipment costs have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.
 - (3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.
 - (4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).
 - (5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.
- (End of clause)

SPECIAL CONTRACT REQUIREMENTS**PARTNERING (AUG 97)**

In order to most effectively accomplish this contract, the Government proposes to form a partnership with the Contractor to develop a cohesive building team. It is anticipated that this partnership would involve the Corps of Engineers, PARTNERSHIP TBD BY COE, the Contractor and primary subcontractors. This partnership would strive to develop a cooperative management team drawing on the strengths of each team member in an effort to achieve a quality project within budget and on schedule. This partnership would be bilateral in membership and participation will be totally voluntary. All costs, excluding labor and travel expenses, shall be shared equally between the Government and the Contractor. The Contractor and Government shall be responsible for their own labor and travel costs.

KEY PERSONNEL, SUBCONTRACTORS AND OUTSIDE ASSOCIATES OR CONSULTANTS (MAY 2006)

In connection with this contract, any in-house personnel, subcontractors, and outside associates or consultants will be limited to individuals or firms that were specifically identified in the Contractor's accepted proposal. The Contractor shall obtain the Contracting Officer's written consent before making any substitution for these designated in-house personnel, subcontractors, associates, or consultants. If the Contractor proposes a substitution, it shall submit the same type of information that was submitted in the accepted proposal to the Contracting Officer for evaluation and approval. The level of qualifications and experience submitted in the accepted proposal or that required by the Solicitation, whichever is greater, is the minimum standard for any substitution.

GOVERNMENT-FURNISHED RFP DRAWINGS, SURVEYS AND SPECIFICATIONS (JUL 2002)

This is to clarify that contract clause 252.236-7001, CONTRACT DRAWINGS AND SPECIFICATIONS, refers to any Government-furnished design or design criteria included in the Request for Proposal (RFP).

GOVERNMENT-FURNISHED SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION

This is to clarify that contract clause 52.236-21, SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, refers to any specifications and drawings furnished in the Request for Proposal (RFP). The term "specifications" refers to the design criteria or scope of work, in addition to any attached specifications.

ADDITIONAL MONTHLY INCENTIVE PROGRESS PAYMENT (MAY 2006)

a. As an incentive for maintaining satisfactory progress, The Government offers to make an interim monthly progress payment for satisfactory construction work in compliance with the contract, while construction operations are underway, up to turnover of the facilities to the Government. This is a second monthly progress payment, in between the regular monthly progress payment that is described in Contract Clause 52.232-5,

PAYMENTS UNDER FIXED PRICE CONSTRUCTION CONTRACTS.

a. As a condition for the additional progress payment, the Contractor must maintain progress within 2% of scheduled progress and within 7 calendar days of the scheduled progress along the critical path(s) at the time of submission.

b. All requirements of the contract clauses PAYMENTS UNDER FIXED PRICE CONSTRUCTION CONTRACTS and 52.232-25, PROMPT PAYMENT, will apply to the interim progress payment. In lieu of submitting an updated progress schedule to substantiate the amounts included in the interim progress payment, the Contracting Officer will determine what documentation is required to support an interim payment, including the required Prompt Payment Certification. For the next regular monthly progress payment following an interim payment, the Contractor shall reconcile the interim progress payment against actual progress.

US ARMY CORPS OF ENGINEERS SAFETY AND HEALTH REQUIREMENTS MANUAL (MAR2006)

In accordance with Contract Clause 52.236-13, ACCIDENT PREVENTION, the Contractor shall comply with the latest version of Engineer Manual 385-1-1, including any interim revisions, in effect at the time of the solicitation. EM 385-1-1 and its changes are available at <http://www.hq.usace.army.mil/hqhome/>. At the HQ homepage, select HQ Offices, scroll to Safety & Occ. Health; at the Safety and Occupational Health Home page, select EM 385-1-1, then most recent dated edition & changes, English Version (controlling with changes), then Changes to EM 385-1-1.

SUPPLEMENTAL PRICE BREAKDOWN INFORMATION

After contract award, the Government will require the Contractor to provide a cost breakdown of each facility by square foot, including major building systems to the five-foot line, for programming validation purposes. There will be no separate payment for this information and the Contractor shall include it in the contract price. The Government will provide a format with the directive.

CONTRACTOR PERFORMANCE EVALUATION

In accordance with the provisions of Subpart 36.201 (Evaluation of Contractor Performance) of the Federal Acquisition Regulation (FAR), construction contractor's performance shall be evaluated throughout the performance of the contract. The United States Army Corps of Engineers (USACE) follows the procedures outlined in Engineering Regulation 415-1-17 to fulfill this FAR requirement. For construction contracts awarded at or above \$700,000.00, the USACE will evaluate contractor's performance and prepare a performance report using the Construction Contractor Appraisal Support System (CCASS), which is now a web-based system. After an evaluation (interim or final) is written up by the USACE, the contractor will have the ability to access, review and comment on the evaluation for a period of 30 days. Accessing and using CCASS requires specific software, called PKI certification, which is installed on the user's computer. The certification is a Department of Defense requirement and was implemented to provide security in electronic transactions. The certification software could cost approximately \$110 - \$125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor. Current information about the PKI certification process and for contacting vendors can be found on the web site: <http://www.cpars.csd.disa.mil/> If the Contractor wishes to participate in the performance evaluation process, access to CCASS and PKI certification is the sole responsibility of the Contractor.

REQUIRED INSURANCE

Pursuant to FAR 28.307-2, the Contractor shall procure and maintain during the entire period of his performance under this contract the following minimum insurance:

- a. Worker's compensation and employers' liability insurance in compliance with applicable state statutes, with a minimum employers' liability coverage of \$100,000.
- b. Comprehensive general liability insurance for bodily injury in the minimum limits of \$500,000 per occurrence. No property damage liability insurance is required.
- c. Comprehensive automobile liability insurance covering the operation of all automobiles used in connection with the performance of the contract in the minimum limits of \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. (See Contract Clause entitled Insurance—Work on a Government Installation).

NON-PREPRICED WORK

1. Non-prepriced work (i.e., tasks not in the Unit Price Book [UPB]) shall be supported by a minimum of two vendor quotes and must be submitted by the contractor for each item. Non-prepriced items shall be proposed in bare costs only (material, equipment, labor) and multiplied by the overhead and profit rates proposed for non-prepriced items (for each region) in the pricing schedule (see Pricing Schedule, line items for nonprepriced items). Non-prepriced items will not be accepted without the minimum two vendor quotes with cost breakdown for each item. The government cannot exceed 10% of any individual task order for non-prepriced work.

2. Items of work not covered by the UPB but within its scope and general intent may be negotiated by the Contracting Officer with the Contractor, and then incorporated into the UPB by modification to the contract. These items of work would be considered and treated as prepriced work as of the effective date of the contract modification. The coefficient will be applied

3. LANGUAGE (JAN 1990)

For each work group that has employees that do not speak English the contractor will provide a bilingual foreman that is fluent in the English language and in the language of the workers. The Contractor will implement the requirements of EM 385-1-1, paragraph 01.B01, 01.B02, and 01.C.02 through these foremen.

4. CLASSIFICATION OF WORK PERFORMED BY CONTRACTOR

Unless he has submitted such description with his offer, the successful offeror must furnish the Contracting Officer, within twenty (20) days after award, a description of the work which he intends to perform with his own organization (e.g., earthwork, paving, brickwork, or roofing), the percentage of the total work this represents, and the estimated cost thereof for each task order.

5. WORK BY THE GOVERNMENT

The Government reserves the right to undertake performance by Government forces or other Contractors, the same type or similar work as contracted for herein, as the Government deems necessary or desirable, and to do so will not breach or otherwise violate this contract.

6. HOURS OF WORK

With reference to Section F, COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK, the following applies: Any work necessary on Saturdays, Sundays, or legal holidays to maintain schedules herein, shall be performed without additional cost to the Government. The Contractor shall notify the Contracting Officer or the Contracting Officer's Authorized Representative in writing a minimum of two (2) working days in advance when the Contractor is planning on working prior to and after normal working hours, which are 0730 hours (7:30 a.m.) to 1630 hours (4:30 p.m.), Monday through Friday, unless other than normal working hours have already been agreed to in an individual task order.

7. ORDERING PROCEDURES

- a. As the need exists for performance under the terms of this contract, the Contracting Officer or his authorized representative will notify the Contractor, verbally, of an existing requirement.
- b. Upon receipt of this notification, the Contractor shall respond to the needs of the Government within two (2) working days by visiting the proposed work site in the company of the Contracting Officer or his authorized representative. Per Section I, ORDER LIMITATIONS, if the Contractor does not wish to provide the services identified at the site visit he must submit an explanation of non-intent, in writing, within 72 hours after the site visit. Explanation of non-intent must be acceptable to the Government. INABILITY OF THE CONTRACTOR TO MAKE A PROFIT ON CERTAIN LINE ITEMS OR DUE TO DISTANCES INVOLVED ARE EXAMPLES WHICH ARE "NOT" ACCEPTABLE REASONS FOR NON-INTENT. The Contractor should recognize that some line items may produce high profits while others may produce a loss. However, the overall contract should produce, with APPROPRIATE COEFFICIENTS, reasonable profit to the Contractor in general. The Government may issue unilateral task orders to the Contractor if it deems the reasons for non-intent are unacceptable; the Contractor may, at his discretion, submit a claim to the Contracting Officer for final decision, but will be required to proceed diligently and expeditiously with the requirements of the task order.
- c. Upon establishment of the scope of the individual requirement, the Contractor shall then be requested in writing by the Contracting Officer or his authorized representative to prepare his proposal for accomplishment of the task.
- (1) The Unit Price Book shall serve as the basis for establishing the value of the work to be performed on a unit price basis.
 - (2) Non-prepriced work to be included in an individual requirement must be proposed by the Contractor using an acceptable proposal format to be agreed upon by the Government and the Contractor.
 - (3) The Contractor's proposal must be supported by necessary documentation to indicate that adequate engineering and planning to accomplish the requirement has been done. All engineering analysis, calculations, and drawings, etc., as to accomplishing the work and preparing the proposal will be submitted with the contractor's proposal. As-built drawings, renderings, etc., will be provided by personnel skilled in the craft (i.e., draftsmen required to perform as-builts). Example of documentation that might reasonably be expected would include drawings (reflecting project scope), calculations, catalog cuts, specifications, architectural renderings, etc. Submittals on equipment and material are required unless waived by the Government. The offeror's coefficient factor must contain as a minimum the items listed in Section B, "OFFERS", as no allowances will be made later for any other than prepriced or non-prepriced item unit prices.
- (4) Time for submittal of the Contractor's proposal for individual requirements will be as agreed upon by the Government and the Contractor for unusually difficult projects. However, all other proposals for projects under \$40,000 will be submitted within three (3) working days and those above \$40,000 and no more than \$100,000 within five (5) working days after receipt of the Request for Proposal. Proposals for projects greater than \$100,000 will be submitted within eleven (11) workdays.**
- d. Contractor's proposals shall be provided on diskette and in hard copy (four copies each). Disks shall be furnished by the Contractor.
- e. Upon receipt of the Contractor's proposal, the Government will review the proposal for completeness. The Government will negotiate with the Contractor on all non-prepriced items, performance times, method of accomplishing work/construction, materials chosen, and quantities.
- f. The Government may determine the appropriate liquidated damages per task order. (See Section F, "Liquidated Damages—Construction").
- g. Task orders will then be issued using a DD Form 1155. Each task order will include the following information:
1. Date of the task order.
 2. Contract number, task order number, and delivery period in calendar days.
 3. Item number and description, quantity and unit prices for prepriced and non-prepriced items and total.
 4. Task order price, delivery or performance data.
 5. Accounting and appropriation data.
 6. Any other pertinent data. (Scope of Work, drawings, etc.)

- h. It should be realized by the Contractor that unforeseen circumstances may prohibit the Government from issuing an individual task order even after the receipt of the Contractor's task order proposal or after the task order has been negotiated. If such circumstances arise, the Government is not obligated to reimburse the Contractor for any costs incurred in the preparation of the task order proposal.

8. COMMENCEMENT OF MOBILIZATION/WORK

The Contractor shall commence any mobilization and familiarization activities prior to actual work on individual task orders as soon after contract award as practicable. However, within thirty (30) calendar days, or as directed by the Contracting Officer and or the Contracting Officers Representative, after contract award, the Contractor shall be fully operational and capable of immediately starting work on any required task order.

WITHIN TEN (10) CALENDAR DAYS UPON NOTIFICATION OF AWARD THE CONTRACTOR SHALL: Submit Performance and Payment Bonds to the Contracting Officer (See Section I, "PERFORMANCE AND PAYMENT BONDS").

WITHIN FIVE (5) WORKING DAYS OF ACCEPTANCE OF BONDS THE CONTRACTOR SHALL:

- a. Meet with the Contracting Officer's authorized representative to establish the agenda for the pre-construction conference (See Section H, PRE-CONSTRUCTION CONFERENCE).
- b. Initiate mobilization to the contractor's yard as designated by the Contracting Officer's authorized representative.
- c. Initiate utility hookups at the contractor's yard.

WITHIN (30) CALENDAR DAYS OF AWARD THE CONTRACTOR SHALL:

- d. Have all critical staff members on site.
- e. Complete formal training (by contractor) of on-site staff members.
 - Personnel Qualifications in the utilization of Job Order Contract Proposal Development System, JOCPDS Software, Version 3.9.2 (\$1,900 – 5 Persons, 2 days, scheduled by the Government) AND OR the most current license and database associated with this resulting contract (i.e. 4Clicks).
- f.. Be fully operational and capable of immediately starting work on any required task orders.

9 PRE-CONSTRUCTION CONFERENCE

a. Initial Conference. When determined appropriate by the Contracting Officer, before the issuance of the first task order under the contract, a conference shall be conducted by the Contracting Officer or the Contracting Officer's Authorized Representative to acquaint the Contractor with Government policies and procedures that are to be observed during the prosecution of the work and to develop a mutual understanding relative to the administration of the contract. The Contractor's Management staff must be in attendance, i.e., Program Manager, Project Managers, Quality Control System Manager, Safety Engineer, and Contract Administrator etc.

- b. Individual Task Order Conferences. Conferences will be held on all task orders except those deemed not necessary by the Contracting Officer or the Contracting Officer's Authorized Representative.

10. DEVIATION FROM PROPOSED LIST OF SUBCONTRACTORS

The Contractor shall update the list of his subcontractors monthly and submit the updated list to the Contracting Officer's Authorized Representative by the 10th day of each month. This list should contain all subcontractor deviations (increases/ decreases), which vary from the original list of contemplated subcontractors provided in the technical proposal.

11 GOVERNMENT-FURNISHED EQUIPMENT/MATERIALS

- a. The Contractor shall transport all Government-furnished equipment/materials, if any, described on the task order. The equipment/materials shall be transported from the Government storage area to the work site indicated on the task order. Installation of GFE/GFM will be negotiated using the prepriced items under the column of labor only, or the non-prepriced items clause when prepriced line items are not available.
- b. The Contractor assumes the risk and responsibility for the loss or damage to Government-furnished property.
- c. The Contractor shall follow the instructions of the Contracting Officer's Authorized Representative regarding the disposition of all Government-furnished property not consumed in performance of a task order.

12 SECURITY REQUIREMENTS

The Contractor shall comply with security regulations imposed by the Installation Commander, Directorate of Law Enforcement and Security and/or agency occupying the space where work is to be performed. Security requirements may change from time to time and effect access to facilities and installations.

13 SCHEDULING WORK

- a. Before commencement of work under an individual task order, the Contractor shall confer with the Contracting Officer or the Contracting Officer's Representative and agree on a sequence of procedures; means of access to premises and building; space for storage of materials and equipment; delivery of materials and use of approaches; use of corridors, stairways, elevators, and similar means of communications and the location of partitions, eating spaces, and restrooms for Contractor's employees and the like.
- b. Furniture and portable office equipment in the immediate area will be moved or protected by the Contractor and replaced to original position. Sensitive equipment and personal computers shall be moved by Government forces as arranged by the Contracting Officer's Representative. If the work required by the work order will not allow furniture and portable office equipment to be replaced to its original location, new locations will be designated by the Contracting Officer's Representative for replacement by the Contractor.
- c. Delivery of materials and equipment shall be made with a minimum of interference to Government operations and personnel.
- d. The work shall, so far as practicable, be done in definite sections or divisions and confined to limited areas which shall be completed before work in other sections or divisions are begun.
- e. The Contractor shall provide the site Contracting Officer's Representative a daily work schedule, by 3:00 p.m. the work day before, listing the task orders to be worked that day and the trades involved.

14. AS-BUILT DRAWINGS

During the progress of the task order job(s), the Contractor shall keep a careful record at jobsite of all changes and corrections from the layouts shown on the drawings, if applicable. See Section 01 78 00 - CLOSEOUT SUBMITTALS.

15. OPERATION AND MAINTENANCE

Prior to final acceptance and payment of each Task Order, the Contractor shall submit three (3) copies of all operation and maintenance manuals to the site Contracting Officer's Representative for HVAC system, electrical controls, etc. The Contractor shall conduct a training session to brief Government personnel on the operation and maintenance procedures of such systems. The Contractor is required to provide three (3) complete tear down/overhaul/repair manuals for the equipment provided. The Contractor is required to provide two (2) complete service literature catalogs for the equipment manufacturer's engineered machinery products. See Section 01 78 00 - CLOSEOUT SUBMITTALS for additional requirements.

16. ENVIRONMENTAL PROTECTION

- a. Solid, Liquid, and Gaseous Contaminants. Contractors shall be responsible for the proper disposal of all solid, liquid, and gaseous contaminants including asbestos in accordance with all Federal, State and local codes and regulations, together with the following requirements: (1) Discharge gaseous contaminants so that they will be sufficiently diluted with fresh air to reduce the toxicity to an acceptable level. (2) Liquid contaminants may, subject to local utility standards, be diluted with water to a level of quality acceptable in the local sewer system, or shall be disposed of in approved vessel at approved sites.
- b. Disposal of Scrap and Debris. All scrap and debris caused by the operations under this contract shall be removed at the end of each working day and hauled off the installation. The Government will not provide a disposal site if one is not available on the military installation. However if available, it will only be utilized and negotiated on each task order award basis.
- c. Burning of Materials and Debris. No materials or debris will be burned on any installation.
- d. Covered Chutes. All chutes for refuse, and the like, shall be covered or of such a design to fully confine the material to prevent the dissemination of dust and debris.
- e. The Contractor shall coordinate all activities which may require environmental documentation or state environmental permits with the Environmental and Natural Resources Division (ENRD) at least thirty (30) calendar days prior to start of work. Contractor will adhere to requirements of lead base paint removal.
- f. The contractor shall be responsible for compliance with all EPA requirements.
- g. See Section 01 57 20.00 10 - ENVIRONMENTAL PROTECTION for additional requirements.

17. CONSTRUCTION SITE MAINTENANCE

The Contractor shall store all supplies and equipment at the location designated for the Contractor's Management Office or at a location designated by/coordinated with the Contracting Officer's Representative so as to preclude mechanical and climatic damage. The site shall be maintained in a neat and orderly manner. Vehicles will not be parked on grassy areas.

18. NOISE CONTROL

The Contractor shall comply with all applicable state and local laws, ordinances, and regulations relative to noise control.

19. GOVERNMENT EQUIPMENT ON THE SITE

The Contractor shall cover equipment that is to remain in place within the area of contract operations and protect it against damage or loss; store equipment that is removed in performance of work where directed or reuse in work as required by drawings and specifications. Equipment temporarily removed shall be protected, cleaned and replaced equal to its condition prior to starting work. Security for equipment or materials that is to be reused and is removed for temporary storage shall be the sole responsibility of the Contractor.

20. TRUCKING

The Contractor shall load all trucks leaving the site with loose debris in a manner that will prevent dropping of materials on streets. All vehicles transporting hot-mix mixtures, sand, base course material, surfacing aggregates or dirt for work performance under this contract and traveling in excess of 30 mph on post area streets or main access roads of military installation shall have the materials covered with a tarpaulin canvas or shall be loaded a minimum of six (6) inches below the top of the sideboards to avoid spillage of materials. The Contractor shall be responsible for cleaning up any materials that fall from trucks.

21. TOILET FACILITIES

Contractor's personnel will be permitted to use toilet facilities where available and or allowed by the Facility User on the premises subject to regulation and control of the Contracting Officer or his designated representative. Contractor personnel shall ensure facility cleanliness is maintained at all times. On those sites where no toilet facilities are

available, the Contractor shall provide adequate facilities, at no additional cost to the Government. These facilities shall be maintained in accordance with the local military installation Safety Office.

22. ELEVATORS

- a. Approval of the COR shall be obtained prior to any temporary use of an existing elevator and shall be by arrangement with the custodian and subject to his controls. Such use will be of an intermittent nature. The Contractor shall provide and maintain suitable and adequate protection covering for the elevator machinery, the hatchway entrance, and the elevator interior, which meets the COR's approval, during the period of temporary use. Loads in excess of the rated capacity of the elevator will not be permitted.
- b. Existence of an elevator does not guarantee the Contractor that the elevator may be used during the construction period.
- c. The Government will bear the cost of electrical current for the operation of the elevator. Upon completion of work, the Contractor shall remove the protection coverings together with any resultant dirt and debris, and leave the equipment in a condition equal to that in which he found it.

23. SAFETY AND HEALTH

a. General

(1) Applicable Publications: The publications listed below and Section C (REFERENCES) form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

(2) Code of Federal Regulations (CFR): OSHA General Industry Safety and Health Standards (29 CFR 1910), OSHA Construction Industry Standards (29CFR 1926). U.S. Army Corps of Engineers, Safety and Health Requirements Manual, EM 385-1-1. National Emission Standards for Hazardous Air Pollutants (40 CFR, Part 61).

(3) Federal Standard (Fed. Std.): 313A, Preparation and Submission of. Use of Asbestos Containing Material, ETL 1110-1-118. Policy & Guidelines for Asbestos Management, DA Circular 40-834.

b. Work covered by this section: This section is applicable to all work covered by this contract. Before issuance of task orders to the contractor, necessary clearances/surveys (asbestos, lead-based paint, etc.) will have been done and the results provided to the contractor. Project-specific issues (such as asbestos, lead-based paint, PCB ballast, etc.) will be addressed on individual task orders at the time of negotiation with the contractor).

c. Definition of Hazardous Materials: Refer to hazardous and toxic materials/substances included in Subparts H and Z of 29 CFR 1919; and to others as additionally defined in Fed. Std. 313. Those most commonly encountered include asbestos, polychlorinated biphenyls (PCBS), explosives, radioactive material, lead, and lead based paint, but may include others.

d. Asbestos

(1) THE CONTRACTOR IS WARNED THAT EXPOSURE TO AIRBORNE ASBESTOS HAS BEEN ASSOCIATED WITH FOUR DISEASES: LUNG CANCER, CERTAIN GASTROINTESTINAL CANCERS, PLEURAL OR PERITONEAL MESOTHELIOMA AND ASBESTOSIS. Studies indicate there are significantly increased health dangers to persons exposed to asbestos who smoke, and further, to family members and other persons who become indirectly exposed as a result of the exposed worker bringing asbestos-laden work clothing home to be laundered.

(2) The Contractor is advised that friable and/or nonfriable asbestos-containing material may be encountered in area(s) where contract work is to be performed. Friable asbestos containing material means any material that contains more than one percent asbestos by weight that hand pressure can crumble, pulverize or reduce to powder when dry. Nonfriable asbestos-containing materials are materials in which asbestos fibers are bound by a matrix material, saturant, impregnant or coating. However, excessive fiber concentrations may be produced during uncontrolled abrading, sanding, drilling, cutting, machining, removal, demolition or other similar activities.

(3) Care must be taken to avoid releasing, or causing to be released, asbestos fibers into the atmosphere where they may be inhaled or ingested. The Occupational Safety and Health Administration (OSHA) has set standards at 29 CFR 1910.1001 and 29 CFR 1926.58 for exposure to airborne concentrations of asbestos fibers, methods of compliance, medical surveillance, housekeeping procedures and other measures that must be taken when working with or around asbestos-containing materials. The Environmental Protection Agency (EPA) has established standards

at 49 CFR 61.140-156 for the control of asbestos emissions to the environment and the handling and disposal of asbestos wastes.

(4) Friable asbestos-containing materials are not permitted by current criteria and shall not be used in new construction or modification projects (ETL 1110-1-118, 27 May 1983). Plans and specifications for all new construction and modification projects will be reviewed to insure that the use of friable asbestos-containing materials is not specified.

(5) Maintenance, modification, or demolition activities where exposure to asbestos dust may occur from previously installed friable or nonfriable asbestos-containing material will be identified. All precautions, to include proper work practices, medical surveillance, respiratory protection, industrial hygiene, and environmental protection requirements of OSHA, EPA (40 CFR 61.140-156) and DA Circular 40-83-4, as applicable, shall be strictly adhered to.

(6) The Government will identify the existence of asbestos in areas where work is to be performed under individual task orders prior to the issuance of the order. The Contractor shall report any findings or suspicion of asbestos to the Contracting Officer's

Representative prior to initiating work or during the performance of work under a task order. (See Section H, "ASBESTOS ABATEMENT.")

e. Lead-Based Paint: The Government will identify the existence of lead-based paint in areas where work is to be performed under individual task orders prior to the issuance of the order. The Contractor shall report any findings or suspicion of lead or lead-based paint to the Contracting Officer's Representative prior to initiating work or during the performance of work under a task order. (See Section H, "LEAD-BASED PAINT ABATEMENT.")

f. PCB Dielectrics: The Government will identify the existence of PCB-containing dielectrics in areas where work is to be performed under individual task orders prior to the issuance of the order. The Contractor will have material which he identifies or suspects as being contaminated with PCB dielectrics tested by an approved independent laboratory for verification at no additional cost to the Government. However, the Contractor shall report any findings of PCB-contaminated dielectrics to the Contracting Officer's Representative prior to initiating work or during the performance of work under a task order. (See Section H, "PCB-Contaminated Dielectrics".)

g. See Section 01 35 26 - GOVERNMENTAL SAFETY REQUIREMENTS for additional requirements.

24. SAFETY ASSURANCE

a. Preconstruction Safety Meeting: Representatives of the Contractor shall meet with the Contracting Officer Representative(s) prior to the start of repair, alteration or construction activities for the purpose of reviewing the Contractor's safety and health programs and discussing implementation of all safety and health provisions pertinent to the work to be performed under the contract. The Contractor shall be prepared to discuss, in detail, the measures he/she intends to take in order to control any unsafe or unhealthy conditions associated with the work to be performed under the contract.

(1) This meeting may be held in conjunction with the pre-construction conference, if so directed by the Contracting Officer or his designated representative. The conduct of this meeting is not contingent upon a general preconstruction meeting. The level of detail for the safety meeting is dependent upon the nature of the work and the potential inherent hazards.

(2) The Contractor's principal on-site representative(s), the general superintendent and his/her safety representative(s) shall attend this meeting.

b. Compliance with Regulations: All work, including the handling of hazardous materials or the disturbance or dismantling of structures containing hazardous materials shall comply with the Department of Labor, OSHA requirements found in 29 CFR 1910 and 29 CFR 1926, project identified national standards, military manuals, instructions, pamphlets, standards and handbooks, and with USACE Safety Manual EM 385-1-1. All work shall comply with latest revisions of Federal, State and local regulations in force at time of contract award.

c. Work involving the disturbance or dismantling of asbestos, asbestos-containing materials or lead based paint; the demolition of structures containing asbestos or lead based paint; and/or the disposal and removal of asbestos or lead based paint, shall be reported to the Contracting Officer's Representative before starting work and shall also comply with the requirements of 40 CFR, Part 61, Subparts A and B, ETL 1110-1-118 and DA Circular 49-83-4. Where there is a conflict between applicable regulations, the most stringent shall apply.

d. Contractor Responsibility:

(1) The Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work, and shall hold the Government

harmless for any action on his part or that of his employees or subcontractors, which results in illness, injury or death.

(2) The Contractor shall furnish to the Contracting Officer's Representative a complete accident prevention plan, including a hazard analysis of all operations to be performed by construction trade. The hazard analysis shall be updated/submitted to the Contracting Officer's Representative on an ongoing basis as required prior to start of new work. The accident prevention plan/hazard analysis documentation shall be forwarded to the Contracting Officer's Representative, Installation Occupational Safety and Health Office for approval prior to start of contractual operations.

(3) All temporary construction electrical systems shall be equipped with ground fault circuit interrupter (GFCI) protection.

(4) Contractor shall have a hearing conservation program in force when the noise level is 85dBA or greater for Contractor/Government personnel.

(5) Contractor shall have a hazardous communication (HAZCOM) program in force and have his personnel trained in the HAZCOM program. Contractor shall maintain up-to-Safety Data Sheets (SDS) files on site in addition to having on site a written copy of the firm's HAZCOM program.

(6) The Contractor shall report any accidents and injuries occurring on the applicable military installation to the Contracting Officer's Representative within 24 hours. Emergencies, deaths, and major accidents shall be reported to 911 and the Contracting Officer immediately.

e. Inspections, Tests, and Reports: The required inspections, tests, and reports made by the Contractor, subcontractors, specially trained technicians, equipment manufacturers, and others as required by a task order, shall be furnished in accordance with the terms of the task order.

f. Materials and Equipment: Special facilities, devices, equipment, clothing, and similar items (such as hard hats, breathing apparatus, traffic barriers, etc.) used by the Contractor in the execution of work shall comply with the applicable regulations. Materials and equipment will be provided at no additional cost to the Government.

g. All companies who conduct business within the state of Texas must, in accordance with Texas Workman Compensation laws (Texas House Bill 62), have an approved company safety policy and an Accident Prevention Plan. The plan, approved by the Texas Workman Compensation Commission (TWCC) shall be submitted For Information Only (FIO) in accordance with Section 01 33 00 Submittal Procedures. In addition to meeting the TWCC requirements, the plan must also include the requirements of USACE Safety Manual EM 385-1-1.

h. All holes/pits/trenches/manway openings, etc., that are to be left open shall be surrounded with a 48 inch high mesh fence with highly visible orange plastic coating. The fence shall be so anchored as to prevent sagging and located a minimum of three (3) feet from the opening so as to prevent an individual, should he fall across the fencing, from falling into the opening. Holes shall also be covered, when not being worked in, with three quarter inch plywood or a metal grating that will prevent small children from entering the hole.

i. Confined Space Entry, reference 29 CFR 1910.146 and all OSHA standards apply to this contract. The applicable Military Installation Fire Department shall be contacted for any required permits.

j. Radiation Permits and Authorizations: Contractors contemplating the use of devices containing radioactive materials (i.e. soil moisture/density probes) or non-ionizing radiation producing equipment (radio frequency radiation transmitters or lasers) while performing work on this contract shall obtain written authorization/permit from the applicable Military Installation Radiological Protection Officer (RPO). To obtain the required authorization/permit, contact the RPO at the applicable Military Installation. . A 45-day lead time shall be anticipated. Without the proper authorization, contractors will not be allowed to bring these devices on base.

25. HAZARDOUS MATERIALS

The Contractor shall provide the Environmental Office a list of all hazardous materials, storage, and disposal methods for the wastes generated to the Environmental Office for review and approval prior to use of the materials. The Contractor shall submit spill prevention and contingency plans to the Environmental Office for review and approval prior to start of work. Any costs associated with spill clean up shall be borne by the Contractor.

26. PRESERVING HISTORICAL AND ARCHEOLOGICAL FINDS

The Contractor shall be required to obtain archeological clearance from the Environmental Natural Resources

Division (ENRD) prior to conducting any ground disturbing action in areas where archeological resources exist. This will include all areas except improved roads, grounds and similar areas. Any failure to do so, which results in damage to cultural resources, may result in claims for costs of mitigating damage being assessed against the Contractor. See Section 01 57 20.00 10 - ENVIRONMENTAL PROTECTION for additional requirements.

27. ASBESTOS ABATEMENT

The Contractor shall coordinate all asbestos removal projects with the Environmental Natural Resources Division (ENRD) and execute all projects in strict adherence to the latest installation, Federal, state, and local regulations.

28. LEAD-BASED PAINT ABATEMENT

The Contractor shall coordinate all lead-based paint removal projects with the Environmental Natural Resources Division (ENRD) and execute all projects in strict adherence to the latest installation, Federal, state, and local regulations.

29. PCB-CONTAMINATED DIELECTRICS

The Contractor shall coordinate removal/disposal of all PCB-contaminated dielectrics with the Environmental Natural Resources Division (ENRD) Office, and execute all projects in compliance with the latest installation, Federal, State, and local regulations. It is not permissible to dilute contaminated dielectrics in an attempt to lower the level of contamination. PCB-contaminated dielectrics must be marked as PCB and transported to and incinerated by an approved EPA waste disposal facility. The Contractor shall furnish to the Government certification of proper disposal.

30. CONTRACTOR STAFF

- a. The Contractor may be required to obtain registered professional services to respond to the requirements set forth in the contract.
- b. Contractor Personnel. The Contractor shall be responsible for selecting personnel who are well qualified to perform the required work, for supervising techniques used in their work, and for keeping them informed of all improvements, changes and methods of operations. In addition:
 - (1) All personnel employed by the Contractor or any representatives of the Contractor entering the Government installation shall conform to all security regulations which may be in effect during the contract period and shall be subject to such checks as may be deemed necessary to assure that no violations occur. No employee or representative will be permitted on the installation when such check reveals that his or her presence would be detrimental to the physical or operational security of the installation.
 - (2) Where removal is due solely to misconduct or security on the part of the employee, replacement will be at the Contractor's expense and not chargeable to the Government. Contractor shall take appropriate personnel action, as required, in the event employees become involved with civilian or military authorities as a result of misconduct.
- c. The Government will not exercise any supervision or control over Contractor employees performing work under the contract. Such employees shall be accountable solely to the Contractor, not the Government. Contractor, in turn, shall be accountable to the Government for Contractor employees.
- d. Conduct. Contractor and Contractor's employees shall be subject to the same general rules of conduct while on the installation that apply to Government civilian employees. The Government reserves the right to refuse installation access to any Contractor employee if the Contracting Officer determines it to be in the best interest of the Government.

31. GOVERNMENT-FURNISHED UTILITIES

The Government will furnish to the Contractor from existing Government facilities and without cost to the Contractor, water and electrical power supply as set forth below. It is the responsibility of the Contractor to be "energy conscious" in the use of these Government-Furnished Utilities. Utilities will be handled on a task order basis.

a. Water.

(1) The Government shall furnish from existing Government facilities and without costs to the Contractor, an adequate supply of water necessary for performance under this contract. The Government will in no case furnish or install any required supply connections and piping for the purpose of implementing the availability of the water supply. It is the responsibility of the Contractor to determine the extent to which existing Government water supply source is adequate for the needs of this contract.

(2) All taps, connections, and accessory equipment required in making the water supply source available will be accomplished by and at the expense of the Contractor. All work in connection therewith shall be coordinated, scheduled, and performed as directed and approved by the Contracting Officer's Representative. Said taps, connections, and accessory equipment shall be maintained by the Contractor in workmanlike manner in accordance with rules and regulations of the Government installation. Upon completion of the task order the removal of all taps, connections and accessories will be accomplished by and at the expense of the Contractor so as to leave the water supply source or facility in its original condition. Such removal shall also be subject to the direction and approval of the Contracting Officer Representative as provided above.

b. Electricity.

(1) The Government shall furnish existing Government facilities and without cost to the Contractor, all electrical power necessary for performance under this contract; provided, the Government will in no case furnish or install any electrical facility or accessory for the purpose of implementing the availability of electrical power for the purpose of this contract. It is the responsibility of the Contractor to determine the extent to which existing Government electrical facilities are adequate for the needs of this contract.

(2) All taps, connections, and accessory equipment required in making the electrical power available will be accomplished by and at the expense of the Contractor. All work in connection therewith shall be coordinated, scheduled, and performed as directed and approved by the Contracting Officer's Representative. Said taps, connections, and accessory equipment shall be maintained by the Contractor in workmanlike manner in accordance with rules and regulations of the Government installation. Upon completion of the contract the removal of all taps, connections and accessories will be accomplished by and at the expense of the Contractor so as to leave the electrical power or facility in its original condition. Such removal shall also be subject to the direction and approval of the Contracting Officer as provided above.

c. Telephone Services. Telephone service will be the responsibility of the Contractor.

d. Interruption of Utilities Service/Medical Systems. All temporary outages of any utility services required for the performance of work shall be scheduled with the Contracting Officer's Representative no less than 14 days in advance of such outages; the Contractor may request a waiver from this requirement from the Contracting Officer's Representative when the utility outage will be of a very limited nature (e.g., within a few rooms of building). If during work performance the Contractor has determined that a utilities-related situation involves the risk to life or substantial risk to property, utilities shall be immediately disrupted to reduce the emergency and alleviate risk. If such a risk exists, or if such a disruption does occur, the Contractor shall notify the Contracting Officer's Representative at the earliest practical time, and in no case later than two hours following the occurrence.

e. Excavation and Utility Clearance. The Contractor shall be responsible for obtaining excavation and utility clearances, when required, to perform work under an individual task order. Clearance forms may be obtained from through the Contracting Officer's Representative not less than 30 calendar days prior to the date which he anticipates commencement of work. The Contractor shall not proceed with excavation of any kind until he has obtained such clearance and has in his possession:

(1) Available drawing(s) showing all known utilities within the proposed work area(s).

(2) Markings in the field have been accomplished for the work area affected.

(3) Clearances will be valid from the date of issuance to date of completion of the task order.

(4) The Contractor shall set offsets and markings (permanent for the duration of the project, i.e., hubs, stakes, bench marks and marking tape) to ensure Government markings are not affected/obliterated by construction. It is the contractor's responsibility to maintain the information on the ground to locate lines previously marked by the Government, throughout the project timeframe.

(5) Communication Cables: Before excavating near buried communications cable, the Contractor shall notify the Contracting Officer's Representative for assistance in locating the cable. Existing communication cables that are indicated or the locations of which are made known to the Contractor prior to excavating shall be repaired by the Government and the cost of repair deducted from the contract price.

(6) Underground utility lines indicated on drawings shall be field verified by the Contractor prior to excavation. The Contractor shall be responsible for all lines shown within the area of excavation and within ten feet of the area to be excavated. The Contractor shall first verify location of lines by excavating with hand-held tools prior to the use of power-operated equipment. The Contractor shall be responsible for repairing, to the satisfaction of the Contracting Officer, all lines damaged during excavation at no cost to the Government.

(7) Underground Utility lines not indicated on the contract drawings: The Government shall reimburse the Contractor for his expenses for a one-time repair of damaged lines that are not indicated on the contract drawings; however, the Contractor shall be responsible for protecting the same lines from further damage and for repair of the lines should further damage occur.

32. GOVERNMENT FURNISHED SOFTWARE

Government furnished software (JOCPS) will NOT be provided to the Contractor. The Government requires the Contractor to acquire the license and cost book information from the Government appointed Company (i.e. 4Clicks) as necessary for the Contractor. This information shall be use as a tool to assist with expedient preparation of cost proposals in response to Government needs. This software will contain an electronic version (copy) of the Unit Price Book (UPB), Volume II (Contractor's UPB), which can be accessed on the equipment utilized by the Contractor to locate and select desired items from the UPB. Once the desired items are selected, the software provides for selection of quantities and, based on the selected quantities, will extend and total UPB costs for each proposal.

33. WASTE AND EXCESS QUANTITIES INCLUDED IN THE COMPLETED-IN-PLACE CONSTRUCTION QUANTITIES

All prices in the Unit Price Book (UPB) are for the complete-in-place construction unless explicitly described otherwise. The unit prices include delivery of materials to the job site. Waste or excess material quantities are incidental costs which are included within the contract coefficient unless explicitly stated otherwise in the UPB. Quantities used on individual Job Order proposals shall be taken from field measurements or design plans, as appropriate, without allowance for waste and/or incidental extra materials used in performance of work. Incidental nails, screws, weldments, and connectors are included in UPB line items. Unless a connector or fastener is specifically stated as not being included, it is included in the price. Example: Installation of a suspended ceiling grid system includes connectors, fasteners, and wire for the hanging system.

34. PRICE ADJUSTMENT MODIFIERS

The Unit Price Book contains unit pricing data to be used by the Contractor in development of price proposals for each task order. The pricing data is presented as basic items and as price adjustment modifiers to the basic item. Price adjustment modifiers provide a method for adding to or deducting from the basic item prices for optional materials, and/or methods of installation. One or more modifiers can be utilized to adjust the basic item price as listed by the appropriate suffix number of basic line.

35. FIRE PREVENTION AND PROTECTION

a. The Contractor shall comply with all fire prevention measures as set forth by the National Fire Protection Association; other recognized fire prevention agencies; and Installation regulations (which can be obtained from the the applicable Military Installation Fire Department). Each construction site shall be inspected with a frequency necessary to insure understanding and compliance on the part of the Contractor with all applicable provisions of the Base Fire Regulation. Combustible trash will not be destroyed by open fire at the construction site but will be removed off the Installation. Approved types of portable fire extinguishers will be furnished and installed at each construction site by the Contractor. Information concerning approved types is available at the applicable Military Installation Fire Department The Contractor shall obtain permits for any hot work (welding, etc.) from the Fire Department before commencing work.

b. The Contractor shall be liable for any fire loss to the Government property attributable to

negligence on the part of the Contractor, including failure to comply with fire prevention measures prescribed by the terms of this contract.

36. CONTRACTOR ACCESS

The area wherein work is to be performed under this contract will be occupied by the Government Services throughout the construction period. The Contractor shall have access to that portion of the area within which work is to be performed. The movement of Contractor personnel, his equipment, materials, and tools shall be confined to this area.

37. LIMITED ACCESS TO Military Installation

The Contractor, shall under regulations prescribed by the Installation Provost Marshal, use only established roadways when transporting personnel and/or material in the prosecution of work. The Contractor shall adhere strictly to the above, and shall the Contractor shall insure his personnel use designated parking areas only. Vehicles shall not be parked on grassy areas. If the Contractor fails or refuses to comply with the above, the Contracting Officer may issue an order stopping all work. No part of the time lost due to any such order shall be made the subject of claim for extension of time or for excess costs or damage by the Contractor. Compliance with the provisions of this article by subcontractors will be the responsibility of the Contractor. All vehicles operated in support of the contract, including Contractor and Contractor employees privately owned vehicles or subcontractor vehicles shall be registered, insured, licensed, and safety inspected IAW applicable Federal, State, and local requirements.

38. DISCOVERY OF UNEXPLODED BOMBS ON Military Installation

The Contractor accepts the award of the contract with the knowledge that unexploded bombs (DUDS) may be encountered when carrying out such work. The Contractor will be required to comply with the local military installation's (applicable to this solicitation and resulting award) Training Range Regulations, FSHREG 350-2, as pertains to Chapter 6, SAFETY, in particular Section 6-4 "Explosive Ordnance Disposal (EOD) Service", quoted as follows: "Disposal of DUD ORDNANCE: DUDS that are discovered on ranges or in the training areas will be clearly marked and coordinate reported to the 70th Ordnance Battalion. Under no circumstances will DUDS be moved, picked up, or disturbed in any way." This regulation is available for inspection at the Military Installations Operations Branch.

39. SERVICES TO BE PERFORMED

The general requirements for the nature and categories of work to be performed under this contract includes but is not necessarily limited to the following: Site clearing, building renovation, earthwork, site drainage and utilities, roads and walks, cast in place concrete, brick masonry, block and tile masonry, structural metal, metal joists and decking, rough carpentry, finish carpentry, built in cabinetry and furniture, roofing and siding, sheetmetal work, doors, windows and glazing, window coverings, entrances and store fronts, lath and plaster, drywall, painting and wall coverings, floor tile and carpeting, pipe and fittings, plumbing devices and fixtures, fire extinguishing systems, fire alarm systems and intrusion detection systems and equipment, heating and air conditioning and ventilating equipment and systems, ducts and controls, boxes and wiring devices, starters, breaker panels, switching devices and transformers, lighting and primary and secondary power systems, and asbestos/lead-based paint abatement and removal.

40. REQUIRED INSURANCE

Prior to commencement of work, the Contractor shall furnish the original of his insurance certificate directly to the Contracting Officer, Fort Worth District, Corps of Engineers, ATTN: CESWF-CT Post Office Box 17300, Fort Worth, Texas 76102-0300 and one copy to the Contracting Officer's Representative. The Contractor shall maintain during the period of his performance under this contract the following minimum insurance:

a. Workmen's Compensation and Employer's Liability Insurance in compliance with the applicable state statutes, with a minimum employers' liability coverage of \$100,000.

- b. Comprehensive General Liability Insurance for bodily injury in the minimum limits of \$500,000 per occurrence. No property damage liability insurance is required.
- c. Comprehensive Automobile Liability Insurance covering the operation of all automobiles used in connection with the performance of the contract in the minimum limits of \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. (See Section I, "INSURANCE--WORK ON A GOVERNMENT INSTALLATION".)

41. ASBESTOS/LEAD-BASED PAINT ABATEMENT INSURANCE

If any asbestos/lead-based paint abatement/removal or any other work with asbestos/lead-based paint is required under this contract and Comprehensive General Insurance is required, the policy of insurance which covers the asbestos/lead-based paint abatement/removal or other work with asbestos/lead-based paint, shall be a "per occurrence" policy as that term is used in the insurance industry. A policy issued on a "claim made" basis or any other "short tail" basis will not be accepted. The Comprehensive General Liability per occurrence policy shall be obtained by the Prime Contractor if the asbestos/lead-based paint abatement/removal work is performed by the Contractor's own work force, or by an asbestos/lead-based paint abatement subcontractor, if the work is subcontracted. The Contractor shall insert in the subcontract a requirement for the asbestos/lead-based paint abatement subcontractor to provide and maintain the insurance required by this paragraph. The Contractor shall maintain a copy of the subcontract's proof of required insurance, and shall make such copy available to the Contracting Officer upon request.

42.. PHYSICAL DATA

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

- a. The indications of physical conditions on the drawings and in the specifications are the result of site investigations and surveys by the Director of Public Works, Engineering Contract Management Division.
- b. Ground Water Levels. It has been observed that ground water levels in heavily timbered or grassed areas quite often undergo a significant temporary rise when the area is cleared and/or stripped. This increase in water level can hinder traffic and construction progress in the affected areas. The duration of the ground water rise varies considerably, depending on prevailing weather and/or climatic conditions.
- c. Transportation Facilities: Highways and railroads.
- d. Delivery Point for Government Furnished Utilities: Location of all taps, and connections to existing Government electrical power and water supply lines shall be field designated by the Ordering Officer of the Contracting Officer's Representative.

43. CERTIFICATES OF COMPLIANCE (SUBMITTALS)

Any Certificates required for demonstrating proof of compliance of materials with specifications requirements shall be executed in four copies. Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company and shall contain the name and address of the contractor, the project name and location, and the quantity and state or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the contractor from furnishing satisfactory material, if the material is found not to meet the specific requirement. In addition, approval of the submittals does not relieve the contractor of the responsibility of providing and installing materials as required by the contract, specifications, and task order requirements.

44. CONTRACTOR QUALITY CONTROL SYSTEM

The inspection system required by the Contract Clause "Inspection of Construction" shall be in accordance with the following requirements and Section 01 45 04.40 44 - CONTRACTOR QUALITY CONTROL.: The Contractor shall provide and maintain an effective quality control program or Contractor inspection system, as required by the Contract Clause entitled "Inspection of Construction," which will assure that all supplies and

services required under the contract conform to contract requirements whether constructed or processed by the Contractor, or procured from subcontractors or vendors. The Contractors shall perform or have performed the inspection and tests required to substantiate that all supplies and services conform to drawings, specifications, and contract requirements and shall also perform or have performed all inspection and tests otherwise required by the contract unless the required inspection and/or test is specifically designated to be performed by the Government. The system shall be implemented by the establishment of a quality control organization separate from the Contractor's production or supervisory staff who shall report directly to the Contractor's top management. This organization shall consist of at least two full-time persons who will be on the job site at all times work is in progress, with sole responsibility for providing continuous inspection of the work to insure compliance with the contract plans and specifications. This organization shall be supplemented by additional quality control personnel as the number of projects increase and/or the dollar value and/or complexity of work increases. The Quality Control Organization personnel shall be a part of the Contractor's staff and not a member of the staff of a subcontractor performing the work. The Contracting Officer reserves the right to have replaced, any member of the Quality Control Staff who in the opinion of the Contracting Officer is not accomplishing their assigned duties (See Section I, "Materials and Workmanship"). The Contractor's inspection system shall be documented, as specified herein, and shall be submitted to the Contracting Officer for review and approval prior to the start of construction and throughout the life of the contract. The Contractor shall notify the Government in writing of any proposed change to his inspection system and changes shall be subject to disapproval if they would, in the opinion of the Contracting Officer, result in nonconformance with the contract requirements.

45. FEDERAL GOVERNMENT HOLIDAYS

The Contract employees will not normally be expected to work during Federal holidays. The Government will not pay for services performed on these holidays unless approval has been received from the Contracting Officer's Representative. The Contractor shall observe the same holidays observed by the Government, which are as follows:

New Year's Day – 1 January

Martin Luther King's Birthday – 3rd Monday in January

President's Day – 3rd Monday in February

Memorial Day - last Monday in May Independence

Day – 4 July

Labor Day – 1st Monday in September Columbus Day

– 2nd Monday in October

Veterans Day – 11 November

Thanksgiving Day – 4th Thursday in November

Christmas Day – 25 December

Note: Any additional holiday as established by Executive Order or Public Law. Any of the above holidays falling on a Saturday will be observed on the preceding Friday; holidays falling on a Sunday will be observed on the following Monday.

46. SAFETY REQUIREMENTS

a. The Contractor is subject to the safety and health standards of both the Occupational Safety and Health Act (OSHA) and the Corps of Engineers General Safety Requirements, EM 385-1-1. Implementation of OSHA provisions rests in the statutory requirement while compliance with EM 385-1-1 is a contractual matter.

b. The offeror should review the accident-prevention clauses of the contract, The Corps of Engineers General Safety Requirements, EM 385-1-1, as amended, referred to therein, and the special and technical provisions applicable to safety. The offeror should assure himself that he has full knowledge of the personal protective equipment (including respiratory equipment) that must be provided workmen, and that he is familiar with the safety standards applicable to machinery and mechanized equipment, ladders and scaffolds, fire prevention and protection, stripping of concrete forms, cleanup and housekeeping and other safety measures for the prevention of accidents during construction.

47. DEVIATION FROM APPROVED MANAGEMENT PERSONNEL

The Contractor shall obtain prior written approval from the Contracting Officer prior to making any changes in his approved management staff set forth in his technical proposal.

48. BUILDING CODES

All work shall be performed in compliance with the following National Standards and Codes, as applicable.

- a. American Institute of Steel Construction (AISC)
 - b. American Concrete Institute (ACI)
 - c. Uniform Building Code (UBC)
 - d. Uniform Plumbing Code (UPC)
 - e. Uniform Mechanical Code (UMC)
 - f. National Electrical Code (NEC)
 - g. National Electrical Safety Code
 - h. Life Safety Codes
 - i. Joint Commission Accreditation of Hospitals (JCAH)
- These codes are supplemental to others listed herein.

49. GOVERNMENT-FURNISHED SITE

The Contractor will be provided the use of a parcel of land on the applicable military installation at a location to be determined upon contract award as designated by the Contracting Officer or his designated representative. The Contractor shall be required to provide trailers and storage rooms to house staff personnel and equipment used in performance of this contract. See Section 01 50 00 - TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS.

50. WORK COORDINATION FOR FAMILY HOUSING PROJECTS

- a. Six (6) working days before starting any work in a housing area, the Contractor shall leave a typewritten flier at each affected quarters describing the work and dates of work performance. The flier will have the approval of the Contracting Officer's Representative before distribution. If the schedule start of work is delayed for some reason, the Contractor shall provide the affected quarters occupants a new start date. The Contracting Officer's Representative may waive the flier requirement for time critical or emergency work.
- b. The Contractor shall coordinate all work on occupied family housing quarters with the affected occupants. The Contractor shall obtain permission from the occupant before entering any housing unit. The Government will not provide access to occupied housing units; therefore, the Contractor shall anticipate and plan for delay resulting from absent occupants.
- c. The Contractor shall coordinate with the Contracting Officer's Representative on obtaining a lock box key to permit access to vacant family quarters, as required.
- d. During all work in family housing areas, the Contractor shall minimize disturbance to family housing occupants.
- e. When working on occupied family housing quarters, the Contractor shall maintain a neat work area. The Contractor shall stack and arrange on-site materials, equipment, etc. in an orderly manner just prior to departure of Contractor personnel at the end of each workday.
- f. The Contractor shall plan work to avoid leaving any structural opening resulting from contract work exposed to the environment, or shall provide temporary measures to prevent any damages therefrom. Under no circumstances shall occupied family housing quarters be left unsecured overnight due to contract work.

51. SALVAGEABLE AND REPAIRABLE MATERIALS

- a. Material classified by the Contracting Officer or the Contracting Officer's Representative as salvageable shall remain the property of the Government and shall be delivered to the Property Disposal Office, on the applicable military installation. .
- b. Material classified by the Contracting Officer or the Contracting Officer's Representative as repairable

shall be thoroughly cleaned and delivered to the Property Disposal Office, on the applicable military installation..

c. Materials not classified as salvageable or repairable by the Contracting Officer or the Contracting Officer's Representative shall be removed from the site and disposed of off the Installation at no cost to the Government.

d. Prior to commencing, a joint inventory will be conducted by the Contractor, the Contracting Officer's Representative, and Government Inspector during which salvageable, repairable material will be identified. The Contractor will be given a copy of this inventory and will be accountable for this property as indicated above. This joint inventory will in no way limit or preclude the Contracting Officer from designating additional items in the above categories during the life of this contract.

52. WARRANTY TAGS

a. Equipment Warranty Identification Tags - The Contractor shall provide warranty identification tags on all equipment installed under this contract. Tags and installation shall be in accordance with the requirements outlined below.

1. **General Requirements:** The Contractor shall provide warranty identification tags on all Contractor and Government furnished equipment which he has installed.
2. **Tag Description and Installation:** The tags shall be suitable for interior and exterior locations, resistant to solvents, abrasion, and to fading caused by sunlight, precipitation, etc. These tags shall have a permanent pressure sensitive adhesive back, and they shall be installed in a position that is easily (or most easily) noticeable. Contractor furnished equipment that has differing warranties on its components will have each component tagged.
3. **Sample Tags:** Sample tags shall be submitted to the Contracting Officer's Authorized Representative for his review and approval. These tags shall be filled out representative of how the Contractor will complete all other tags.
4. **Duplicate Information:** If the manufacturer's name, model number and serial number are on the manufacturer's equipment data plate and this data plate is easily found and fully legible, this information need not be duplicated on the equipment warranty tag.
5. **Execution:** The Contractor will complete the required information on each tag and install these tags on the equipment by the time of and as a condition of final acceptance of the equipment. The Contractor will schedule this activity in the Contractor progress reporting system. The final acceptance inspection is scheduled based upon notice from the Contractor, thus if the Contractor is at fault in this inspection being delayed, the Contractor will, at his own expense, update the in-service and warranty expiration dates on these tags.
6. **Payment:** The work outlined above is a subsidiary portion of the contract work, and has a value to the Government approximating 5% of the value of the Contractor furnished equipment.
7. **Equipment Warranty Tag Replacement:** Under the terms of this contract, the Contractor's warranty with respect to work repaired or replaced shall run for one year from the date of repair or replacement. Such activity shall include an update warranty identification tag on the repaired or replaced equipment. The tag shall be furnished and installed by the Contractor, and shall be identical to the original tag, except that the Contractor's warranty expiration date will be one year from the date of acceptance of the repair or replacement.
8. **The Contractor shall obtain all commercial warranties available on the major/minor equipment and turn them over to the Government at the conclusion of the task order. The Contractor shall also prepare a list of the companies which honor the warranties, including names, addresses and telephone numbers.**

b. Construction Warranty

1. In addition to the commercial warranties described above, and in accordance with the

Construction Warranty clause (See Section I) the Contractor shall provide a one-year warranty period on all Installation/modification work accomplished for each task order.

2. The Contractor shall provide name, address, and telephone numbers of the Contractor's single point of contact for full time (24 hours) answering and response capability, within the local service area of the warranted construction. The local service area is described as within a 180-mile radius of the Installation.
3. If the Contractor fails to remedy any failure, defect, or damage within 24 hours of notification of the need for remedial action, the Government has the option of taking steps to remedy the failure and billing the Contractor. Where applicable, JCAHO standards shall apply to the issuance and utilization of these warranties.
 - b. See Section 01 78 00 - CLOSEOUT SUBMITTALS for additional warranty requirements.

53. CONSTRUCTION SCHEDULES

- a. For each task order the Contractor will be required to prepare and submit to the Contracting Officer a practicable schedule as outlined in Section I, "SCHEDULES FOR CONSTRUCTION CONTRACTS" and Sections 01 32 01.00 10 - PROJECT SCHEDULE and 01 45 01.10 - USACE QUALITY CONTROL SYSTEM QCS. The schedule must include activities for submittal approval, as-built drawings, final clean up and inspection, correction of punchlist items and final payroll submittal and Operation and Maintenance manuals.
 - b. The Contractor shall utilize a computer software program to generate his construction schedule.
Software program shall include all requirements for "Schedule for Construction Contracts", FAR 52.236-15. Suggested scheduling software is Primavera SURETRAK Project Scheduler, but the contractor may submit an Government three
 - c. copies for use during the contract period. Construction contract schedules will be submitted both on disk and in paper copy.

54. PROBLEM REPORTING

The Contractor shall promptly report to the Contracting Officer's Representative (COR) all construction problems encountered during construction. Report will include recommended solutions or alternatives. The reporting is to be done on a form provided by the Contractor. This may be called a Corrective Action Request (CAR), Request for Information (or Instruction) (RFI) or whatever title the Contractor desires as long as the form and title are acceptable to the COR.

55. INSTALLATION DESIGN GUIDE

The Contractor will comply with the applicable Military Installation Design Guide (IDG), when developing proposals. The IDG provides guidance which, when applied to the planning, programming, design, and execution of individual projects, will result in improving and maintaining the quality of the visual environment of the Installation.

56. PERSONNEL QUALIFICATIONS

- a. The Government reserves the right to review the resume of Contractor personnel proposed to be assigned to this contract. If the Contracting Officer questions the qualifications or competence of any individual performing under this contract, the burden of proof shall be upon the Contractor.
- b. The successful Contractor must staff the contract with personnel whose qualifications are equal to or better

than those whose resumes were submitted with the proposal. In the event the Contractor decides to utilize personnel in the performance of the resultant contract for which resumes were not submitted at the time of proposal evaluation, the Contractor shall, prior to the utilization of these personnel, submit their resumes to the Contracting Officer or his authorized Representative for approval.

c. The Contractor shall be responsible for employing trained personnel to perform the tasks outlined in this document. The Contracting Officer reserves the right to determine if a given work history contains necessary and sufficient, directly related experience to reasonably ensure the ability for effective and efficient performance.

d. Individual resumes of key personnel shall be submitted for personnel assigned to the duties required, i.e., Project Manager, Estimator, Contractor's Quality Control (CQC) Manager, and Contractor Office Manager. Without an engineering degree the, the minimum experience for the Contractor's Quality Control Manager (CQC) is five years of experience in the construction industry and three years as a Quality Control Manager.

e. The Contractor shall prepare and maintain an organization plan to perform Task Orders as they are assigned by the Contracting Officer. The plan shall indicate all categories of personnel employed by the contractor and any subcontractors that will be utilized by the contractor. The plan shall delineate how the contractor will perform work from the initiation of Task Order, proposal development phase and through the completion of construction of each Task Order initiated and completed under this contract. This plan shall be submitted to the Contracting Officer within 30 days after award of this contract. A preliminary plan shall be submitted with the contractor's proposal.

f. The Contractor must meet the following personnel qualifications:

(1) PROJECT MANAGER (PM) – Serves as a full-time on-site Project Manager. PM must have a minimum of six (6) years experience in a building construction supervisory position, i.e., project manager and/or construction superintendent. Capability to direct work requiring extensive understanding of and intimate familiarity with the principles, methods, and techniques of architectural, civil, mechanical, and electrical engineering, with no one discipline predominating. Ability to recruit and manage qualified subcontractors in all construction disciplines from the local market in the applicable military installation area. Must be able to respond in a timely manner to all contractual agreements, instructions, and inquiries from authorized government personnel. Must understand and have knowledge of government construction requirements, and the Job Order Contract in total. Must be capable of preparing project proposals, be authorized to negotiate, and accept individual task orders issued under this contract. Another individual meeting the qualifications may be designated to act for the Project Manager; however, the Contracting Officer's Representative must be notified in writing a minimum of forty-eight (48) hours in advance of such change. Notification must include exact duration (not to exceed 15 days) for temporary changes.

(2) ESTIMATOR (IF APPLICABLE per each Task Order) – Serves as a full-time senior estimator.

The estimator, as a minimum, should have an Engineering degree in a discipline that is compatible with the building construction industry, or an equivalent combination of education and experience approved by the Contracting Officer. Must have a minimum of five years experience as a senior estimator in the building construction industry. Without an engineering degree the estimator must have a minimum of five years of experience in the construction industry and three years of experience as an Estimator. Must have extensive understanding of and be intimately familiar with the principles, methods, and techniques of architectural, civil, mechanical and electrical engineering, with no one discipline predominating. Must possess extensive knowledge and understanding of the JOC Unit Price Book (UPB) from which he will make his estimates that will be included in the project proposal. In the absence of the project manager, the estimator will prepare and negotiate project proposals. He must have thorough knowledge of Government labor laws, the Davis/Bacon Act, and schedule of wages. He must also have the capability to supervise subcontractors and perform periodic construction inspections.

(3) CONTRACTOR OFFICE MANAGER (COM) (IF APPLICABLE) – This is a full-time, on-site position. As a minimum, the COM should have extensive background in accounting and bookkeeping and should be computer literate and a proficient typist. Must be capable of dealing with all levels of management both in-house and with Government officials, as well as with subcontractor personnel. Must be capable of establishing, managing, and maintaining file systems. Must be familiar with proposal preparation and must know and understand the Job Order Contract concept and contract. Must have knowledge and understanding of Government labor laws and regulations as well as subcontractor payrolls. The COM should also have the capability of acting as a purchasing agent and expeditor.

57. HVAC PERSONNEL CERTIFICATION

All contracted HVAC personnel performing work on the applicable military installation. HVAC equipment must be certified in accordance with Environmental Protection Agency procedures under Section #608 of the Clean Air Act Amendment of 1990. HVAC contractor shall be required to show proof of certification of their personnel before proceeding with HVAC work.

58. LABOR REQUIREMENT

No construction, alteration, or repair (including painting and decorating) of public buildings or public works shall be performed under this contract without the utilization of qualified persons/licensed mechanics who meet the requirements of the work to be performed and accepted.

59. TASK AND DELIVERY ORDER CONTRACT OMBUDSMAN

FAR 16.505 (b)(6) states "The head of the agency shall designate a task order contract and delivery order contract ombudsman who shall be responsible for reviewing complaints from contractors on task order contracts and delivery order contracts. The ombudsman shall review complaints from the contractors and ensure that all contractors are afforded a fair opportunity to be considered, consistent with the procedures in the contract. The ombudsman shall be a senior agency official who is independent of the contracting officer and may be the agency's competition advocate." For all U.S. Army Corps of Engineer Activities the Ombudsman, Office of Principle Assistant for Contracting (OPARC), Headquarters, U.S. Army Corps of Engineers, Attn: CEPR-P (USACE Ombudsman), 20 Massachusetts Avenue N.W., Washington, D.C. 20314-1000.

60. CONTRACTOR PERFORMANCE EVALUATIONS

In accordance with the provisions of Subpart 36.201 (Evaluation of Contractor Performance) of the Federal Acquisition Regulation (FAR), construction contractor's performance shall be evaluated throughout the performance of the contract. The United States Army Corps of Engineers (USACE) follows the procedures outlined in Engineering Regulation 415-1-17 to fulfill this FAR requirement. For construction contracts awarded at or above \$700,000.00, the USACE will evaluate contractor's performance and prepare a performance report using the Contractor Performance Assessment Reporting System (CPARS), which is now a web-based system. After an evaluation (interim or final) is written up by the USACE, the contractor will have the ability to access, review and comment on the evaluation for a period of 30 days. Accessing and using CPARS requires specific software, called PKI certification, which is installed on the user's computer. The certification is a Department of Defense requirement and was implemented to provide security in electronic transactions. The certification software could cost approximately \$110 - \$125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor. Current information about the PKI certification process and for contacting vendors can be found on the web site: <http://www.cpars.navy.mil/>. If the Contractor wishes to participate in the performance evaluation process, access to CPARS and PKI certification is the sole responsibility of the Contractor.

61. CONTRACTOR PAYROLL RECORD

Contractor shall be required to log payrolls for all their own employees and subcontractors utilizing ENG Form 3180. Each subcontractor requires a separate ENG 3180 for their payrolls. The Contractor shall maintain the ENG 3180, along with the payrolls, on site and available for review by the Contracting Officer's Representative. The ENG 3180's shall be updated weekly as payrolls are submitted. After making copies for their files, the Contractor is required to submit the originals of each week's payrolls to the Resident Office. Before final payment, the Contractor shall provide the completed ENG 3180's to the Contracting Officer's Representatives.

62. CORRESPONDENCE IDENTIFICATION

a. The Contractor shall use a serial numbering system on all formal correspondence sent to the

Contracting Officer or his representative. The Contractor will provide one original and two duplicate copies of all correspondence.

b. The Contractor may use a Request for Information (RFI) system for drawing/specification clarifications, subject to the following conditions:

(1) The Contractor shall use a sequential numbering system for all RFI's separate and apart from the correspondence numbering system.

(2) The Contractor shall provide one original and two copies of all RFI's.

(3) The Contractor shall designate ONE individual responsible person, subject to approval by the Contracting Officer, for reviewing and issuing RFI's.

(4) For projects requiring Network Analysis Systems (NAS), all RFI's shall identify the NAS activities directly or indirectly affected by the RFI on the progress schedule.

The Contractor should anticipate a minimum of 10 calendar days for Government review and response.

(5) No requests for deviations or variations from the contract by RFI will be allowed.

Deviations/variations are to be submitted on ENG Form 4025 as described in Section 01330 Submittal Procedures.

(6) The use of RFI's does not relieve the Contractor of the responsibility for reviewing the contract documents and coordinating the work to be performed. If the Contracting Officer determines that the RFI system is being used for other than its intended purpose, the Contracting Officer has the authority to discontinue the use of the RFI's for the remainder of the contract.

Section 00 73 46 - Wage Determination Schedule

WAGE DETERMINATION

WAGE DETERMINATION SCHEDULE

Section 00 73 46 - Wage Determination Schedule

Department of Labor (DOL) issues Davis-Bacon Act (DBA) Wage Decision (WDs) reflecting prevailing wages and benefits paid by the construction industry within specific localities. The DBA WDs are further classified by the nature of the construction projects performed, specifically listed as "schedules": residential, building, highway, and heavy construction. A brief outline of the definitions for each schedule is listed below. Further details and examples may be found in DOL's "All Agency Memorandum No. 130 and 131" issued in 1978 (reference the WDOL Library Page).

Building Construction. Includes construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies; all construction of such structures; the installation of utilities and of equipment, both above and below grade levels; as well as incidental grading, utilities and paving. Such structures need not be "habitable" to be building construction. Also, the installation of heavy machinery and/or equipment does not generally change the project's character as a building.

Heavy Construction. Includes those projects that are not properly classified as either "building," "highway," or "residential." Unlike these classifications, heavy construction is not a homogenous classification. Because of this catch-all nature, projects within the heavy classification may sometimes be distinguished on the basis of their particular project characteristics, and separate schedules may be issued for dredging projects, water and sewer line projects, dams, major bridges, and flood control projects.

Highway Construction. Includes construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

Residential Construction. Includes the construction, alteration or repair of single-family houses, apartment buildings of no more than four stories in height. This includes all incidental items such as site work, parking areas, utilities, streets, and sidewalks.

Some contracts or projects may require more than one general schedule to be included depending on the nature and extent of the work. This is described in more detail in DOL's All Agency Memo No. 131. The contracting agency should provide designate the work to which each wage determination or part thereof applies per FAR 22.404-2.

APPLICATION OF WAGE DECISIONS

Solicitation/Contract Number: W9126G-16-R-0048

Project: JOC for Sustainment, restoration, and Modernization Projects at Fort Hood, TX

Location: Fort Hood

County: Bell County

The following Wage Decisions are applicable for this solicitation and resulting JOC Award.

TX WD'S

TX32 Residential
 TX34 Construction,
 TX45 Heavy Pipeline Onshore Construction,
 TX52 Heavy (Includes Water / Sewer Lines,
 TX53 Residential,

TX81 Heavy Tunnel, and
TX93 Building

NOTE:

(1) PAYROLL RECORDS ARE REQUIRED, UNDER THE DAVIS-BACON ACT, TO BE SUBMITTED TO THE U.S. ARMY CORPS OF ENGINEERS FOR ALL CONSTRUCTION WORK PERFORMED.

(2) THE WAGE DECISION NUMBER APPLICABLE TO THE WORK PERFORMED IS TO BE SHOWN ON ALL THE CERTIFIED PAYROLL RECORDS SUBMITTED.

General Decision Number: TX160032 01/08/2016 TX32
Superseded General Decision Number: TX20150032
State: Texas
Construction Type: Residential
Counties: Bell, Coryell, Lampasas, McLennan and Robertson
Counties in Texas.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories.)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/08/2016

* SUTX1983-006 05/01/1983

	Rates	Fringes
Air Conditioning Mechanic.....	\$ 9.06	
BRICKLAYER.....	\$ 8.95	
CARPENTER.....	\$ 7.87	
CEMENT MASON/CONCRETE FINISHER...	\$ 7.46	
DRYWALL FINISHER/TAPER.....	\$ 7.25	
DRYWALL HANGER.....	\$ 10.00	
ELECTRICIAN.....	\$ 7.79	
FLOOR LAYER: CARPET (SOFT)		
FLOOR.....	\$ 7.25	
GLAZIER.....	\$ 9.20	
Insulation Installer.....	\$ 7.25	

IRONWORKER.....\$ 7.25

Laborers:

Mason tenders.....\$ 7.25

Unskilled.....\$ 7.25

Landscaper.....\$ 7.25

PAINTER.....\$ 7.25

PLUMBER.....\$ 7.89

Power equipment operators:

Backhoes.....\$ 7.25

Dozers.....\$ 8.08

Graders.....\$ 7.25

Loaders.....\$ 7.25

Rollers.....\$ 7.25

Srapers.....\$ 7.25

Tractors.....\$ 7.25

ROOFER, Including Built Up,
Composition and Single Ply

Roofs.....\$ 7.25

Sheet metal worker.....\$ 7.25

TRUCK DRIVER.....\$ 7.25

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union

number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination

- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

General Decision Number: TX160016 01/08/2016 TX16

Superseded General Decision Number: TX20150016

State: Texas

Construction Types: Heavy and Highway

Counties: Atascosa, Bandera, Bastrop, Bell, Bexar, Brazos, Burleson, Caldwell, Comal, Coryell, Guadalupe, Hays, Kendall, Lampasas, McLennan, Medina, Robertson, Travis, Williamson and Wilson Counties in Texas.

HEAVY (excluding tunnels and dams, not to be used for work on Sewage or Water Treatment Plants or Lift / Pump Stations in Bell, Coryell, McClellon and Williamson Counties) and HIGHWAY Construction Projects

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date
0 01/08/2016

* SUTX2011-006 08/03/2011

Rates Fringes

CEMENT MASON/CONCRETE
FINISHER (Paving and
Structures).....\$ 12.56

ELECTRICIAN.....\$ 26.35

FORM BUILDER/FORM SETTER
Paving & Curb.....\$ 12.94
Structures.....\$ 12.87

LABORER

Asphalt Raker.....	\$ 12.12
Flagger.....	\$ 9.45
Laborer, Common.....	\$ 10.50
Laborer, Utility.....	\$ 12.27
Pipelayer.....	\$ 12.79
Work Zone Barricade Servicer.....	\$ 11.85

PAINTER (Structures).....\$ 18.34

POWER EQUIPMENT OPERATOR:

Agricultural Tractor.....	\$ 12.69
Asphalt Distributor.....	\$ 15.55
Asphalt Paving Machine.....	\$ 14.36
Boom Truck.....	\$ 18.36
Broom or Sweeper.....	\$ 11.04
Concrete Pavement Finishing Machine.....	\$ 15.48
Crane, Hydraulic 80 tons or less.....	\$ 18.36
Crane, Lattice Boom 80 tons or less.....	\$ 15.87
Crane, Lattice Boom over 80 tons.....	\$ 19.38
Crawler Tractor.....	\$ 15.67
Directional Drilling Locator.....	\$ 11.67
Directional Drilling Operator.....	\$ 17.24
Excavator 50,000 lbs or Less.....	\$ 12.88
Excavator over 50,000 lbs....	\$ 17.71
Foundation Drill, Truck Mounted.....	\$ 16.93
Front End Loader, 3 CY or Less.....	\$ 13.04
Front End Loader, Over 3 CY.	\$ 13.21
Loader/Backhoe.....	\$ 14.12
Mechanic.....	\$ 17.10
Milling Machine.....	\$ 14.18
Motor Grader, Fine Grade....	\$ 18.51
Motor Grader, Rough.....	\$ 14.63
Pavement Marking Machine....	\$ 19.17
Reclaimer/Pulverizer.....	\$ 12.88
Roller, Asphalt.....	\$ 12.78
Roller, Other.....	\$ 10.50
Scraper.....	\$ 12.27
Spreader Box.....	\$ 14.04
Trenching Machine, Heavy....	\$ 18.48

Servicer.....\$ 14.51

Steel Worker
 Reinforcing.....\$ 14.00
 Structural.....\$ 19.29

TRAFFIC SIGNAL INSTALLER
 Traffic Signal/Light Pole
 Worker.....\$ 16.00

TRUCK DRIVER
 Lowboy-Float.....\$ 15.66
 Off Road Hauler.....\$ 11.88
 Single Axle.....\$ 11.79
 Single or Tandem Axle Dump
 Truck.....\$ 11.68
 Tandem Axle Tractor w/Semi
 Trailer.....\$ 12.81

WELDER.....\$ 15.97

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number

where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can

be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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Group 2.....	\$ 18.82	a
Group 3.....	\$ 16.81	a
Group 4.....	\$ 16.04	a
Group 5.....	\$ 15.71	a

FOOTNOTE

a - \$2.52 PER HOUR PLUS \$41.00 PER WEEK

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Truck Mechanics

GROUP 2 - Lowboy, rollagon or similar type equipment

GROUP 3 - A-Frame, Gin pole, Tandem float (4 & 5 axle) , rubber- tired tractor, fork lift, winch truck, track truck equipment, stringing truck

GROUP 4 - Single axle float (3 axle), flat bed truck (3 axle) dump truck (3 axle), skid truck (3 axle), hot pass (2 axle), Flat bed truck (2 axle) dump truck (2 axle), skid truck (2 axle) water truck (2 axle), pick up, bus jeep, staion wagon, swamp buggy or similar type equipment.

GROUP 5 - Stringer bead & hot pass (2 axle, flat bed truck (2 axle), dump truck (2 axle), skid truck (2 axle), water truck (2 axle), pick-up, bus jeep, station wagon, swamp buggy or similar type equipment.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - Backhoe, dragline, clam, crane, ditching machine, side booms (except those in GROUP 2), mechanic, operator on dredges, bulldozer, cleaning machine, coating machine, back filler, motor grader, end loader (3 yd. & over), blending machine, wate-kote machine, equipment welder, track tractor

GROUP 2 - Pipe dream, gin truck or winch truck with poles when used for hoisting, side boom (cradling rock drill), tow tractor,, farm tractor, road boring machine, end loader (under 3 y.d), fork lift (industrial type), pot fireman (power agitated); straightening machine, boring machine, bombardier (track or tow rig), mobile lubrication & service engineer, hydrostatic testing operator, rollagon or similar type equipment

GROUP 3 Fuel man, oiler or swamper (on trenching machine or shovel- type equipment)

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average

calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: TX160279 06/17/2016 TX279

Superseded General Decision Number: TX20150279

State: Texas

Construction Type: Building

County: Bell County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any

classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	06/17/2016

BOIL0074-003 01/01/2014

	Rates	Fringes
BOILERMAKER.....	\$ 23.14	21.55

ENGI0178-005 06/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(1) Tower Crane.....	\$ 29.00	10.60
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under.....	\$ 27.50	10.60

IRON0084-011 06/01/2015

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 23.02	6.35

* PLUM0286-011 05/30/2016

	Rates	Fringes
PIPEFITTER (Excludes HVAC Pipe Installation).....	\$ 28.03	12.43

SUTX2014-005 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 19.09	0.00
CARPENTER, Excludes Drywall Hanging, and Metal Stud Installation.....	\$ 17.28	1.71

CEMENT MASON/CONCRETE FINISHER...\$ 14.00	0.00
DRYWALL HANGER AND METAL STUD INSTALLER.....\$ 14.59	0.00
ELECTRICIAN (Low Voltage Wiring Only).....\$ 28.28	2.44
ELECTRICIAN, Excludes Low Voltage Wiring.....\$ 20.50	2.71
HVAC MECHANIC (HVAC Pipe Installation Only).....\$ 15.50	0.00
HVAC MECHANIC (Installation of HVAC Unit Only).....\$ 16.01	1.56
INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation).....\$ 19.77	7.13
IRONWORKER, REINFORCING.....\$ 13.35	0.00
IRONWORKER, STRUCTURAL.....\$ 18.35	4.90
LABORER: Common or General.....\$ 10.53	0.00
LABORER: Mason Tender - Brick...\$ 9.98	0.00
LABORER: Mason Tender - Cement/Concrete.....\$ 9.93	0.00
LABORER: Pipelayer.....\$ 12.49	2.13
LABORER: Roof Tearoff.....\$ 11.28	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....\$ 13.10	1.24
OPERATOR: Bobcat/Skid Steer/Skid Loader.....\$ 13.93	0.00
OPERATOR: Bulldozer.....\$ 18.29	1.31
OPERATOR: Drill.....\$ 16.22	0.34
OPERATOR: Forklift.....\$ 14.00	0.00
OPERATOR: Grader/Blade.....\$ 14.34	1.68
OPERATOR: Loader.....\$ 13.88	0.44
OPERATOR: Mechanic.....\$ 17.52	3.33

OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.03	0.00
OPERATOR: Roller.....	\$ 13.11	0.00
PAINTER (Brush, Roller, and Spray).....	\$ 15.00	0.81
PLUMBER, Excludes HVAC Pipe Installation.....	\$ 21.18	7.57
ROOFER.....	\$ 13.75	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 18.71	4.90
SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 14.89	1.55
SPRINKLER FITTER (Fire Sprinklers).....	\$ 15.46	0.00
TILE FINISHER.....	\$ 11.22	0.00
TILE SETTER.....	\$ 14.74	0.00
TRUCK DRIVER: Dump Truck.....	\$ 11.50	1.10
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00	4.11

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4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SECTION 01 00 00.00 44

CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.1 SCHEDULE

Commence, prosecute, and complete the work under this contract in accordance with the following schedule and Section 00 72 00 CONTRACT CLAUSES COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK and LIQUIDATED DAMAGES:

	Item of Work	Commencement of Work (Calendar days)	Completion of Work (Calendar days)	Liquidated Damages per calendar days
(1)	All work for each task order	See task order RFP Letter.	Completion time and liquidated damages shall be in accordance with task order requirements	

a. Liquidated damages for individual items of work will not be combined. Only the rate of the affected item of work will be assessed.

b. Liquidated damages are not accumulative for multiple phases of work.

** Operation and Maintenance Manuals: See Section 01 78 00 CLOSEOUT SUBMITTALS, paragraph OPERATION AND MAINTENANCE MANUALS

*** Record Drawings: See Section 01 78 00 CLOSEOUT SUBMITTALS, paragraph titled RECORD DRAWINGS.

1.1.1 Testing of Heating and Air-Conditioning Systems

The times stated for completion of a task order includes all required testing specified in appropriate specification sections of heating, air conditioning and ventilation systems including HVAC Commissioning. Exception: boiler combustion efficiency test, boiler full load tests, cooling tower performance tests, and refrigeration equipment full load tests, when specified in the applicable specifications, shall be performed in the appropriate heating/cooling season as determined by the Contracting Officer.

1.2 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (OCT 1989)
(ER 415-1-15) (52.0001-4038 1/96)

a. This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the contract clause FAR 52.249-10 entitled "DEFAULT: (FIXED PRICE CONSTRUCTION)." In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

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

(2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the contractor.

b. The following schedule of monthly anticipated adverse weather delays due to precipitation and temperature is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. Wind is not considered in the Monthly Anticipated Adverse Weather Calendar Day Schedule.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORK DAYS BASED ON (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
4	4	4	4	6	4	3	3	4	4	3	4

c. Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the contractor's scheduled work day.

d. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph "b", above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause entitled "Default (Fixed Price Construction)."

1.3 WORK RESTRICTIONS

1.3.1 Working Hours

Normal working hours will be identified in each task order. Requests to work at times other than the stated working hours, including scheduled utility outages discussed below, shall be submitted to the Contracting Officer for approval. Contractor shall not work outside of the above stated working hours without prior written approval of the Contracting Officer.

1.3.2 Security Requirements

1.3.2.1 Installation Entrance Requirements

Entrance requirements to the Installation are specified in Section 01 35 10.00 44 SPECIAL PROJECT PROCEDURES FOR FORT HOOD.

In addition to the requirements specified in Section 01 35 10.00 44 and for the duration of this Contract, access to Fort Hood will be delayed between 5 minutes to 30 minutes or more due to increased security precautions, including the checking of vehicle occupants' IDs, vehicle manifests, and the searching of all vehicles. Any general or specific threat to the safety of those working or living at the Installation could result in longer waiting times at the access points to the Installation.

The following are the minimum requirements for contractor employees entering Fort Hood:

- a. One form of picture ID.
- b. A memo from the construction company on their letterhead stating the reason for entry, contract number, and the location at Fort Hood where the jobsite is located.
- c. All delivery trucks must have a bill of lading and delivery truck drivers must have a picture ID.

1.3.3 Identification of Employees

The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

Contractor personnel shall wear visible Contractor-furnished employee identification badges while physically on the Installation. Each badge shall include, as a minimum, the company name, employee name, photograph, Contract Title, Contract Number, and the expiration date of the badge.

1.4 UTILITIES

1.4.1 Payment for Utility Services

Utility availability and Payment For Utility Services are specified in Section 01 50 00 TEMPORARY CONSTRUCTION FACILITIES AND CONTROL.

1.4.2 Coordination

For Contractor Telephone And Internet Service, the Contractor shall coordinate with ITBC and the local phone company for contractor telephone and internet service during construction.

1.4.3 Outages

The Contractor shall coordinate all requests for utility outages with the Contracting Officer in writing 14 days prior to date of requested outage:

a. Water and sewer outages shall be held to a maximum duration of 4 hours unless otherwise approved in writing.

b. Gas and electrical outages are prohibited. Connections to gas and electrical lines shall be connected Hot without an outage. The Contractor shall submit a Work Plan for Electrical Connections 14 calendar days before the requested connections.

c. All utility outages shall be scheduled only on Saturdays, Sundays, or holidays unless specific approval is otherwise received.

1.5 PAPERLESS CONTRACT SUBMISSION

a. GENERAL INFORMATION ON PAPERLESS CONTRACT SUBMISSION

The goal is to reduce waste, decrease time, decrease associated costs, and to streamline most file transmission procedures.

b. METHODS OF DIGITAL SUBMISSION

This contract shall use digital submission methods to the greatest extent practicable. Acceptable methods are as follows, in order of precedence:

1. QCS/RMS - will be used to the greatest extent practicable. Some items may not be submittable via QCS/RMS due to program constraints. Those items shall use an alternate method. All ENGR 4025's shall be generated and submitted in QCS.

2. Secure, Password Protected Web-Based System Access must be allowed and approved by the Government Representative. Access must be allowed and approved by the Government Representative. This method shall not be used for security sensitive documents.

3. E-mail - Items not submitted via QCS/RMS, as discussed above, shall be submitted via e-mail, if possible. E-mail limitations for file size must be considered prior to submission. Under current conditions, 5 megabytes is the limitation for any single file/e-mail.

4. CD/DVD - Will be accepted if no other method is possible and upon prior approval.

c. ITEMS TO BE SUBMITTED VIA HARDCOPY

Product samples, color boards, and any other item not feasible to submit digitally, shall be submitted hard copy. ENGR 4025 shall be submitted digitally always. The Government reserves the right to request hard copy submission on any item, if deemed necessary. Contractor shall be prepared to provide requested hard copy at any time.

1.6 CONTRACTOR PERFORMANCE EVALUATIONS

In accordance with the provisions of Subpart 36.201 (Evaluation of Contractor Performance) of the Federal Acquisition Regulation (FAR), construction contractor's performance shall be evaluated throughout the performance of the contract. The United States Army Corps of Engineers (USACE) follows the procedures outlined in Engineering Regulation 415-1-17 to fulfill this FAR requirement. For construction contracts awarded at or

above \$700,000.00, the USACE will evaluate contractor's performance and prepare a performance report using the Contractor Performance Assessment Reporting System (CPARS), which is now a web-based system. After an evaluation (interim or final) is written up by the USACE, the contractor will have the ability to access, review and comment on the evaluation for a period of 30 days. Accessing and using CPARS requires specific software, called PKI certification, which is installed on the user's computer. The certification is a Department of Defense requirement and was implemented to provide security in electronic transactions. The certification software could cost approximately \$110 - \$125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor. Current information about the PKI certification process and for contacting vendors can be found on the web site: <http://www.cpars.csd.disa.mil/>. If the Contractor wishes to participate in the performance evaluation process, access to CPARS and PKI certification is the sole responsibility of the Contractor.

1.7 CONTRACTOR PAYROLL RECORD

Contractor shall be required to log payrolls for all their own employees and subcontractors utilizing ENG Form 3180. Each subcontractor requires a separate ENG 3180 for their payrolls. The Contractor shall maintain the ENG 3180, along with the payrolls, on site and available for review by the Contracting Officer's Representative. The ENG 3180's shall be updated weekly as payrolls are submitted. After making copies for their files, the Contractor is required to submit the originals of each week's payrolls to the Resident Office. Before final payment, the Contractor shall provide the completed ENG 3180's to the Contracting Officer's Representatives.

1.8 (S-102) CONTRACTOR SUPPLY and USE OF ELECTRONIC SOFTWARE FOR PROCESSING DAVIS-BACON ACT CERTIFIED LABOR PAYROLLS (April 2011)

If the contractor elects to use an electronic payroll processing system, then the contractor is encouraged to use a commercially-available electronic system to process and submit certified payrolls electronically to the Government. The requirements for preparing, processing and providing certified labor payrolls are established by the Davis-Bacon Act as stated in FAR 52.222-8, PAYROLLS AND BASIC RECORDS and FAR 52.222-13, COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS.

The contractor shall be responsible for obtaining and providing for all access, licenses, and other services required to provide for receipt, processing, certifying, electronically transmitting to the Government, and storing weekly payrolls and other data required for the contractor to comply with Davis-Bacon and related Act regulations. When the contractor uses an electronic Davis-Bacon payroll system, the electronic payroll service shall be used by the contractor to prepare, process, and maintain the relevant payrolls and basic records during all work under this construction contract and the electronic payroll service shall be capable of preserving these payrolls and related basic records for the required 3 years after contract completion. The contractor shall obtain and provide electronic system access to the Government, as required to comply with the Davis-Bacon and related Act regulations over the duration of this construction contract. The access shall include electronic review access by the Government contract administration office to the electronic payroll processing system used by the contractor.

The contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria: commercially

available; compliant with appropriate Davis Bacon Act payroll provisions in the FAR; able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract; demonstrated security of data and data entry rights; ability to produce contractor-certified electronic versions of weekly payroll data; ability to identify erroneous entries and track the data/time of all versions of the certified Davis Bacon payrolls submitted to the government over the life of the contract; capable of generating a durable record copy, that is, a CD or DVD and PDF file record of data from the system database at end of the contract closeout. This durable record copy of data from the electronic Davis-Bacon payroll processing system shall be provided to the Government during contract closeout.

All contractor-incurred costs related to the contractor's provision and use of an electronic payroll processing service shall be included in the contractor's price for the overall work under the contract. The costs for Davis-Bacon Act compliance using electronic payroll processing services shall not be a separately bid/proposed or reimbursed item under this contract.

1.9 ADDITIONAL CONTRACTOR PAYROLL RECORD

(1) Reference the Special Contract Requirement (S-102) CONTRACTOR SUPPLY AND USE OF ELECTRONIC SOFTWARE FOR PROCESSING DAVIS-BACON ACT CERTIFIED LABOR PAYROLLS. The Fort Worth District encourages the contractor and all sub-contractors to use an electronic payroll system meeting the requirements of S-102 and the following requirements.

(a) The Certified Labor Payrolls must be tracked electronically via WEB-based software and all data must be submitted via WEB. Payroll guidelines, "Instructions to Contractors on Contract Labor Requirements, published as "Appendix A, SWFP 1185-1-1" (also known as the Green book), will be provided to advise/inform contractors how these labor provisions will be administered and enforced.

(b) The WEB-based software must be capable of downloading data directly from existing electronic payrolls, track workers to ensure that overtime is being paid when overtime status is reached on Government contracts whether on one or multiple contracts or different sub-contractors. The software must track apprentices and journeyman ratios, create and track SF-1444 "Request for Authorization of Additional Classification and Rate", track workers by name/address/with or without Social Security Numbers, allow automated redaction of information appearing on payroll statements for agency response to Freedom of Information Act (FOIA requests), and provide free online training by the software provider to any user of the software.

(c) The software must allow fringe benefit statement to track fringe benefits "whether cash or into an approved plan, fund, or program. If the fringe benefits are paid into a plan, fund, or program the company's name (receiving benefits), phone number, and address shall be listed on the Statement of Compliance Form (DD Form 879 or WH-347).

(d) Software must provide a method of tracking standard and non-standard deductions such as restitution, alimony, child support, and allow for custom entries. Method of tracking must list the deductions on the statement of compliance or be listed as an attachment.

(e) The Contractor is required to provide the updated 3080's and notify the Contracting Officer's Representatives weekly by email when the current

payrolls are complete and ready for inspection/review on the WEB. Before final payment, the Contractor shall provide the completed ENG For 3180's and 3 disks (CD/DVD) which include complete copies of the Contractor and sub-contractor's payrolls/attachments, to the Contracting Officer's Representatives.

(2) Electronic copies of electronically/manually signed forms/memos/letters such as SF 1413 Statement of Acknowledgement (sub-contractor agreement), SF-1444 "Request for Authorization of Additional Classification and Rate", employee deduction authorization, certification of apprentices and trainees shall be provided to the Contracting Officer's Representative as required by FAR.

1.10 STREET CLOSINGS

The Contractor shall coordinate all requests for street closings with the Contracting Officer in writing 14 days prior to date of requested outage:

a. One lane traffic shall be maintained at all times (except that a total closing may be allowed for specific 8-hour periods).

b. The final street repair shall be completed within 14 days after the start of any street crossing. Any part of the street returned to service prior to final repair shall be maintained smooth with hot-mix cold-lay surface course.

c. Open cuts across paved roads and streets for utility crossings will not be allowed. Utility crossings will be accomplished by boring or jacking procedures only.

1.11 Veterans Employment Emphasis for U.S. Army Corps of Engineers Contracts

In addition to complying with the requirements outlined in FAR Part 22.13, FAR Provision 52.222-38, FAR Clause 52.222-35, FAR Clause 52.222-37, DFARS 222.13 and Department of Labor regulations, U.S. Army Corps of Engineers (USACE) contractors and subcontractors at all tiers are encouraged to promote the training and employment of U.S. veterans while performing under a USACE contract. While no set-aside, evaluation preference, or incentive applies to the solicitation or performance under the resultant contract, USACE contractors are encouraged to seek out highly qualified veterans to perform services under this contract. The following resources are available to assist USACE contractors in their outreach efforts:

Federal Veteran employment information at

<http://www.fedshirevets.gov/index.aspx>

Department of Labor Veterans Employment Assistance <http://www.dol.gov/vets/>

Department of Veteran Affairs - VOW to Hire Heroes Act

<http://benefits.va.gov/vow>

Army Wounded Warrior Program -

<http://wtc.army.mil/modules/employers/index.html>

U.S. Chamber of Commerce Foundation - Hiring Our Heroes

<http://www.hiringourheroes.org/>

Guide to Hiring Veterans - Reference Material -

http://whitehouse.gov/sites/default/files/docs/white_house_business_council_-_guide_to_h

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

Section 01 10 00 - Statement of Work

SECTION 01 10 00.30 44

JOC STATEMENT OF WORK

**Maintenance, Repair, Upgrade and Construction
of Real Property Facilities at Fort Hood, Killeen, Texas**

1.0 GENERAL

The Contractor shall perform major repair, maintenance, and minor construction defined in each task order. The Contractor shall provide all labor, material and equipment in sufficient quantities to meet approved requirements.

The Contracting Officer or appropriately designated Job Ordering Official will issue to the Contractor a Request for Proposal (RFP). The Contractor shall be responsible for estimating the level of effort required to perform the requested work. The Government will provide the basic requirement to the Contractor detailing the task to be accomplished. The detail provided will vary from a general idea of what is required with no drawings to complete design documents, depending on the complexity of the project. The Contractor shall submit a complete detailed proposal of items required to perform the work required by the task order, within the time frame stated in the RFP. The proposal must be of sufficient detail and broken out so that the Government can readily determine if estimated quantities and level of effort is adequate to meet requirements for each task and subtask.

The Contractor shall provide, upon receipt of a task order, all work, materials, supplies, parts (to include system components), plant, supervision, labor, transportation, and equipment (except when specified as Government Furnished), for maintenance, repair, upgrade and construction of real property facilities at Fort Hood in Killeen, Texas, and the related services as specified in strict accordance with all the terms, conditions, special contract requirements, specifications, drawings, attachments, and exhibits contained in the contract or incorporated by reference as follows.

The Contractor's work and responsibility shall include all Contractor planning, programming, administration, and management necessary to provide all facets of work for the construction and related services as specified. The work shall be conducted by the Contractor in strict accordance with the contract and all applicable Federal, State of Texas, and local laws, regulations, codes or directives. The Contractor shall ensure that all work provided meets, or exceeds the critical reliability rates or tolerances specified or included in the applicable documents. The Contractor shall provide related services such as preparing and submitting required reports, performing administrative work, and submitting necessary information as specified under this contract and within individual task orders.

2.0 PERIOD OF PERFORMANCE

The estimated period of performance for this contract is a 12-month base, and two (2) 12-month options, and option to extend service for up to 6 months under FAR 52.217-8. The maximum capacity in amount is \$30,000,000.00. The Government intends to exercise both options period 1 and 2.

Base Period – 15 January 2017 through 14 January 2018, 12 months of performance.
Option Period 1 - 15 January 2018 through 14 January 2019, 12 months of performance.
Option Period 2 -15 January 2019 through 14 January 2020, 12 months of performance.

3.0 ANTITERRORISM/OPERATIONS SECURITY (AT/OPSEC) requirements:

1. AT Level I Training. This provision/contract text is for contractor employees with an area of performance within an Army controlled installation, facility or area. Proposed language: "All contractor employees, to include subcontractor employees, requiring access to Army installations, facilities, controlled access areas, or require network access, shall complete AT Level I awareness training within 30 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. Upon request, the contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee, to the COR or to the contracting officer (if a COR is not assigned), within 5 calendar days after completion of training by all employees and subcontractor personnel. AT Level I awareness training is available at the following website: <http://jko.jten.mil/courses/at11/launch.html>; or it can be provided by the RA ATO in presentation form which will be documented via memorandum."

2. Access and General Protection/Security Policy and Procedures. This standard language text is for contractor employees with an area of performance within an Army controlled installation, facility or area. Proposed language: "All contractor and all associated sub-contractors employees shall comply with applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative). The contractor shall also provide all information required for background checks to meet installation/facility access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel) as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any installation or facility change, the Government may require changes in contractor security matters or processes."

3. For contractors who do not require CAC, but require access to a DoD facility or installation. Proposed language: Contractor and all associated sub-contractors employees shall comply with adjudication standards and procedures using the National Crime Information Center Interstate Identification Index (NCIC-III) and Terrorist Screening Database (TSDB) (Army Directive 2014-05 / AR 190-13), applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative, as NCIC and TSDB are available), or, at OCONUS locations, in accordance with status of forces agreements and other theater regulations.

4. Suspicious Activity Reporting Training (e.g. iWATCH, CorpsWatch, or See Something, Say Something). This standard language is for contractor employees with an area of performance within an Army controlled installation, facility or area. Proposed language: "The contractor and all associated sub-contractors shall receive a brief/training (provided by the RA) on the local suspicious activity reporting program. This locally developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious

activity to the project manager, security representative or law enforcement entity. This training shall be completed within 30 calendar days of contract award and within 30 calendar days of new employees commencing performance with the results reported to the COR NLT 5 calendar days after the completion of the training."

5. For Contracts that Require OPSEC Training. Per AR 530-1, (Operations Security) contractor employees must complete Level I OPSEC Training within 30 calendar days of contract award. Proposed language: "All new contractor employees will complete Level I OPSEC Training within 30 calendar days of their reporting for duty. Additionally, all contractor employees must complete annual OPSEC awareness training. The contractor shall submit certificates of completion for each affected contractor and subcontractor employee, to the COR or to the contracting officer (if a COR is not assigned), within 5 calendar days after completion of training. OPSEC awareness training is available at the following websites: <https://www.iad.gov/ioss/> or <http://www.cdse.edu/catalog/operations-security.html>; or it can be provided by the RA OPSEC Officer in presentation form which will be documented via memorandum."

6. Pre-screen candidates using E-Verify Program. Proposed language: "The Contractor must pre-screen Candidates using the E-verify Program (<http://www.uscis.gov/e-verify>) website to meet the established employment eligibility requirements. The Vendor must ensure that the Candidate has two valid forms of Government issued identification prior to enrollment to ensure the correct information is entered into the E-verify system. An initial list of verified/eligible Candidates must be provided to the COR no later than 3 business days after the initial contract award." *When contracts are with individuals, the individuals will be required to complete a Form I-9, Employment Eligibility Verification, with the designated Government representative. This Form will be provided to the Contracting Officer and shall become part of the official contract file.

4.0 DOCUMENTS

The following documents shall be utilized in the execution of the work under this contract:

- Job Order Contract (JOC) Division 01 General Requirements
- Job Order Contract (JOC) Technical Specifications
- Building Codes
- Unit Price Book (UPB) And Software
- Job Order Contracting (JOC) Standard Operating Procedures
- Job Order Contracting (JOC) Guide

4.1 Job Order Contract DIVISION 01 GENERAL REQUIREMENTS

4.2 Job Order Contract TECHNICAL SPECIFICATIONS

Furnish materials and equipment conforming to the requirements specified in the task order, or if not in the task order, in the Unified Facilities Guide Specifications (UFGS) which can be downloaded from the Whole Building Design Guide website at <http://www.wbdg.org/ccb/ccb.php>. The UFGS are unedited guide specifications that require editing to fit the requirements of the task order. They are in the SpecsIntact format (.sec) and can only be edited using the SpecsIntact software which can be downloaded free of charge at <http://specsintact.ksc.nasa.gov/>. The guides are numbered and organized in accordance with the Construction Specification Institute's (CSI) 2010 Master Format, from Division 01 through 48. The intent of these specifications is to furnish concise industrial and/or

commercial standards for maintenance and repair of Government facilities.

5.0 BUILDING CODES

All work shall meet or exceed applicable Building Codes.

6.0 UNIT PRICE BOOK AND SOFTWARE REQUIREMENTS

6.1 **COST ESTIMATING SOFTWARE REQUIREMENTS:** The Contractor shall purchase, maintain and use the latest version of e4Clicks (e4Clicks) Basic or Professional Project Estimator. The Contractor shall use e4Clicks software to estimate and submit all of their estimates, both electronically and on paper. The Contractor is responsible for deciding which software application to purchase and the number of copies of the software that they will need to support their contract requirements.

6.2 The estimating and project management software package shall be Windows-based software and must be able to import and export estimates and projects electronically in a secured estimate file format. It shall be able to track projects by contract, contract year, estimator, customer and/or project location. It shall support project management tracking of project milestones, project costs, locations, contacts, and project notes. It shall provide a means for document management, whereas the user can setup template documents, point and click and create new, project specific documents using the current project details. The software must support multiple contracts, contractors and coefficients. The software shall be able to import the contractor's estimate, complete an electronic comparison and technical evaluation showing the Government's pre-negotiation strategy, as well as producing the contractors revised estimate report to show the post negotiation changes made from the initial estimate to the final accepted estimate. The software must be capable of handling multiple coefficients and the contractor's markups within a project. The database shall contain all of the line items found in the RSMMeans bound volumes. Software must support Specification management, whereby specific line items will be linked to specific specifications and the user can automatically produce a detailed Specification document for each project as they build their estimates. The software must support estimate line item notes and takeoff both manually and via electronic drawings, providing the ability for instant drill down from a line item quantity to the specific drawing and measurement. The software report engine shall support square foot planning and programming detailed reports for future projects and budgeting. All RSMMeans databases must be protected from being changed by any user. The software must support all of the City Cost Index provided by RSMMeans annually and quarterly in addition to supporting Division Level Material/Installation, Division Level Weighted Average, Weighted Average Material/Installation and Weighted Average Totaling for Bare Cost pricing and O&P unit pricing. The RSMMeans data must be provided in both book description and full character descriptions. The software shall be able to export to Microsoft Excel™ and Adobe PDF™ file types as well as create electronic DOD Form 1354 Real Property documents.

6.3 Information on this software and pricing can be obtained by emailing sales@4Clicks.com; notify them that this is for the USACE SWF Killeen, TX JOC contract. FAR Part 51 allows the Contracting officer to issue a Letter of Authorization

to give us permission to provide the awarded Contractor with GSA pricing. You will need to request, obtain and submit this to us should you be the successful Contractor.

- 6.4 e4Clicks offers free 30 day evaluations to qualified contractors to evaluate the software, RSMeans and create your model project. Contact them to determine if you are able to participate in this offering. They request a copy of your company electronic logo, your location (city and state), and the estimators first and last name and their email and contact phone number.

7.0 DEFINITIONS

- 7.1 Unit Price Book (UPB): The list and price information for all pre-priced items covered in this contract. The UPB shall include the base cost pricing from the RSMeans Facilities Construction Cost Data. The UPB shall also include RSMeans trades line items, selective demolition line items, removal and replacement line items, average line items, and Government Furnished Materials line items.
- 7.2 Line item: An item or system denoted in the UPB by a unique line item number.
- 7.3 Bare costs: The cost of a line item without any multiplier.
- 7.4 Multipliers: All factors added to the bare cost pricing of the UPB. This includes the City Cost Index (CCI) and the contractors' coefficients.
- 7.5 Pre-priced line item: A line item from the UPB with approved changes.
- 7.6 Non-pre-priced line item (NPI): A line item that is not a pre-priced line item.
- 7.7 Conventional line item: A line item listed directly from an RSMeans Cost Data Guide(s).
- 7.8 RSMeans trades line item. These are the bare cost hourly rates found in the back of the annually published RSMeans hardback books.
- 7.9 Selective demolition line item: The removal of material with no concern for its replacement. If a line item can be found in the UPB for selective demolition, that line item will be used. If there is no line item for selective demolition, the Contractor will locate the line item in the UPB. Then the Contractor will create an alternate pre-priced line item removing the cost for the material and equipment, and the remaining labor amount will be multiplied by 50%. This will be used as the means to demolish that item. This line item will be pre-priced. If the line item cannot be found in the UPB, the demolition will be an NPI.
- 7.10 Removal and replacement line item: An item that is to be removed and then replaced without damaging the item. If a line item can be found in the UPB for removal and replacement, that line item will be used. If there is no line item for removal and replacement, the Contractor will locate the line item in the UPB. Then the Contractor will create an alternate pre-priced line item removing the cost for the material and equipment, and the remaining labor amount will be multiplied by 150%. This will be used as the means to demolish that item. This line item will be pre-priced. If the line item cannot be found in the UPB, the demolition will be an NPI.

- 7.11 Average line item: An item that is created by using a minimum and maximum line item. If an average line item can be found in the UPB, that line item will be used. If there is no line item for an average, but there is a line item for minimum and maximum and the average line item is applicable the Contractor will locate the two line items, the minimum and the maximum in the UPB. Then the Contractor will create an alternate pre-priced line item using the average total cost of the two line items. This will be used as a means to create an average line item when none exists. This line item will be pre-priced. If the minimum and maximum line item cannot be found in the UPB, the average line item will be an NPI.
- 7.12 Government Furnished Materials (GFM): On occasion, the Government may choose to supply the Contractor with materials to accomplish project requirements. If this occurs, the line item prices for labor and equipment only will be used. They are considered as pre-priced. The Contractor will not adjust the labor and equipment pricing. The materials are to be cared for by the Contractor, and excess materials are to be returned to the Government.
- 7.13 All prices in the UPB are for completed and in-place construction unless explicitly described otherwise. Incidental fasteners, such as, nails, screws, bolts, weldments, connectors, and adhesives are included in the bare material cost. Unless specifically omitted in the UPB line item description, testing, adjusting, balancing, and start-up of installed equipment is included in the unit price line number cost found in the UPB. Line items are for end finishes. For example, the line item price for concrete broom finish included all finishes necessary to result in the broom finish.
- 7.14 The UPB prices certain line items with a “Minimum labor/equipment charge.” This minimum charge is often the price a tradesman would charge to make a special visit to perform that work. If the Contractor is already on-site and the minimum is met, then this item shall not be used as an adjustment to the Unit Price line items.
- 7.15 All line item prices assume the installation of the material under normal working conditions. This includes working from scaffolding when appropriate. In other words, the productivity for brick veneer is based upon working not only from the ground, but also from working on scaffolding. Therefore unless the division has specific height exceptions, no allowance or change to the unit price is required for working at different heights. The cost to rent and erect the scaffolding is required. All scaffolding line items are based upon a one month rental of the scaffolding. Scaffolding is measured by the square foot of face area where the work is being performed (working height in feet multiplied by the length of the wall in feet) or, in the case of when scaffolding must be erected inside a structure in order to access the ceiling, by the cubic feet (volume) of the actual scaffolding components. Scaffolding is priced separately. There are line items for the material costs and line items for erection/dismantling. It is not appropriate to use the scaffolding line items separately for each subcontractor. Scaffolding should be applied to the job cost once, and the subcontractors are “allowed” to use it.
- 7.16 Line items for mobilization and demobilization are for one or the other unless noted otherwise. Normally, a piece of equipment will need to be mobilized and demobilized. Therefore, the line item would normally be included twice per piece of equipment used. Small equipment placed in rear of truck or towed by a pickup truck is limited to those items included in the RSMMeans crews.

8.0 PRICE DETERMINATION

- 8.1 CITY COST INDEX (CCI): The CCI will be applied directly to the bare cost of each line item.
- 8.2 The CCI for task orders at Fort Hood, TX will use the quarterly published CCI for Killeen, TX.
- 8.2.1 City Cost indexes are published around the middle of each of these months: February, May, August, and November.
- 8.3 Conventional line items will use the Weighted Average Total CCI.
- 8.4 The RSMeans trades, selective demolition, removal and replacement, average, and GFM lines items will be summated and multiplied by the most current quarterly published Weighted Average Total CCI.
- 8.5 PREPRICED LINE ITEMS: Bare cost line items from the Unit Price Book (UPB) will be summated with the CCI applied as described above. The appropriate coefficient shall then be applied to the total. This is the pre-priced line item total.
- 8.6 NON-PRE-PRICED LINE ITEMS: The non-pre-priced line items shall be summated and the appropriate coefficient applied. This is the non-pre-priced line item total.
- 8.7 FINAL PROJECT PRICE: The summation of the pre-priced and non-pre-priced line item totals shall result in the final project price.
- 8.8 COST ESTIMATE ORGANIZATION: Cost Estimates will be comprised of three sections: 1) Division Summary, 2) Totalling Components and 3) Line Item Estimate.
- 8.8.1 SECTION 1, DIVISION SUMMARY: This section shall include the RSMeans pre-priced divisions, Trades, Assemblies and Alternates (both pre-priced and non-pre-priced). These items shall make up the Bare Total. No markups shall be applied at this level. (CCI's shall be applied as described above.)
- 8.8.2 SECTION 2, TOTALLING COMPONENTS: This section includes totaling components setup for all applicable markups, including contractor coefficients. (CCI's shall be applied as described above.)
- 8.8.3 SECTION 3, LINE ITEM ESTIMATE: This section shall include all of the estimate line items. The report shall include a sequential line item number, full RSMeans item number, unit of measure, quantity, and bare unit cost, total amount (quantity multiplied by bare unit cost). The report will print: pre-priced line items by division for all RSMeans pre-priced line items found in the UPB, with division breaks and division subtotals, and a listing of the Trades, Assemblies and Alternates, both pre-priced and non-pre-priced. (CCI's shall be applied as described above.)

All non-pre-priced line items will be submitted with three independent price quotes including line item number, description, material, labor, and equipment breakdowns. List the supplier names and telephone numbers for each non-pre-priced item. Do not apply any type of markup to these line items.

8.9 PRE-PRICED UNIT PRICE BOOK

8.9.1 UNIT PRICE BOOK: The unit price book shall consist of the most current RSMMeans Facilities Construction Cost Data. All costs used from the databases shall be bare costs.

8.9.1.1 All bound volumes, electronic databases, and software licenses shall be provided by the Contractor to the Government, and will remain the property of the Government.

8.9.1.2 The following Subdivisions/Major Classifications, as contained in any of the RSMMeans bound or electronic databases shall not be used as line items in pricing task orders issued under this contract. These costs shall be covered in the contractor's coefficients:

8.9.1.2.1 1.8.5.2.1 Subdivision 01-31 – Project Management and Coordination, excluded in its entirety.

8.9.1.2.2 1.8.5.2.2 Subdivision 01-32 – Construction Progress Documentation, excluded in its entirety.

8.9.1.2.3 1.8.5.2.3 Subdivision 01-41 – Regulatory Requirements, excluded in its entirety.

8.9.1.2.4 1.8.5.2.4 Subdivision 01-52 – Construction Facilities, excluded in its entirety. Include in the exclusions:

- 01 11 31 20. Construction Management Fees
- 01 11 31 50. Models
- 01 11 31 75. Renderings
- 01 21 16. Contingencies
- 01 21 55-01 21 63. Job Conditions/Overtime/Cost Indexes/Taxes - all except hoisting, work space availability, and material storage
- 01 54 09 50. Personnel Protective Equipment
- 01 93 08 50. Equipment

8.9.1.3 No informational portion of RSMMeans books (introduction, chapter tips, etc) shall be construed as permitting cost changes or deviations from the RSMMeans line items used for the UPB.

8.10 NON-PRE-PRICED UNIT PRICE GUIDES

Line items not covered in the pre-priced UPB but within the scope and general intent of the contract and necessary to complete the requirements of a specific task order may be negotiated and incorporated into the task order by the Contracting Officer. These non-pre-priced line items (NPI's) shall only be allowed if the Government deems that an appropriate line item is not provided by the pre-priced UPB.

To permit recurrent use, a non-pre-priced line item must be incorporated by supplemental agreement into the non-pre-priced UPB. This may be done at any time during the contract period.

JOB ORDER CONTRACTING (JOC) STANDARD OPERATING PROCEDURES FOR FORT HOOD FACILITIES ENGINEERING DIVISION JOC SOP

Fort Hood customers, tenant activities, preventive maintenance programs, and other in-house facilities inspection programs generate requirements for sustainment, restoration, and modernization work. Completed Individual Job Orders (IJO) are submitted to the Fort Hood Facilities Work Reception Office in accordance with installation regulations and standard procedures. The initial step is to prepare an IJO based on a DA Form 4283, Work Request. The Fort Hood work management office is responsible for assessing the validity of the work request, checking for duplication with other requests, classifying the category of work, checking the customer's statement of work for sufficient detail, identifying and confirming a funding source, and assigning a priority and project number. The work management office also completes a desk estimate of the project cost to help determine the best method for executing the work request (in-house shops, competitively bid individual contracts or JOC).

1.0 Ordering Officer Responsibilities

The distribution of functions associated with contract operations, including issuance of task orders and actions required by the Contracting Officer, shall be planned and discussed to ensure smooth and orderly accomplishment of functions.

2.0 Contract Administration Functions

The Fort Hood Facilities Engineering Management Division is responsible for the contract administration functions. Responsibilities include contract administration functions, including such areas as payment disputes, appeals, total or partial contract termination (including task order termination) and contract closeout. A contract administration plan will be written by the contract administration office and the Fort Hood as part of a JOC execution SOP.

3.0 Contract Inspection Functions

The Fort Hood Facilities Engineering Management Division is responsible for the contract inspection functions. Responsibilities include for the inspection, acceptance and delivery of assigned task orders to the Facilities customer in accordance with the statement of work, specifications, drawings and Fort Hood safety, environmental and fire department requirements.

4.0 In-House or Contract Performance Review

The Facilities Management Operations Officer considers the availability of in-house personnel, self-help capabilities or other means to determine whether the project should be performed in-house or by contract. At any time during the process, the IJO can be returned to the work management office for additional information. The IJO must be analyzed to determine the most suitable method of accomplishing the work. In addition to these responsibilities, Fort Hood will log in the IJO, validate the requirement, set priorities, and obtain appropriate approvals.

5.0 Requirements Review

If an existing eligible requirements contract (as defined in FAR 16.503) totally covers the job order's work requirement, the work may be awarded to the Contractor holding that contract. If

only part of the IJO's requirement is covered by a requirements contract, the work management office must decide whether to obtain the appropriate portion from the requirements Contractor and the rest from the JOC Contractor, or to have all the work done by the JOC Contractor.

6.0 Job Order Contracting

JOC contract can be used to accomplish SRM projects of buildings, structures, or other real property. JOC cannot be used to purchase supplies, services, or architect and engineer (A-E) services. The work management office must ensure that requests for work other than construction are not sent to the JOC section. For example, the following items are not authorized for acquisition under a JOC contract task order:

- Fuels
- Utilities
- Construction equipment
- Administrative equipment
- Furnishings
- Construction materials only (lumber, concrete, etc.), for other than valid JOC projects
- Architect-Engineer Services (Brooks Act)
- Administrative services such as typing, transportation, reproduction, graphics, and interior design services
- Housekeeping services

7.0 Job Order Routing

Upon receipt, the office responsible for JOC will review the IJO to make sure that the JOC contract is the appropriate contracting tool (given the same criteria as above), and develop a preliminary statement of work, and ascertain that the IJO is a valid requirement. If the IJO is found to be inappropriate for JOC, it is returned to the work management office for reassignment to the proper office.

8.0 Assignment of a Project Manager

Once the IJO has been approved for accomplishment by the JOC contract, a project manager will be assigned. This assignment will be based upon the scope of the project, its complexity, and the predominant construction discipline required. The project manager will be responsible for ensuring successful and timely completion of the IJO under the JOC contract. The project manager must become familiar with the job by visiting the construction site with the customer to determine the relevant aspects of the project. The project manager must review the applicable standards and regulations governing the required type of work. If the project manager determines that JOC is not the appropriate method for completing the IJO, it should be returned to the work management office so that the job order can be accomplished by some other method.

9.0 Scope Validation Meeting

When the project manager is satisfied that the IJO can be accomplished under the JOC contract, he should set up a scope validation meeting with the customer, and the JOC Contractor to review the job order and to refine the scope of the project. The Contracting Officer/ordering officer and quality assurance personnel (inspectors) may also attend this meeting. This meeting should take place at the construction site. The project manager is responsible for developing the statement of

work. The following topics should be discussed, as appropriate:

- Existing site conditions
- Methods and alternatives for accomplishing the work
- Definitions and requirements
- Detailed statement of work
- The Contractor's requirement for plans, sketches, shop drawings, as-builts, etc. or the Government provided plans, sketches, drawings etc.
- Tentative construction schedule

In addition, the parties should tentatively agree upon a target performance period during the meeting. This target may be modified after the Contractor has prepared a detailed proposal. After the meeting, the project manager should prepare a memorandum for record (MFR) describing the details of the meeting. This memorandum will be used later as a guide to prepare the task order package, the independent Government estimate and refine the scope of work. The MFR will be included in the task order support file.

10.0 Request for Contractor's Proposal

The Contracting Officer and ordering officer (when authorized) are the only people who have the responsibility and authority to place JOC task orders. The Contracting Officer, ordering officer, or Contracting Officer's representative, may issue requests for Contractor's proposal. JOC personnel must adhere to the authorities delegated to them by the Contracting Officer. Before issuing the request for proposal, the following conditions should be met. Once satisfied that these conditions are met, check to see that the requirement is within the delegation of the ordering officer authority.

- The requirement is within the scope of the JOC contract.
- The request for proposal and support file are complete.
- The requirement is not subject to the provisions of another existing contract.
- Once satisfied that these conditions are met, check to see that all of the following items are included in the task order proposal package:
 - Name of project
 - Project number
 - Statement of work
 - Date of request
 - Date proposal is due
 - Special instructions, such as identifying work that must be performed during other-than-normal working hours and the need for drawings, samples, etc.
 - Preliminary construction schedule
 - Liquidated damages assessment, if appropriate
 - Number of copies of the proposal required
 - Copy of the site visit MFR

After reviewing the material, the request for proposal can be issued to the Contractor. This request to the Contractor shall instruct the Contractor to return the task order proposal to the Contracting Officer/ordering officer by a specified date.

11.0 Proposal Preparation

Upon receipt of the request for task order proposal, the Contractor will prepare a detailed proposal identifying the required construction tasks from the UPB, refine the quantities, propose prices for NPP tasks, prepare working drawings, develop performance schedules, and prepare the proposal document in the specified format. The Contractor's task order proposal must be based on the UPB, using the predetermined prices and technical specifications to the maximum extent possible. The Contractor will separately identify work requested by the Government that

must be performed during other-than-normal working hours.

Non-pre-priced (NPP) work may arise from tasks that were not included in the UPB at contract initiation, but are within the scope of the contract. The Contractor shall develop a detailed proposal supporting any portions of the work requirement that are NPP so that these items can be compared with the same items in the Government estimate. The Contractor shall provide adequate information (e.g., at least two vendor quotes) for the Contracting Officer/ordering officer to determine the reasonableness of the cost for the NPP work requirements. The Contractor shall submit the completed task order proposal and supporting documentation to the Contracting Officer/ordering officer on the date stipulated.

12.0 Independent Government Estimate Preparation

While the Contractor is developing a detailed proposal, the project manager will prepare an independent Government estimate (IGE) for projects \$150,000 or more. This IGE is in addition to the earlier gross estimate, which helped determine whether the proposed work was appropriate for JOC. A detailed analysis of all task orders is required for orders less than \$150,000 in order to aid in the determination of a fair and reasonable price. The IGE or detailed analysis must be completed before receipt of the Contractor's proposal and before negotiations take place. The IGE will be used to evaluate the reasonableness of the Contractor's proposal and will serve as the Government's pricing and quantity objective during negotiations. The IGE should normally be prepared using the UPB so that a common basis exists to compare with the Contractor's proposal. A separate Government estimate, using an alternative method such as R.S. Means may be used in order to determine whether the proposed work is appropriate for a JOC contract or a separate contract. A lump-sum IGE for a total job is not acceptable. Major significant components of work and all NPP items must be identified separately, their quantities enumerated, and their costs estimated independently. The IGE must identify the source from which it was generated and the name of the preparer.

13.0 Evaluate Contractor's Proposal

When the Contractor's task order proposal is received, the Contracting Officer/ordering officer must record the date and forward the proposal to the project manager for review. The project manager must perform a detailed review of the Contractor's proposal. Simply comparing the total cost of the task order to the total cost shown on the Government estimate is not sufficient. The proposal will be checked for scope completeness, method of construction, proper identification of tasks and quantities and NPP pricing data as applicable. The project manager should also review the Contractor's specifications and drawings for acceptability. The Contracting Officer/ordering officer and the technical personnel will evaluate and determine the reasonableness of the Contractor's proposal by comparing it with the IGE or detailed analysis, the scope validation visit and the detailed statement of work. Each proposed construction task must be reviewed in detail by the project manager. The review of items found in the UPB will determine whether they are required and whether the proposed quantities are accurate, reasonable, and consistent with the statement of work. The project manager will review any additions to the statement of work beyond that which was requested and approved. The review of all NPP items will verify the need for the items and the accuracy of the proposed quantities and will determine if the proposed direct cost for the items is fair and reasonable. The project manager will ensure that the Contractor's performance schedule is realistic and meets the requirements of the job order.

If the Contractor's proposal is completely unacceptable, it can either be returned to the Contractor with supporting documentation for revision or be determined inappropriate for a JOC contract. A transmittal letter will explain why the proposal is being returned and what changes are needed to make the proposal acceptable, or why the proposal is no longer required. If the project manager and Contracting Officer/ordering officer agree that the proposal is not only unacceptable but also inappropriate for job order contracting, the JOC project file will be closed and the IJO returned to the work management office for

accomplishment by some other means.

14.0 Negotiation of Task Order

Following the detailed review of a proposed task order, the Contracting Officer/ordering officer will conduct a negotiations meeting with the Contractor to reconcile differences in the performance schedule, construction tasks quantities, and/or method of performance for pre-priced tasks. If necessary, the Government and Contractor must also negotiate the NPP tasks to include quantities, methods of performance, and costs. A memorandum of negotiations shall be prepared by the ordering officer/Contracting Officer at the conclusion of the negotiations and be included in the project file to support the Government's position. Differences between the statement of work, the IGE, and the Contractor's proposal shall be reconciled and documented.

If changes are required, the Contractor must modify his proposal to incorporate them and resubmit it to signify concurrence with those changes. The statement of work will also be revised to incorporate any changes as a result of negotiations. Normally, if the value of the non-pre-priced work exceeds 10 percent, then the non-pre-priced work should be reduced, eliminated or performed in-house or the job must be acquired using other contracting methods. However, Contracting Officers may exceed 10 percent if the non-pre-priced portion of the order involves urgent or emergency situations or if the Contracting Officer determines it is a good business decision. The Contracting Officer shall negotiate the task order and make a determination that the price is fair and reasonable.

15.0 Task Order Award Package Preparation

Following successful completion of negotiations with the Contractor, the project manager/contract administrator initiates a DD Form 1155 DFARS 213.5051(b), Order for Supplies or Services, and includes it in the task order package for review and approval by the Contracting Officer/ordering officer. The task order support package will include the following:

- Approved DA Form 4283, Work Request
- Scope validation site visit memorandum for record
- Preliminary and final statement of work
- Request for task order proposal
- Contractor's signed proposal
- Memorandum of Negotiations
- Determination and findings, if applicable
- Independent Government estimate, if applicable
- DA Form 3953, Purchase Request and Commitment
- The DD Form 1155, signed by the Contracting Officer/ordering officer
- Other documentation appropriate to the order (e.g., documentation regarding Government-furnished property)
- The Contracting Officer/ordering officer may now place the order, considering the following guidance:
 - A copy of all task orders will be forwarded to the Contracting Officer for preparation of the DD Form 350, Individual Contracting Action Report or reporting on the 1057 within 3 days of issue.
 - If the task order exceeds the limitations of the ordering officer appointment, the T.O. package must be sent to the Contracting Officer for issuance of the T.O.

If funding is not available at this time, the task order and support file can be held until funding becomes available or the project is canceled. Projects held for available funding may be good candidates for year-end funding and should be prioritized so that the year-end funds can be applied most effectively. If projects are put on hold for an extended period, it may be necessary to go back to the Contractor for application of a new option year coefficient (as amended by the economic price adjustment). All valid task orders and support files shall be

sent to the Contracting Officer/ordering officer for final review, award, and distribution in accordance with the procedures in FAR 4.804. A task order file checklist is useful to ensure all components of the task order package are included and properly executed.

16.0 Placing the Order

After negotiation and prior to the Contracting Officer/ordering officer signing the task order, the DD Form 1155 is mailed, electronically mailed or otherwise delivered to the Contractor who formally accepts the task order, as mutually agreed during negotiations, by signing in block 16 of

DD Form 1155. The task order is then signed by the Contracting Officer/ordering officer and issued to the Contractor. The signed, issued task order constitutes the Contractor's notice to proceed unless a separate Notice to Proceed (NTP) is specified in the task order. The Contractor must begin work in the time period specified in the order. A duplicate of all task order documentation packages issued by the ordering officer is sent to the contracting office and likewise all T.O.s issued by the Contracting Officer will be forwarded to the ordering officer for monitoring contract performance.

17.0 Task Order Authorities

- a. JOC ordering officers may be authorized to sign task orders of greater value, not to exceed the limits authorized in the AFARS, on behalf of the Government, if determined necessary to realize the benefits of JOC, provided that the criteria in AFARS 5117.9006(c)(2)(i)-(iv) are met.
- b. The maximum T.O. value is limited to the SRM approval authority, as delegated by HQDA.
- c. KOs may exceed 10% limit if it involves urgent or emergency situations or if the KO determines it is a good business decision. If task orders contain NPP work in excess of \$2,500 or otherwise exceed the ordering officer's limits, the Contracting Officer is responsible for negotiating and placing the order and obtaining any required approvals.

18.0 Preconstruction Meeting

The project manager will conduct a preconstruction meeting with the customer and the Contractor for final project coordination. This meeting will follow receipt of the signed task order and/or the Contractor's Notice to Proceed. Construction should begin as specified in the task order.

19.0 CONTRACT ADMINISTRATIVE RESPONSIBILITIES

The contract administrator responsibilities will be accomplished in accordance with the FAR, its supplements, and the contract administration plan (CAP). The ordering officer and other Fort Hood personnel involved with the contract will oversee contract administration functions and quality assurance inspection and acceptance as delegated by the Contracting Officer.

20.1 Non-Pre-priced Items

Non-pre-priced (NPP) work may arise from tasks that were not included in the UPB at contract initiation, but are within the scope of the contract. To streamline the negotiation

of non-pre-priced items during task order negotiations with the Contractor, an "indirect costs and profit rate" will be used, if the contract allows. This rate will be solicited during the solicitation phase of the basic JOC contract. Indirect costs and profit is defined as all costs associated with performing the tasks, other than direct labor, equipment and material costs. NPP proposals shall be supported with verifiable documentation supporting competitive quotes (minimum of two), catalog price, etc., for all NPP work. NPP items shall be proposed in bare costs only (material, equipment and labor) multiplied by the quantity and the NPP indirect costs and profit rate (if applicable) to arrive at the total price for the NPP work.

When prices for NPP items are negotiated and incorporated in a task order, this does not incorporate the item in the UPB for subsequent use as a priced item. To permit subsequent use under the UPB as a pre-priced item, repetitive NPP items will be incorporated by supplemental agreement to the JOC contract. Also, a contract provision will be developed to permit regular (such as quarterly or annually) incorporation of negotiated NPP items into the UPB. NPP items may be added as a modifier to an existing line item or as a new line item.

20.2 **Contractor Performance**

JOC personnel shall create and maintain a Contractor performance file that will be used to support the Government's decision as to whether or not to exercise its option for the following year. Evaluation of the Contractor's performance must be supported in writing based on observations made by the Fort Hood JOC TEAM and contracting personnel, or customers. Fort Hood personnel will meet with the Contracting Officer no later than six months before the option exercise date to review Contractor performance and recommend whether or not to exercise the option. The FAR requires Contracting Officers to evaluate Contractor performance and prepare a performance report for each construction contract over \$700,000.00 per CPARS FAR 42.10502. However, for JOC contracts, IAW AFARS 5136.201, the Contracting Officer shall complete a performance evaluation form on all specific task orders of \$100,000 or more and evaluate the Contractor annually, following the base year and each option year. Reports will be submitted for any dollar threshold for unsatisfactory or outstanding performance. In accordance with DFARS 236.201, DD Form 2626, Performance Evaluation (Construction), is to be used for reporting performance evaluations. These reports are entered electronically by the reporting activity into the DOD database, Construction Contractor Appraisal Support System (CCASS). Before awarding a JOC contract, Contracting Officers will retrieve all performance evaluations in the CCASS on those offerors in range or award.

20.3 **Significant Events**

JOC personnel will document all significant events. A significant event is defined as anything that occurs pertaining to a contract that has a material impact on cost, quality or delivery. Significant events can be caused by the Government or by Contractors. Some examples include:

- Completion schedule changes

- Changes in method or sequence of work
- Late or defective Government-furnished property or information
- Delays in Government actions such as processing engineering change proposals and review of technical data

When a significant event occurs, it will be analyzed and documented immediately. Information to be generated for each significant event should include, as a minimum:

- The nature and pertinent circumstance of the event;
- The date of the event and the identification of Government and Contractor personnel involved, including name and function of the respective individuals;
- Identification of any relevant documents involved;
- The substance of any oral communications;
- A statement concerning the possible consequences or effects of the event described upon the contract cost, schedule, or technical performance, including manner or sequence of performance.

20.4 **Task Order Close Out**

Task orders will be closed out within a reasonable amount of time. A task order will be closed out upon receipt of warranty information, O&M manuals, release of claims, training documentation, approved payrolls, as-built drawings and after final payment is made. The ordering officer will close out task orders as part of contract administration if the responsibility for close out was delegated by the Chief, Contracting Office. If not, the task order will be closed out by the Contracting Officer.

20.5 **Payroll Review**

The Contracting Officer is responsible for ensuring that the Contractor complies with the Davis-Bacon Act as part of contract administration responsibilities. The Contractor will be required to submit weekly payroll records to the Contracting Officer, who may require support from the Fort Hood personnel to review these reports. The Contracting Officer will be given a report of deficiencies, if any, for transmittal to the Contractor and will decide whether corrective actions are needed. When withholdings must be made from payments to the Contractor, the cognizant labor relation's personnel must be contacted. The Contracting Officer is responsible for conducting labor interviews, or he can delegate the duties to Facilities JOC TEAM.

20.6 **Timely Accomplishment of Requirements**

The ordering officer/COR will ensure that the schedule requirements are met and that the Contracting Officer is notified if it appears that the Contractor will not complete the requirement on time. If the task order package includes a liquidated damages clause, the Government, in coordination with legal counsel, begins the required actions in accordance with that clause.

20.7 **Contract Status Report**

A contract status report will be used to track fund obligations under the JOC contract and

to make sure orders do not exceed performance and payment bonding or the annual maximum amount. The ordering officer will maintain the contract status report, if delegated, to show the original funds obligated and the task orders issued against the funds. As orders are received, the report balance will be checked to make sure funds are still available.

20.8 **Bonding**

The solicitation shall clearly notify offerors of initial and continuing bonding requirements. Initial bonding must be sufficient to cover the stated estimated annual maximum contract value. No JOC contract shall cite the total estimated maximum value of the contract (including option periods) as the estimated annual maximum value. If the estimated annual maximum value is exceeded, FAR 28.102-2(a) and (b) apply. Contractors shall be clearly notified of their responsibility for ensuring sufficient bond coverage necessary to protect the Government's interests during the course of the contract. All costs associated with bonding (specifically including bond premiums) shall be included in the coefficient.

20.9 **Contractor Payments based on Schedule of values**

Progress payment shall be made based Contractor's approved scheduled of values. Progress payments are paid on the basis of costs incurred or the state of completion during performance of the contract before final delivery. The Government neither takes title nor beneficial occupancy (unless otherwise specified in the contract) and the Contractor remains Liable, not only for the completion of the work, but also for any risk of loss.

Progress payments are authorized under a JOC contract in accordance with FAR 52.232-5, which states that the Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer. The Contracting Officer/ordering officer (if delegated) will review and approve requests for progress payments in accordance with the "Payments Under Fixed-Price Construction Contracts" clause of the JOC contract, Section I. When the work is certified complete and a proper invoice has been received, the KO will process the invoice for payment through the appropriate finance and accounting office.

Each task order is considered a mini-construction contract; therefore, a release of claims statement should be obtained prior to making final payment, in accordance with FAR 52.232-5, paragraph (h)(3), Payments Under Fixed-Price Construction Contracts.

20.10 **Quality Assurance/Quality Control**

The quality assurance reviews and inspection and acceptance are made by Fort Hood personnel and are the same as those for any other construction contract. Quality Assurance (QA) is the responsibility of the Government. Contract quality assurance means the various functions including inspection, performed by the Government to determine whether a Contractor has fulfilled the contract obligations pertaining to quality and quantity.

The FAR, Part 46, prescribes policies and procedures to assure that supplies and services procured by the Government conform to the quality and quantity set forth in the contract. The Government determines the type and extent of Government quality assurance based upon the particular acquisition.

20.11 Quality Control (QC): The Responsibility of The Contractor

The Contractor is responsible for carrying out the obligations as set forth in the contract terms and conditions, for controlling product quality, and for offering to the Government only those supplies and services conforming to contract requirements. The Contractor shall establish and maintain a Quality Control Plan (QCP) that has been reviewed and accepted by the Government for compliance with contract requirements. The Contractor's QCP shall explain the manner in which the Contractor will assure all contract requirements are being accomplished in an acceptable manner. A JOC Contractor's coefficient includes the costs associated with quality control.

21.0 TASK ORDER (T.O.) MODIFICATIONS

If at any time during the execution of a T.O., a modification to the order is required, an SF Form 30, Amendment of Solicitation Modification of Contract, will be executed. Typical circumstances that may require a T.O. modification are differing site conditions and changes to proposed requirements in the statement of work, including time extensions, termination of work, or changes in methods of work performance. The Ordering Officer will execute modifications to existing task orders provided that the Contracting Officer specifically delegates this authority in the appointment letter. Pricing for the modification must be accomplished using the unit price book. The amount of the modification will not exceed the ordering officer's authority, to include the total value of non-pre-priced items. Modifications affecting termination actions or work suspensions shall be executed by the Contracting Officer because of legal consideration and the potential fiscal issues involved.

If an ordering officer executes the T.O. modification, the SF 30 shall be modified by XXXing out the words "Contracting Officer, United States of America," and typing in "Ordering Officer, Authorized Representative of the Contracting Officer."

Every attempt will be made to identify the site conditions properly during the initial site visit and scope validation meeting before the T.O. is placed so that the accurate site conditions will be priced before the work begins. This will minimize application of the Differing Site Conditions Clause (FAR 52.236-2).

An administrative change is a unilateral contract change, in writing, that does not affect the substantive rights of the parties, e.g., correction of typographical errors, and change in paying office, and accounting and appropriations data. An administrative change does not include time extensions for work completion, additions/deletions of quantities, or suspension of work in progress.

21.1. Changes to Task Order Requirements

Task Order changes are governed by the Changes Clause FAR 52.243-4, which provides for an equitable adjustment in price as the result of any change. Authorized changes are limited to those within the scope of the contract. They include:

- Changes to the specifications, drawings, and designs
- Changes to the method or manner of performance of the work directed by the Government
- Changes in the Government-furnished facilities, equipment, materials, services, or site
- Directed acceleration in the performance of work
- Time extensions due to delays caused by weather, Government requirements, or delivery of equipment, and terminations of work shall be governed by the default clause in FAR 52.249-10

Modifications to requirements following issuance of a Task Order will be made in accordance with requirements the appropriate contract clauses. A formal request for proposal modification will be forwarded to the Contractor whenever the complexity of the changes or the dollar amount requires it.

21.2. **Task Order Status Report**

Fort Hood JOC personnel will submit to the KO a monthly report on the status of all Task Orders. This report shall be submitted no later than the 10th of the following month and shall include the following information:

- A list of the subject and dollar amount of all T.O.s issued during the month
- A list of the subject and dollar amount of all T.O.s completed during the month
- The status of all incomplete T.O.s

-- End of Section --

SECTION 01 31 19.00 44

PROJECT MEETINGS

PART 1 GENERAL

1.1 PRECONSTRUCTION CONFERENCE

Approximately three weeks after award of the contract and prior to the start of any construction work an authorized representative of the Contracting Officer will schedule and conduct a preconstruction conference.

The Contractor's Project Manager, Superintendent, and Quality Control Manager will attend this meeting. The Contractor is encouraged to have an officer of his company and representation from his sub-contractors at this conference. This conference will be held at the location specified by the Contracting Officer's authorized representative. Minutes of the meeting will be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file.

1.1.1 Start of Construction Work

If the Contractor has submitted the Accident Prevention (Safety) Plan, Quality Control Plan, Environmental Protection Plan, if required for the task order, and the Storm Water Pollution Prevention Plan for review prior to this meeting, these may be accepted in to or accepted with comments at the conference. Construction work will not proceed until after this meeting has been held, the plans noted above have been accepted, and the Notice to Proceed has been received and acknowledged by the Contractor.

1.2 OTHER MEETINGS

Construction Quality Control meetings and conferences are specified in Section 01 45 00.00 10 QUALITY CONTROL. Other meetings are specified in various Division 1 and technical sections.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

SECTION 01 32 01.00 10

PROJECT SCHEDULE

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

ECB 2005-10 (2005) Scheduling Requirements for Testing of Mechanical Systems in Construction

ER 1-1-11 (1995) Progress, Schedules, and Network Analysis Systems

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Project Schedule; G

1.3 QUALITY ASSURANCE

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating (activity status) and preparation of reports. The authorized representative shall have previously developed, created, and maintained at least 2 electronic schedules for projects similar in nature and complexity to this project and shall be experienced in the use of the scheduling software that meets the requirements of this specification.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS. Show in the schedule the sequence in which the Contractor proposes to perform the work and dates on which the Contractor contemplates starting and completing all schedule activities. The scheduling of the entire project is required. The scheduling of construction is the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project

Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool.

3.1.1 Approved Project Schedule

Use the approved Project Schedule to measure the progress of the work and to aid in evaluating time extensions. Make the schedule cost loaded and activity coded. The schedule will provide the basis for all progress payments. If the Contractor fails to submit any schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

3.1.2 Schedule Status Reports

Provide a Schedule Status Report on at least a monthly basis. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

3.1.3 Default Terms

Failure of the Contractor to comply with the requirements of the Contracting Officer shall be grounds for a determination, by the Contracting Officer, that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of the contract.

3.2 BASIS FOR PAYMENT AND COST LOADING

Use the schedule as the basis for determining contract earnings during each update period and therefore the amount of each progress payment. Lack of an approved schedule update, or qualified scheduling personnel, will result in the inability of the Contracting Officer to evaluate contract earned value for the purposes of payment. Failure of the Contractor to provide all required information will result in the disapproval of the preliminary, initial and subsequent schedule updates. In the event schedule revisions are directed by the Contracting Officer and those revisions have not been included in subsequent revisions or updates, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until such revisions to the Project Schedule have been made. Activity cost loading shall be reasonable, as determined by the Contracting Officer. The aggregate value of all activities coded to a contract CLIN shall equal the value of the CLIN on the Schedule.

3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

The computer software system utilized to produce and update the Project Schedule shall be capable of meeting all requirements of this specification. Failure of the Contractor to meet the requirements of this specification will result in the disapproval of the schedule.

3.3.1 Critical Path Method

Use the Critical Path Method (CPM) of network calculation to generate the Project Schedule. Prepare the Project Schedule using the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

Develop the Project Schedule to an appropriate level of detail. Failure to develop the Project Schedule to an appropriate level of detail, as determined by the Contracting Officer, will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

3.3.2.1 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than 2 percent of all non-procurement activities shall have Original Durations (OD) greater than 20 work days or 30 calendar days. Procurement activities are defined herein.

3.3.2.2 Procurement Activities

The schedule must include activities associated with the submittal, approval, procurement, fabrication and delivery of long lead materials, equipment, fabricated assemblies and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days. A typical procurement sequence includes the string of activities: submit, approve, procure, fabricate, and deliver.

3.3.2.3 Mandatory Tasks

The following tasks must be included and properly scheduled:

- a. NOT USED
- b. Submission of mechanical/electrical/information systems layout drawings.
- c. Submission and approval of O & M manuals.
- d. Submission and approval of as-built drawings.
- e. Submission and approval of 1354 data and installed equipment lists.
- f. Submission and approval of testing and air balance (TAB).
- g. NOT USED
- h. Submission and approval of fire protection specialist.
- i. Submission and approval of testing and balancing of HVAC plus commissioning plans and data. Develop the schedule logic associated with testing and commissioning of mechanical systems to a level of detail consistent with ECB 2005-10.
- j. Air and water balancing.

- k. HVAC commissioning.
- l. Controls testing plan submission.
- m. Controls testing.
- n. Performance Verification testing.
- o. Other systems testing, if required.
- p. Contractor's pre-final inspection.
- q. Correction of punchlist from Contractor's pre-final inspection.
- r. Government's pre-final inspection.
- s. Correction of punch list from Government's pre-final inspection.
- t. Final inspection.

3.3.2.4 Government Activities

Show Government and other agency activities that could impact progress. These activities include, but are not limited to: approvals, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.2.5 Activity Responsibility Coding (RESP)

Assign responsibility Code for all activities to the Prime Contractor, Subcontractor or Government agency responsible for performing the activity. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, environmental permit approvals by State regulators, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements. Code all activities not coded with a Government Responsibility Code to the Prime Contractor or Subcontractor responsible to perform the work. Activities shall not have more than one Responsibility Code. Examples of acceptable activity code values are: ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and GOVT (for USACE). Unacceptable code values are abbreviations of the names of subcontractors.

3.3.2.6 Activity Work Area Coding

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew, from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities shall not have more than one Work Area Code. Not all activities are required to be Work Area coded. A lack of Work Area coding will indicate the activity is not resource or space constrained.

3.3.2.7 Contract Changes/Requests for Equitable Adjustment (REA) Coding (MODF)

Assign Activity code to any activity or sequence of activities added to the

schedule as a result of a Contract Modification, when approved by the Contracting Officer, with a Contract Changes/REA Code. Key all Code values to the Government's modification numbering system. Any activity or sequence of activities added to the schedule as a result of alleged constructive changes made by the Government may be added to a copy of the current schedule, subject to the approval of the Contracting Officer. Assign Activity codes for these activities with a Contract Changes/REA Code. Key the code values to the Contractor's numbering system. Approval to add these activities does not necessarily mean the Government accepts responsibility and, therefore, liability for such activities and any associated impacts to the schedule, but rather the Government recognizes such activities are appropriately added to the schedule for the purposes of maintaining a realistic and meaningful schedule. Such activities shall not be Responsibility Coded to the Government unless approved. An activity shall not have more than one Contract Changes/REA Code.

3.3.2.8 Contract Line Item (CLIN) Coding (BIDI)

Code all activities to the CLIN on the Contract Line Item Schedule to which the activity belongs. An activity shall not contain more than one CLIN Item Code. CLIN Item code all activities, even when an activity is not cost loaded.

3.3.2.9 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities based upon the phase of work in which the activity occurs. Code activities to a Construction Phase. If the contract specifies construction phasing with separately defined performance periods, identify a Construction Phase Code to allow filtering and organizing the schedule accordingly. Each activity shall be identified with a single project phase and have only one Phase of Work code.

3.3.2.10 Category of Work Coding (CATW)

Assign Category of Work Code to all Activities based upon the category of work to which the activity belongs. Category of Work Code must include, but is not limited to: construction submittal approvals, Acceptance, Procurement, Fabrication, Delivery, Weather Sensitive Installation, Non-Weather Sensitive Installation, Start-Up, Test and Turnover. Assign a Category of Work Code to each activity. Each activity shall have only one Category of Work Code.

3.3.2.11 Definable Features of Work Coding (FOW1, FOW2, FOW3)

Assign a Definable Feature of Work Code to appropriate activities based on the definable feature of work to which the activity belongs. Definable Feature of Work is defined in Specification Section 01 45 00.00 10 QUALITY CONTROL. An activity shall not have more than one Definable Feature of Work Code. Not all activities are required to be Definable Feature of Work Coded.

3.3.3 Scheduled Project Completion and Activity Calendars

The schedule interval shall extend from NTP date to the required contract completion date. The contract completion activity (End Project) shall finish based on the required contract duration in the accepted contract proposal, as adjusted for any approved contract time extensions. The first scheduled work period shall be the day after NTP is received by the Contractor. Schedule activities on a calendar to which the activity

logically belongs. Activities may be assigned to a 7 day calendar when the contract assigns calendar day durations for the activity such as a Government Acceptance activity. If the Contractor intends to perform physical work less than seven days per week, schedule the associated activities on a calendar with non-work periods identified including weekends and holidays. Assign the Category of Work Code - Weather Sensitive Installation to those activities that are weather sensitive. Original durations must account for anticipated normal adverse weather. The Government will interpret all work periods not identified as non-work periods on each calendar as meaning the Contractor intends to perform work during those periods.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. Include as the first activity in the project schedule an activity called "Start Project" (or NTP). The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Schedule Constraints and Open Ended Logic

Constrain completion of the last activity in the schedule by the contract completion date. Schedule calculations shall result in a negative float when the calculated early finish date of the last activity is later than the contract completion date. Include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the contract completion date for the project, and with a zero day duration or by using the "project must finish by" date in the scheduling software. The schedule shall have no constrained dates other than those specified in the contract. The use of artificial float constraints such as "zero fee float" or "zero total float" are typically prohibited. There shall only be 2 open ended activities: Start Project (or NTP) with no predecessor logic and End Project with no successor logic.

3.3.3.3 Early Project Completion

In the event the Preliminary or Initial project schedule calculates an early completion date of the last activity prior to the contract completion date, the Contractor shall identify those activities that it intends to accelerate and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. The last activity shall have a late finish constraint equal to the contract completion date and the schedule will calculate positive float. The Government will not approve an early completion schedule with zero float on the longest path. The Government is under no obligation to accelerate activities for which it is responsible to support a proposed early contract completion.

3.3.4 Interim Completion Dates

Constrain contractually specified interim completion dates to show negative float when the calculated early finish date of the last activity in that phase is later than the specified interim completion date.

3.3.4.1 Start Phase

Include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X"

activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

3.3.4.2 End Phase

Include as the last activity for a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the specified completion date for that phase and a zero day duration.

3.3.4.3 Phase "X" Hammock

Include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" hammock activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Do not automatically update Actual Start and Finish dates with default mechanisms that may be included in the scheduling software. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the AS and AF dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's updated schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Disable program features which calculate one of these parameters from the other.

3.3.6 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Correct out of sequence progress that continues for more than two update cycles by logic revision, as approved by the Contracting Officer.

3.3.7 Negative Lags and Start to Finish Relationships

Lag durations contained in the project schedule shall not have a negative value. Do not use Start to Finish (SF) relationships.

3.3.8 Calculation Mode

Schedule calculations shall retain the logic between predecessors and successors even when the successor activity starts and the predecessor activity has not finished. Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") will not be allowed.

3.3.9 Milestones

The schedule must include milestone activities for each significant project

event including but not limited to: milestone activities for foundation/substructure construction complete; superstructure construction complete; building dry-in or enclosure complete to allow the initiation of finish activities; permanent power complete; and building systems commissioning complete.

3.3.10 USE OF PRIMAVERA P6

If P6 is being used, the following are Mandatory Requirements:

The following settings are mandatory and required in the Preliminary Project Schedule, Initial Project Schedule and all schedule submissions to the Government.

- 1) Activity Codes shall be Project Level not Global or EPS level.
- 2) Calendars shall be Project Level not Global or Resource level.
- 3) Activity Duration Types must be set to "Fixed Duration & Units".
- 4) Percent Complete Types must be set to "Physical".
- 5) Time Period Admin Preferences must remain the default "8.0 hr/day, 40 hr/week, 172 hr/month, 2000 hr/year". Calendar Work Hours/Day must be set to 8.0 Hour days.
- 6) Schedule Option for defining Critical Activities shall be set to "Longest Path".
- 7) Schedule Option for defining progressed activities shall be set to "Retained Logic".
- 8) Cost loading shall be set up using a single lump sum Resource. The Price/Unit shall be \$1/hr, Default Units/Time shall be "8h/d", and settings "Auto Compute Actuals" and "Calculate costs from units" selected.
- 9) Activity ID's shall not exceed 10 characters.
- 10) Activity Names shall have the most defining and detailed description within the first 30 characters.

Note: USACE P6 Mandatory Requirements are located in the Contract Administration Manual, and can be obtained from the Field Office.

3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data CD, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

Submit the Preliminary Project Schedule, defining the Contractor's planned operations for the first 90 calendar days for approval within 15 calendar days after the NTP is acknowledged. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 90 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. Detail it for the first 90 calendar days. It may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as previously specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required Plan and Program preparations, submissions and approvals identified in the contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) as well as permitting activities, and other non-construction activities intended to occur within the first 90 calendar days. Schedule any construction

activities planned for the first 90 calendar days after NTP. Activity code any activities that are summary in nature after the first 90 calendar days with Responsibility Code (RESP) and Feature of Work code (FOW1, FOW2, FOW3).

3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 42 calendar days after NTP. The schedule shall demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. The Initial Schedule shall be at a reasonable level of detail as determined by the Contracting Officer.

3.4.3 Periodic Schedule Updates

Based on the result of the meeting, specified in PERIODIC SCHEDULE UPDATE MEETINGS, submit periodic schedule updates. These submissions will enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgement of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used. A template SDEF compatible schedule backup file (sdef.prx) is available on the QCS website: www.rmssupport.com. The SDEF format is as follows:

Field	Activity Code	Length	Description
1	WRKP	3	Workers per Day
2	RESP	4	Responsible Party (e.g. GC, subcontractor, USACE)
3	AREA	4	Area of Work
4	MODF	6	Modification or REA number
5	BIDI	6	Bid Item (CLIN)
6	PHAS	2	Phase of Work
7	CATW	1	Category of Work
8	FOW1	10	Feature of Work (used up to 10 characters in length)
9	FOW2	10	Feature of Work (used up to 20 characters in length)
10	FOW3	10	Feature of Work (used up to 30 characters in length)

3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

3.5.1 Data CD's

Provide two sets of data CD's containing the project schedule in the backup format. Each CD shall also contain all previous update backup files. File medium shall be CD. Label each CD indicating the type of schedule (Preliminary, Initial, Update), full contract number, Data Date and file name. Each schedule shall have a unique file name as determined by the Contractor.

3.5.2 Narrative Report

Provide a Narrative Report with the Preliminary, Initial, and each Periodic Update of the project schedule, as the basis of the progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths where the total float is less than or equal to 20 work days, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to communicate to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis. Identify and explain why any activities that, based their calculated late dates, should have either started or finished during the update period but did not.

3.5.3 Approved Changes Verification

Include only those project schedule changes in the schedule submission that have been previously approved by the Contracting Officer. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format, filtering, organizing and sorting for each schedule report shall be as directed by the Contracting Officer. Typically reports shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete. The following lists typical reports that will be requested. One or all of these reports may be requested for each schedule submission.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of detailed predecessor and successor activities for every activity in ascending order by activity number.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.

3.5.4.4 Earnings Report by CLIN

A compilation of the Contractor's Total Earnings on the project from the NTP to the data date. This report shall reflect the earnings of specific activities based on the agreements made in the schedule update meeting defined herein. Provided that the Contractor has furnished a complete schedule update, this report shall serve as the basis of determining progress payments. Group activities by CLIN item number and sort by activity number. This report shall: sum all activities coded to a

particular CLIN and provide a CLIN item percent earned value; and complete and sum CLIN items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram is required for the Preliminary, Initial and Periodic Updates. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. Show the activity number, description, duration, and estimated earned value on the diagram.

3.5.5.2 Project Milestone Dates

Show dates on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.5.3 Critical Path

Clearly show the critical path.

3.5.5.4 Banding

Organize activities as directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC SCHEDULE UPDATE MEETINGS

Conduct periodic schedule update meetings for the purposes of reviewing the Contractor's proposed out of sequence corrections, determining causes for delay, correcting logic, maintaining schedule accuracy and determining earned value. Meetings shall occur at least monthly within five days of the proposed schedule data date and after the Contractor has updated the schedule with Government concurrence respecting actual start dates, actual finish dates, remaining durations and percent complete for each activity it intend to status. Provide a computer with the scheduling software loaded prior to the meeting which allows all meeting participants to view the proposed schedule update during the meeting. The meeting and resultant approvable schedule update shall be a condition precedent to a formal submission of the update as described in SUBMISSION REQUIREMENTS and to the submission of an invoice for payment. The meeting will be a working interactive exchange which will allow the Government and the Contractor the opportunity to review the updated schedule on a real time and interactive basis. The Contractor's authorized scheduling representative will organize, sort, filter and schedule the update as requested by the

Government. The meeting will last no longer than 8 hours. A rough draft of the proposed activity logic corrections and narrative report shall be provided to the Government 48 hours in advance of the meeting. The Contractor's Project Manager and Authorized Scheduler shall attend the meeting with the Authorized Representative of the Contracting Officer.

3.6.1 Update Submission Following Progress Meeting

Submit a complete update of the project schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 working days after the periodic schedule update meeting, reflecting only those changes made during the previous update meeting.

3.6.2 Status of Activities

Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be subject to the approval of the Government prior to the meeting. As a minimum, address the following items on an activity by activity basis during each progress meeting.

3.6.2.1 Start and Finish Dates

Accurately show the status of the AS and/or AF dates for each activity currently in-progress or completed since the last update. The Government may allow an AF date to be assigned with the percent complete less than 100% to account for the value of work remaining but not restraining successor activities. Only assign AS dates when actual progress occurs on an activity.

3.6.2.2 Remaining Duration

Update the estimated RD for all incomplete activities independent of Percent Complete. Remaining Durations may exceed the activity OD or may exceed the activity's prior update RD if the Government considers the current OD or RD to be understated based on current progress, insufficient work crews actually manning the job, unrealistic OD or deficiencies that must be corrected that restrain successor activities.

3.6.2.3 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete. To allow for proper schedule management, cost load the correction of punch list from Government pre-final inspection activity(ies) not less than 1 percent of the total contract value, which activity(ies) may be declared 100 percent complete upon completion and correction of all punch list work identified during Government pre-final inspection(s).

3.6.2.4 Logic Changes

Specifically identify and discuss all logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. The Government will only approve logic

revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.

3.6.2.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule that does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor believes it is entitled to an extension of the contract performance period, completion date, or any interim milestone date, furnish the following for a determination by the Contracting Officer: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of excusable delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is a condition precedent to any approvals by the Government. In response to each Request For Proposal issued by the Government, the Contractor shall submit a schedule impact analysis demonstrating whether or not the change contemplated by the Government impacts the critical path.

3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in a calculated schedule delay, will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

3.7.2 Submission Requirements

Submit a justification for each request for a change in the contract completion date of less than 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Identify activities impacted in each justification for change by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

The Contracting Officer may request an interim update with revised activities for any requested time extension of over 2 weeks. Provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The Contracting Officer will approve proposed revisions to the schedule prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 WEEKLY PROGRESS MEETINGS

a. The Government and the Contractor shall meet weekly (or as otherwise mutually agreed to) between the meetings described in paragraph PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. The then current and approved schedule update shall be used for the purposes of this meeting and for the production and review of reports. The Contractor's Project Manager and the Authorized Representative of the Contracting Officer shall attend. The weekly progress meeting will address the status of RFI's, RFP's and Submittals.

b. Provide a bar chart produced by the scheduling software, organized by Total Float and Sorted by Early Start Date, and a two week "look-ahead" schedule by filtering all schedule activities to show only current ongoing activities and activities schedule to start during the upcoming two weeks, organized by Work Area Code (AREA) and sorted by Early Start Date.

c. The Government and the Contractor shall jointly review the reports. If it appears that activities on the longest path(s) which are currently driving the calculated completion date (driving activities), are not progressing satisfactorily and therefore could jeopardize timely project completion, corrective action must be taken immediately. Corrective action includes but is not limited to: increasing the number of work crews; increasing the number of work shifts; increasing the number of hours worked per shift; and determining if Government responsibility coded activities require Government corrective action.

3.10 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

3.11 TRANSFER OF SCHEDULE DATA INTO RMS/QCS

The Contractor shall download and upload the schedule data into the Resident Management System (RMS) prior to RMS databases being transferred to the Government and is considered to be additional supporting data in a form and detail required by the Contracting Officer pursuant to FAR 52.232-5 - Payments under Fixed-Price Construction Contracts. The receipt of a proper payment request pursuant to FAR 52.232-27 - Prompt Payment for Construction Contracts is contingent upon the Government receiving both acceptable and approvable hard copies and electronic export from QCS of the application for progress payment.

3.12 USACE P6 SCHEDULE NAMING CONVENTION (FORT WORTH DISTRICT)

Summary

Please ensure that all schedule submittals comply with the following:

- 1) **Sample Schedule Name, (P6 Project ID): "M2002931-2INIT-V03"**. Use the RMS/QCS 8-digit "Project ID", a "-", a 5-digit schedule type identifier, another "-", and a 3-digit version identifier.
- 2) **Sample Schedule Description, (P6 Project Name): "W9126G-09-D-0088.0001.FSH Rennov B4203"**. Use the RMS/QCS 16-digit "Contract Number", (including dashes), a ".", the RMS/QCS "Task Order Number", another ".", and the "RMS/QCS Contract Short Description". (Use "0000" if no Task Order number is used.)
- 3) **Sample P6 Export File Name: "M2002931-2INIT-V03.xer"**. Use the Schedule Name, (P6 Project ID), for the name of the export file.

Details

To ensure compatibility with the USACE Primavera database, contractor's schedule submissions must follow the guidance for schedule IDs, Schedule Names and Schedule File Submittals, as shown below:

A. Schedule Name (Project ID)

To ensure that all construction schedules can be imported into the USACE database, contractors must use the following P6 naming convention:

- 1) **Software Settings:** The "Project ID" must be set to the maximum of 20 characters. (The normal default.)
- 2) **Schedule Name**
 - a. The first eight characters of the Schedule Name, (P6 Project ID), must use the RMS/QCS "Contract ID"
 - b. For legibility, use a "-" for the next character
 - c. Define the type of schedule with the next 5 characters
 - i. "1PREL" for Preliminary
 - ii. "2INIT" for Initial
 - iii. "3FRAG" for Fragnets
 - iv. "4RBAS" for Re-Baselined schedules
 - v. "5UP##" for monthly update, i.e. "UP01" for the first monthly update
 - d. For legibility, use a "-" for the next character
 - e. Define the version with the next 3 characters. Use "V01" for

the 1st version of the schedule, "V02" for the 2nd version of the schedule, etc.

3) **Examples:**

- 1) M2003368-1PREL-V01 - The 1st version of the Preliminary schedule for project M2003368
- 2) M2002479-2INIT-V03 - The 3rd version of the Initial schedule for project M2002479
- 3) M2003451-3FRAG-V02 - The 2nd Fragnet for project M2003451
- 4) M2001123-4RBAS-V01 - The 1st Re-Baselined/Recovery schedule for project M2001123
- 5) M2001835-5UP11-V01 - The 1st version of the 11th update for project M2001835

B. Schedule Description (Project Name)

To ensure that schedule descriptions are meaningful and consistent, contractors should use the following conventions for the P6 Project Name:

- 1) Use the RMS/QCS 16-digit "Contract Number", (including dashes), a ".", the RMS/QCS "Task Order Number", another ".", and the "RMS/QCS Contract Short Description". (Use "0000" if no Task Order number is used.)
- 2) Examples:
 - a. For project M2002931: W9126G-09-D-0088.0001.FSH Rennov B4203
 - b. For project M2002231: W9126G-08-C-0036.0000. SAMMC North
 - c. For project M2002487: W91238-06-D-0032.0003.HQ Bldg BCT-3

C. Schedule File

To ensure that there is a direct correlation between contractor's submitted schedule file and their respective schedules in our database, the contractor must:

- 1) Use the P6 Project ID for the exported file name for each schedule file submitted to the Corps. This will ensure that the schedule file name matches the imported schedule name in our database.
- 2) **Examples:**
 - a. The file export for a schedule named M2001244-5UP01-V01 should be named "M2001244-5UP01-V01.xer".
 - b. The file export for a schedule named M2003451-3FRAG-V02 should be named "M2003451-3FRAG-V02.xer"

D. Creating the Schedule Exports:

Each schedule submittal must be saved in our database as a separate schedule for future reference. This means that a single project will have many schedules in our database, one matching each of the contractor's submittals. These schedules will include all of the "Preliminary", "Initial", "Update", "Fragnet" and "Re-Baselined" schedules. To create these uniquely-named schedules, it is recommended that the contractor use the following strategy:

- 1) Create a working schedule named with the 8-digit contract ID, for example "M2002487". However, please note that if a contractor has their own, internal naming convention, they can continue to use their standard schedule name for this working schedule.
- 2) Ensure that the "Project Name" is set correctly, in our example "W91238-06-D-0032.0003.HQ Bldg BCT-3"
- 3) When ready to submit the schedule, copy the working schedule, "M2002487" in our example, within the database. The software will automatically append a "-1" to the schedule, creating "M2002487-1".
- 4) Highlight the "M2002487-1" in the project list and change the "Project ID" on the "General" tab to the appropriate name, for example "M2002487-2INIT-V02".

- 5) Close all schedules.
- 6) Open the new submittal schedule, in our example "M2002487-2INIT-V02".
- 7) Export this schedule to a CD using "M2002487-2INIT-V02" as the name of the export file. This will create a file named "M2002487-2INIT-V02.xer" ensuring that the file name and schedule name are the same.

There may be situations when this schedule-creation strategy will not work, for example, when creating fragnets for multiple MODS. It is incumbent upon the contractor to follow a strategy that preserves the integrity of each schedule in these circumstances.

-- End of Section --

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's Quality Control (CQC) System Manager to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals requiring Government approval are to be scheduled and made prior to the acquisition of the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Safety Data Sheets (SDS) and in compliance with existing laws and regulations.

1.1 DEFINITIONS

1.1.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals which are required prior to start of construction (work) or the start of the next major phase of the construction on a multi-phase contract. Includes schedules, tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work, submitted prior to start of construction work or next major phase of construction.

Certificates of insurance

Surety bonds

List of proposed Subcontractors

List of proposed products

Construction Progress Schedule

Network Analysis Schedule (NAS)

Submittal register

Schedule of prices

Health and safety plan

Work plan

Quality control(QC) plan

Environmental protection plan

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-04 Samples

Fabricated or unfabricated physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or

system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily logs and checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

Text of posted operating instructions.

SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and (SDS) concerning impedances, hazards and safety precautions.

SD-10 Operation and Maintenance Data

Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel, including manufacturer's help and product line documentation necessary to maintain and install equipment. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.

This data is intended to be incorporated in an operations and maintenance manual or control system.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

Interim "DD Form 1354" with cost breakout for all assets shall be provided at the end of the design phase.

1.1.2 Approving Authority

Office or designated person authorized to approve submittal.

1.1.3 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, except those SD-01 Pre-Construction Submittals noted above, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with this section.

SD-01 Preconstruction Submittals

Submittal Register; G

1.3 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.3.1 Government Approved G

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled, "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.3.2 Information Only

Submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.4 PREPARATION

1.4.1 Transmittal Form

Use the attached sample transmittal form (ENG Form 4025) for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms are included in the QCS software that the Contractor is required to use for this contract. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper

listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

1.4.2 Additional Instructions

In addition to the requirements of this Section, additional instructions are specified in the attachment "INSTRUCTIONS TO CONTRACTORS FOR TRANSMITTAL REQUIREMENTS" located at the end of this section.

1.4.3 Contractor Review

The Contractor's quality control representative shall review the listing at least every 30 days and take appropriate action to maintain an effective and updated system. A copy of the register or progress schedule shall be maintained at the job site. Revised and/or updated register or progress schedule shall be submitted to the Contracting Officer at least every 60 days in quadruplicate (complete register need not be provided, only those portions containing additions or changes).

1.4.4 Number of Copies

The Contractor shall provide 4 CD/DVD sets of all submittals unless otherwise specified.

1.4.5 Address to Receive Submittals

Submittals, regardless of reviewer designation, shall be sent to the Corps of Engineers' Area Office assigned to the project.

1.4.6 Additional Government Approved Submittals

In addition to those specified in PART 1 paragraph SUBMITTAL CLASSIFICATION, the following classifications of submittals also require Governmental approval:

a. Mechanical and Electrical Systems

The Contractor shall furnish one reproducible, unfolded copy of all wiring and control diagrams and approved system layout drawings with the operating instructions called for under the various headings of the specifications for mechanical and electrical systems.

b. Fire Protection and Detection Submittals

The Contractor shall prepare and submit, as one integrated submittal, shop drawings for the fire protection/detection system. This submittal shall also include sprinkler plans and sections, fire detection and alarm plans and risers, and catalog cuts of proposed equipment. The Contractor shall submit proof that the shop drawings were prepared by an engineer regularly engaged in fire protection/detection systems for at least 2 years, and that they are sealed by a registered professional engineer. Shop drawings for the fire protection/detection system shall be prepared on full-size reproducible sheets. The shop drawings submitted for review shall be submitted on full-size prints. After updating all deviations, modifications, and changes, the final submittal shall be on reproducible sheets and CADD files (submitted on CD-ROM disk(s)); these will represent the final as-built drawings.

c. Asbestos and lead-based paint abatement submittals.

- d. Color/finish sample boards submittal.

1.4.7 Certificates of Compliance

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

1.4.8 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

- a. Contractor-proposed deviations, including variations and other departures from the contract requirements, shall be noted/marked in red on each copy of the submittal data and shall be provided with a letter attachment to the ENG Form 4025 summarizing the proposed variation, deviation, or departure. Variations, deviations, or departures shall contain sufficient information to permit complete evaluation. Additional sheets may be used to fully explain why a variation, deviation, or departure is requested. At the minimum the information shall include:

- (1) An explanation in detail of the reason for the variation and how it differs from that specified;
- (2) The cost difference; and
- (3) How the variation will benefit the Government.

- b. Any submittal annotated by a supplier or vendor with "Field Verify," "Select Color," or the like shall be accompanied by the Contractor's written response to the supplier's query.

1.5 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the

Government in those instances where the technical specifications so prescribe.

1.6 VARIATIONS

Variations from contract requirements require both Designer of Record (DOR) and Government approval pursuant to contract Clause FAR 52.236-21 and will be considered where advantageous to Government.

1.6.1 Considering Variations

Discussion with Contracting Officer prior to submission, after consulting with the DOR, will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.6.2 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government, including the DOR's written analysis and approval. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

Check the column "variation" of ENG Form 4025 for submittals which include proposed deviations requested by the Contractor. Set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.6.3 Warranting That Variations Are Compatible

When delivering a variation for approval, Contractor, including its Designer(s) of Record, warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.6.4 Review Schedule Is Modified

In addition to normal submittal review period, a period of 10 working days will be allowed for consideration by the Government of submittals with variations.

1.7 SUBMITTAL REGISTER

Prepare and maintain submittal register, as the work progresses. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by Government; retain data which is output in columns (a), (g), (h), and (i) as approved. A submittal register showing items of equipment and materials for which submittals are required by the specifications is provided as an attachment. This list may not be all inclusive and

additional submittals may be required. Maintain a submittal register for the project in accordance with Section 01 45 00.10 10 QUALITY CONTROL SYSTEM (QCS). The Government will provide the initial submittal register in electronic format

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns, including dates on which submittals are received and returned by the Government.

1.7.1 Use of Submittal Register

Submit submittal register. Submit with QC plan and project schedule. Verify that all submittals required for project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

Column (a) Activity Number: Activity number from the project schedule.

Column (g) Contractor Submit Date: Scheduled date for approving authority to receive submittals.

Column (h) Contractor Approval Date: Date Contractor needs approval of submittal.

Column (i) Contractor Material: Date that Contractor needs material delivered to Contractor control.

1.7.2 Contractor Use of Submittal Register

Update the following fields in the Government-furnished submittal register program or equivalent fields in program utilized by Contractor with each submittal throughout contract.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.

Column (l) List date of submittal transmission.

Column (q) List date approval received.

1.7.3 Approving Authority Use of Submittal Register

Update the following fields in the Government-furnished submittal register program or equivalent fields in program utilized by Contractor.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (l) List date of submittal receipt.

Column (m) through (p) List Date related to review actions.

Column (q) List date returned to Contractor.

1.7.4 Government Review Action Codes

Entries for columns (j) and (o), are to be used are as follows (others may be prescribed by Transmittal Form):

"A" - "Approved as submitted"; "Completed"

"B" - "Approved, except as noted on drawings"; "Completed"

"C" - "Approved, resubmission required"; "Resubmit"

"D" - "Returned by correspondence"; "Completed"

"E" - "Disapproved (See attached)"; "Resubmit"

"F" - "Receipt acknowledged"; "Completed"

"G" - "Other (Specify)"; "Resubmit"

"X" - "Receipt acknowledged, does not comply"; "Resubmit"

1.7.5 Copies Delivered to the Government

Deliver one copy of submittal register updated by Contractor to Government with each invoice request.

1.8 SCHEDULING

Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 15 calendar days will be allowed and shown on the register for review and approval of submittals for color/finish sample boards, door hardware, food service equipment, and refrigeration and HVAC control systems.

- a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.
- b. Submittals called for by the contract documents will be listed on the register. If a submittal is called for but does not pertain to the

contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the register or marked "N/A."

- c. Re-submit register and annotate monthly by the Contractor with actual submission and approval dates. When all items on the register have been fully approved, no further re-submittal is required.
- d. Carefully control procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

1.9 GOVERNMENT APPROVING AUTHORITY

When approving authority is Contracting Officer, the Government will:

- a. Note date on which submittal was received.
- b. Review submittals for approval within scheduling period specified and only for conformance with project design concepts and compliance with contract documents.
- c. Identify returned submittals with one of the actions defined in paragraph entitled, "Review Notations," of this section and with markings appropriate for action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date approved submittals. One (1) copy of the approved submittal will be returned to the Contractor.

1.10 DISAPPROVED SUBMITTALS

Contractor shall make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications; notice as required under the clause entitled, "Changes," is to be given to the Contracting Officer. Contractor is responsible for the dimensions and design of connection details and construction of work. Failure to point out deviations may result in the Government requiring rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, the Contractor shall make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.11 APPROVED SUBMITTALS

The Contracting Officer's approval or acceptance of submittals is not be construed as a complete check, and indicates only that the general method of construction, materials, detailing and other information are satisfactory.

Approval or acceptance will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work.

After submittals have been approved or accepted by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.11.1 Previously Approved Submittals

Complete submittals other than an ENG Form 4025 need not be submitted for items, products, or systems that have previously been approved and are on file at the Corps of Engineers' Area Office. See paragraph "Transmittal Form".

1.12 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor to assure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not approved will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of his responsibilities under the contract.

1.13 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.14 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements is to be similar to the following:

<p>CONTRACTOR</p> <p>(Firm Name)</p> <p>_____ Approved</p> <p>_____ Approved with corrections as noted on submittal data and/or attached sheets(s)</p> <p>SIGNATURE: _____</p> <p>TITLE: _____</p> <p>DATE: _____</p>
--

1.15 INSTRUCTIONS TO CONTRACTORS FOR TRANSMITTAL REQUIREMENTS

FORT WORTH DISTRICT
FOR INFORMATION ONLY (FIO) AND GOVERNMENT APPROVED (G) SUBMITTALS

1. General Requirements

a. General requirements for transmittal of FIO and G submittals is contained in the preceding specifications. Specific requirements on how to transmit FIO and G Submittals are outlined herein.

b. FIO and G submittal data shall be transmitted under separate ENG Form 4025s and assigned different Transmittal Numbers. If G and FIO submittal data is included in the same submittal, using the same ENG Form 4025, they will be considered an FIO submittal until the Contractor corrects the error.

c. The Contractor shall designate on each Eng Form 4025, above the Transmittal No., either FIO or G to show the transmittal type. This procedure allows ready identification of FIO or G submittals. The Government reserves the right to redesignate the category (G or FIO) of submittals incorrectly identified by the Contractor.

d. The Contractor shall assure all FIO submittals for each technical section are submitted prior to or concurrent with the G submittals for that technical section. If appropriate FIO submittals have not been submitted, the G submittal will be returned disapproved.

e. Data transmitted with ENG Form 4025 shall be identified by marking it with the same item number(s) appearing in the "Item No." column on the form. The model number, part number, color, etc., of proposed materials or equipment shall be highlighted or otherwise identified.

f. The Contractor shall identify and include with each submittal a copy of any modification and/or Request for Information (RFI) or Government Correspondence that may have changed the requirements of the Contract in regards to each individual submittal.

2. Specific Requirements for For Information Only (FIO) Submittals

a. One fully coordinated FIO submittal shall be made for each technical section. Each FIO submittal listed on the ENG Form 4288, shall be submitted as a separate item on the ENG Form 4025 in the order they appear on the progress schedule. Technical data provided with the ENG Form 4025 shall conform to the "Submittals" paragraph in each Technical Section. (Example: SD-02 Shop Drawings as outlined herein.)

b. Items such as mill certificates or other test data unavailable until the equipment/material is manufactured/fabricated shall be identified on the initial ENG Form 4025. An explanation in the "Remarks" section shall explain this data will be submitted by Transmittal Number () (fill in transmittal number) after materials are manufactured/fabricated (or other explanations as appropriate). A separate submittal for long lead time equipment or material may be made if sufficient data is furnished to show contract compliance. An explanation shall be provided in the "Remarks" section or on a separate sheet, if necessary, explaining why a partial submittal is being made. Explanation shall include the estimated delivery date of the above equipment/material and the Transmittal Number of the submittal that will contain data required by the particular specification section for the remaining equipment/materials. For contracts with several buildings/structures, separate transmittals for each technical section may be used if each building/structure is noted in the "Remarks" section of the ENG Form 4025. Samples of materials shall be submitted along with technical data, not under separate transmittals.

2.1 FIO Submittal Review

a. The Contractor's Quality Control (CQC) Representative has full responsibility for reviewing and certifying that all FIO submittal data and all equipment and/or materials comply with the contract. FIO Submittals are provided to the Government "For Information Purposes Only." Contracting Officer approval is not required and will not be given. The Government will not code any FIO submittals. Copies of FIO Submittals will not be returned to the Contractor.

b. However, the Government may perform QA reviews and re-reviews of FIO submittals at any time during the contract. If the Government determines submittal data is incomplete or not in compliance with contract, comments will be provided. Comments will state, "Disagree with Contractor's Certified Compliance" and list items not in compliance or not provided as required by the Contract. The Contractor shall respond to all comments by return FIO resubmittal on a new ENG Form 4025. Repeated incomplete or non-complying FIO submittals with improper certifications may result in disapproval of the Contractor's Quality Control (CQC) Program and/or possible replacement of the Contractor Quality Control (CQC) personnel.

c. Performance of, or failure to perform QA submittal reviews or Government requirement to submit additional data on FIO submittals, will not prevent the Contracting Officer from requiring removal and

replacement of non-conforming material incorporated into the work. No adjustment for time or money will be allowed for corrections required because of non-compliance with contract plans and/or specifications.

3. Specific Requirements for Government (G) Approved Submittals

a. The Contractor's Quality Control Representative is responsible for assuring all data submitted is complete and in compliance with contract requirements. The Contractor shall assure all FIO submittals are submitted prior to or concurrent with the G submittal for each technical section. If the FIO submittals have not been submitted, the G submittal will be returned disapproved.

b. A separate submittal shall be made for each technical section with G submittals. FIO submittal data shall not be mixed with G submittal data.

c. The Government will provide written comments as appropriate and assign action codes to each item outlined on the back of the ENG Form 4025. One (1) stamped and dated copy of the submittal, along with any comments, will be provided to the Contractor. Action Code "A"- Approved As Submitted, and Code "B"- Approved Except As Noted, constitutes Government Approval. The Contractor shall resubmit under a separate Transmittal Number all data necessary to show compliance with Government comments on all other action codes.

d. Government review time is stated in Paragraph SCHEDULING. Government review time is exclusive of mailing time. Review time starts the day of receipt by the Government and continues until the day comments or notice of approval is provided to the Contractor.

e. If the Contractor considers any Government review comment to constitute a change to the contract, notice shall be given promptly as required under the Contract Clause entitled "Changes." No request for "Equitable Adjustment" will be honored unless the Contractor complies fully with the prompt notice provisions of the contract.

4. Variations/Deviations/Departures from the Contract Drawings or Specifications

Contractor proposed variations, deviations, or departures from the contract drawings or specifications shall be noted in the "Variation" column of ENG Form 4025 with an asterisk, for each FIO submittal. A brief explanation, and the Transmittal Number of the appropriate "G" submittal (as explained below), shall be added to the "Remarks" section of the Form (or a separate sheet, if necessary). Each variation, deviation, or departure shall be listed as an item on a separate "G" submittal, which may contain other G submittal items. Variations, deviations, or departures will be processed and approved the same as G submittals, provided they are included in a G submittal. Variations, deviations, or departures will not be approved in the FIO submittal, and will be disapproved, until they are properly submitted on a "G" submittal. Variations, deviations, or departures shall contain sufficient information to permit complete evaluation. Additional sheets may be used to fully explain why a variation, deviation, or departure is requested. The Government reserves the right to disapprove or rescind inadvertent approval of submittals containing unnoted variations, deviations, or departures.

5. Submittal Numbering

Each submittal shall cover only one specification section. For purposes of consistency and to provide compatibility with the Government's computerized submittal register, submittal numbers shall include a specification section prefix and special suffixes. Note the following examples (for Technical Section 07 41 60):

- a. New submittals - 07 41 60-01, 07 41 60-02, etc.
- b. Resubmittals -
 - (1) First resubmittal - 07 41 60-01.01, 07 41 60-02.01, etc.
 - (2) Second resubmittal - 07 41 60-01.02, 07 41 60-02.02, etc.
 - (3) Third resubmittal - 07 41 60-01.03, 07 41 60-02.03, etc.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE For use of this form, see ER 415-1-10; the proponent agency is CECW-CE.	DATE	TRANSMITTAL NO.
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SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO.	CHECK ONE: <input type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL _____
-----	-------	--------------	---

SPECIFICATION SEC. NO. <i>(Cover only one section with each transmittal)</i>	PROJECT TITLE AND LOCATION	THIS TRANSMITTAL IS FOR: <i>(Check one)</i> <input type="checkbox"/> FIO <input type="checkbox"/> GA <input type="checkbox"/> DA <input type="checkbox"/> CR <input type="checkbox"/> DA/CR <input type="checkbox"/> DA/GA
--	----------------------------	---

ITEM NO. <i>(See Note 3)</i>	DESCRIPTION OF SUBMITTAL ITEM <i>(Type size, model number/etc.)</i>	SUBMITTAL TYPE CODE <i>(See Note 8)</i>	NO. OF COPIES	CONTRACT DOCUMENT REFERENCE		CONTRACTOR REVIEW CODE	VARIATION <small>Enter "Y" if requesting a variation (See Note 6)</small>	USACE ACTION CODE <i>(Note 9)</i>
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.

REMARKS	I certify that the above submitted items had been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.		
	<table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;">NAME OF CONTRACTOR</td> <td style="width:50%; border: none;">SIGNATURE OF CONTRACTOR</td> </tr> </table>	NAME OF CONTRACTOR	SIGNATURE OF CONTRACTOR
NAME OF CONTRACTOR	SIGNATURE OF CONTRACTOR		

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED <i>(List by item No.)</i>	NAME AND TITLE OF APPROVING AUTHORITY	SIGNATURE OF APPROVING AUTHORITY	DATE
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INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each Transmittal shall be numbered consecutively. The Transmittal Number typically includes two parts separated by a dash (-). The first part is the specification section number. The second part is a sequential number for the submittals under that spec section. If the Transmittal is a resubmittal, then add a decimal point to the end of the original Transmittal Number and begin numbering the resubmittal packages sequentially after the decimal.
3. The "Item No." for each entry on this form will be the same "Item No." as indicated on ENG FORM 4288-R.
4. Submittals requiring expeditious handling will be submitted on a separate ENG Form 4025-R.
5. Items transmitted on each transmittal form will be from the same specification section. Do not combine submittal information from different specification sections in a single transmittal.
6. If the data submitted are intentionally in variance with the contract requirements, indicate a variation in column h, and enter a statement in the Remarks block describing the detailed reason for the variation.
7. ENG Form 4025-R is self-transmitting - a letter of transmittal is not required.
8. When submittal items are transmitted, indicate the "Submittal Type" (*SD-01 through SD-11*) in column c of Section I.
Submittal types are the following:

SD-01 - Preconstruction	SD-02 - Shop Drawings	SD-03 - Product Data	SD-04 - Samples	SD-05 - Design Data	SD-06 - Test Reports
SD-07 - Certificates	SD-08 - Manufacturer's Instructions	SD-09 - Manufacturer's Field Reports	SD-10 - O&M Data	SD-11 - Closeout	
9. For each submittal item, the Contractor will assign Submittal Action Codes in column g of Section I. The U.S. Army Corps of Engineers approving authority will assign Submittal Action Codes in column i of Section I. The Submittal Action Codes are:

A -- Approved as submitted.	F -- Receipt acknowledged.
B -- Approved, except as noted on drawings. Resubmission not required.	X -- Receipt acknowledged, does not comply with contract requirements, as noted.
C -- Approved, except as noted on drawings. Refer to attached comments. Resubmission required.	G -- Other action required (<i>Specify</i>)
D -- Will be returned by separate correspondence.	K -- Government concurs with intermediate design. (<i>For D-B contracts</i>)
E -- Disapproved. Refer to attached comments.	R -- Design submittal is acceptable for release for construction. (<i>For D-B contracts</i>)
10. Approval of items does not relieve the contractor from complying with all the requirements of the contract.

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Fort Hood Job Order Contract; FY16

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE			DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 32 01.00 10	SD-01 Preconstruction Submittals														
			Project Schedule	3.4	G												
		01 33 00	SD-01 Preconstruction Submittals														
			Submittal Register	1.7	G												
		01 35 10.00 44	SD-02 Shop Drawings														
			Hardware schedule		G												
			Keying system														
			Electro-Mechanical Devices		G												
			SD-03 Product Data														
			Casing Pipe	1.11.2													
			Paint Usage and Safety Data Sheet (SDS)														
			Air Emission Inventory														
			Certificate of Conformity for New Generators														
			Backflow Prevention Assembly														
			Vacuum Breakers														
			SD-04 Samples														
			Plastic Marking Tape and Tracer Wire	1.11.1	G												
			Locks and Latches		G												
			SD-07 Certificates														
			Customer Service Inspections	1.26													
			Customer Service Inspection Certificate	3.1.2													
			Digging And Water Use Permits	1.10.1													

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(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 35 10.00 44	Army Radiation Permits (ARP)	1.10.3													
			Landfill Permit	1.22.1													
			Landfill Permit	3.1.1													
			Backflow Prevention Assembly Tests														
			Certification of Natural Gas Heating Equipment														
			Waste Diversion Report		G												
			De-chlorination of Super-chlorinated New Water Supply System		G												
			De-chlorination Method of Wastewater from Disinfecting Water Line and Water Storage Tanks		G												
			Certificate of Proof on Asbestos Free Construction Material and Safety Data Sheet (SDS) for Construction Materials and Products		G												
			Potable Water Lines	1.12													
			SD-10 Operation and Maintenance Data														
			Operation And Maintenance Manuals														
		01 35 26	SD-01 Preconstruction Submittals														

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																		(a)
		01 35 26	Accident Prevention Plan (APP)	1.7	G A													
			Activity Hazard Analysis (AHA)	1.8	G A													
			Crane Critical Lift Plan		G A													
			Crane Operators	1.6.1.3	G A													
			Supporting Systems															
			SD-02 Shop Drawings															
			Temporary Support Data	3.12.2														
			SD-06 Test Reports															
			Reports	1.12														
			Accident Reports	1.12.1														
			Crane Reports	1.12.3														
			Gas Protection															
			Doctor's Reports	1.12.6														
			SD-07 Certificates															
			Confined Space Entry Permit	1.9														
			Hot work permit	1.9														
			License Certificates															
		01 45 35	SD-01 Preconstruction Submittals															
			Written Practices	3.1.2														
			NDT Procedures and Equipment	3.1.2														
			Calibration Records															
			SD-06 Test Reports															
			Daily Reports	3.1.2														
			Biweekly Reports	3.1.1														
			SD-07 Certificates															
			Fabrication Plant	2.1														

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		01 45 35	Steel Joist Institute Membership Certificate of Compliance	2.1													
			Special Inspector Qualification Records	1.5 3.1.2	G												
			SD-11 Closeout Submittals														
			Comprehensive Final Report	2.1	G												
			Comprehensive Final Report	3.1.2	G												
		01 50 00	SD-01 Preconstruction Submittals														
			Construction site plan	1.4	G												
			Traffic control plan	3.3.1	G												
			SD-06 Test Reports														
			Backflow Preventer Tests	2.2.5	G												
			SD-07 Certificates														
			Backflow Tester	1.5.1	G												
			Backflow Preventers	1.5													
		01 52 00.00 44	SD-03 Product Data														
			Government Field Office	2.1	G												
		01 56 00.00 44	SD-01 Preconstruction Submittals														
			Dust Control	3.1	G												
			Products and Procedures	2.1	G												
			Material Safety Data Sheet		G												
			Sandblasting	3.3.2	G												
			SD-02 Shop Drawings														
			Recordkeeping	1.7													
		01 57 20.00 10	SD-01 Preconstruction Submittals														
			Environmental Protection Plan	1.7	G												

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		01 57 20.00 10	Storm Water Pollution Prevention Plan	3.2.5	G												
			SD-02 Shop Drawings														
			Hazardous Substance Reporting	3.16	G												
		01 57 23	SD-01 Preconstruction Submittals														
			Storm Water Pollution Prevention Plan	1.3.2													
			Storm Water Notice of Intent	1.3.2													
			SD-06 Test Reports														
			Storm Water Inspection Reports for General Permit														
			Erosion and Sediment Controls	1.3													
			SD-07 Certificates														
			Mill Certificate or Affidavit	2.1.3													
		01 57 24.01 44	SD-01 Preconstruction Submittals														
			Storm Water Pollution Prevention Plan	3.5.7	G												
			Notice of Termination	9.2	G PER-												
		01 58 00	SD-02 Shop Drawings preliminary drawing indicating layout and text content		G												
		01 62 35	SD-11 Closeout Submittals														
			List of Recycled/Recovered Materials	3.1													
		01 71 23.00 44	SD-01 Preconstruction Submittals														
			Survey Data	3.1													

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																		(a)
		01 74 19	SD-01 Preconstruction Submittals															
			Waste Management Plan	1.6	G													
			SD-11 Closeout Submittals															
			Records	1.7														
		01 78 00	SD-03 Product Data															
			As-Built Record of Equipment and Materials	1.4.2														
			Warranty Management Plan	1.10.1														
			Warranty Tags	1.10.6														
			Performance Bond	1.10.2														
			Warranty Point of Contact	1.10.3														
			Warranty Report	1.10.4														
			Warranty Report	1.10.5														
			Final Cleaning															
			Spare Parts Data	1.5														
			SD-08 Manufacturer's Instructions															
			Preventative Maintenance	1.6														
			Condition Monitoring (Predictive Testing)	1.6														
			Inspection	1.6														
			Instructions	1.10.1														
			SD-10 Operation and Maintenance Data															
			Operation and Maintenance Manuals	1.11														
			SD-11 Closeout Submittals															

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		01 78 00	LEED Review Meetings														
			Red Zone Meeting	1.11.5													
			Video	1.11.1.1													
			Record Drawings	1.4.1													
			Preliminary Record Drawings	1.4.1.3													
			Final Record Drawings	1.4.1.4													
			Sustainable Design Documentation														
			Final Approved Shop Drawings	1.4.3													
			Construction Contract Specifications	1.4.4													
			Real Property Equipment	1.4.5													
			Certification of EPA Designated Items	1.7	G												
			Interim Form DD1354		G												
			Checklist for Form DD1354	1.13	G												
			Inventory Of Contractor Furnished And Installed Equipment	1.8													
			Inventory Of Contractor Furnished And Installed Equipment	1.9													
			Real Property Record														

SECTION 01 35 10.00 44

SPECIAL PROJECT PROCEDURES FOR FORT HOOD

PART 1 GENERAL

This Section covers the project requirements unique to Fort Hood, Texas. These unique requirements relate to items such as the digging permit process; tracer wire and marking tape specifications for the location of utility systems; Fort Hood landfill operations and permit requirements; local jacking, boring, and tunneling requirements; backflow prevention assembly documentation; and Customer Service Inspection certifications.

1.1 Installation Entrance Requirements

All personnel accessing Fort Hood must have DOD affiliation or be vetted at the Visitors' Welcome Center and issued a pass before being allowed onto Fort Hood. Contractor employees working at Fort Hood will be issued an extended pass once they have been vetted.

1.1.1 Vetting Requirements

Entry Requirements for person without a Valid DOD ID Card requesting unescorted access:

- A valid purpose for entering the installation; (Attend Meeting, visit Museum, Job interview, etc.)
- Valid driver's license
- Current vehicle registration (If operating a vehicle)
- Proof of current insurance (If operating a vehicle)
- License plate number
- Provide the destination, name of facility, building number, street address, or unit name/designation

Upon satisfying the above criteria and vetting requirements an Installation access pass/badge will be issued to the person.

NOTE: All unescorted visitors and all vehicle passengers (riding in these vehicles) will proceed to the Visitors Welcome Center (VWC) and receive a security screening. All vehicle occupant names will be included on an Installation Visitors Pass. Security personnel will verify all occupants ID with names on visitor passes at Installation Access Control Points (IACP) prior to providing installation access.

1.2 REFERENCES

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

AMERICAN WATER OPERATIONS & MAINTENANCE, INC. (AWO&M, Inc.)

AWO&M, Inc. Design Guide <http://www.amwater.com/products-and-services/military-services/specifications-and-details/fort-hood/index.html#designguide>

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C651 (2014) Standard for Disinfecting Water Mains

ASTM INTERNATIONAL (ASTM)

ASTM A53/A53M (2012) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

ANSI/BHMA A156.4 (2008) Door Controls - Closers

FORT HOOD DPW (FH)

FHIDG FORT HOOD INSTALLATION DESIGN GUIDE, MARCH 2007

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Hardware schedule; G

Submit a door hardware schedule, similar to Door Hardware Institute's (DHI) "Vertical Hardware Schedule for Typical Openings", listing all items to be furnished.

Keying system

Electro-Mechanical Devices and Accessories; G

Detail drawings for hardware devices for computerized keying systems, magnetic cards, keyless push button access control systems, and other electrical hardware devices showing complete wiring and schematic diagrams and other details required to demonstrate proper function of units.

SD-03 Product Data

Casing Pipe

10 days prior to jacking, boring, and tunneling activity, furnish catalog data for casing pipe.

Paint Usage and Safety Data Sheet (SDS)

Submit two copies of all paint systems for this contract and the associated SDS. One copy for the Contracting Officer Representative (COR) and the other copy for the Air Quality

Manager (telephone, 254-287-5284), DPW Environmental Division.

Air Emission Inventory

Submit a copy of air emission inventory Air Program Manager on each type of mechanical equipment and the number of units to be installed for the new facility to facilitate annual revision of Federal Air Permit Title V. The Contractor should use the manufacturer equipment information to prepare submittal of Air Emission Inventory

Certificate of Conformity for New Generators

Submit a copy of Environmental Protection Agency issued Certificate of Conformity for all new generators to the Air Program Manager to be installed to facilitate annual revision of Federal Title V Air Permit.

Backflow Prevention Assembly;

A list of backflow prevention devices installed for this project shall be provided to DPW-Services Division (David Somerville, 254 287-9606). The list shall identify all devices (the type, size, location and purpose of what system it is protecting)

Vacuum Breakers

Add vacuum breakers to all hose bibs installed in the Contract. See SD-07 submittal description "Backflow Prevention Assembly Tests."

Door hardware manufacturer's descriptive data, technical literature, catalog cuts, installation instructions, manufacturer warranties, and spare parts data. Spare parts data for locksets, exit devices, closers, electric locks, electric strikes, electro-magnetic closer holder release devices, and electric exit devices, 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 and supplies, with current unit prices and source of supply.

SD-04 Samples

Plastic Marking Tape and Tracer Wire; G

10 days prior to installation of utilities, furnish 12 inch long samples of marking tape for each applicable utility. Furnish 12 inch long sample of the tracer wire.

Locks and Latches; G.

Furnish samples of the locksets, cylinders, cores, and keys to be furnished this project. Notify the Contracting Officer and base personnel for a meeting demonstrating that the locksets to be furnished are fully compatible with the project requirements and, if applicable, the existing keying system. An existing base core and/or cylinder and key will be fitted to the sample lockset.

SD-07 Certificates

Customer Service Inspections

The Contractor shall supply a "Customer Service Inspection" (CSI) certificate for the water supply in accordance with the Texas Commission on Environmental Quality (TCEQ) regulations. Prior to final inspection and acceptance of new construction or after any material improvement or addition to drinking water systems, furnish the completed and signed certificate to American Water Operations & Maintenance, Inc. (AWO&M) (Bldg. 49002, 254-213-0382), through the Contracting Officer, for review and final approval. The ORIGINAL of the signed and dated form shall be delivered to AWO&M (Bldg. 49002). A blank certificate is located at the end of this section. See paragraph CUSTOMER SERVICE INSPECTIONS for additional information.

Customer Service Inspection Certificate

Digging And Water Use Permits

Digging permits must be obtained prior to any digging, drilling or excavation. See paragraph DIGGING PERMITS for additional information.

Army Radiation Permits (ARP)

Landfill Permit

Contractor shall obtain permission from Fort Hood Directorate of Public Works (DPW) to use the Fort Hood landfill. Submit documentation granting permission and a completed landfill permit to the Contracting Officer prior to start of construction. A blank permit form is located at the end of this section. See paragraph CONDITIONS FOR USE OF FORT HOOD LANDFILL for additional information.

Backflow Prevention Assembly Tests

Certification of proper operation of backflow preventers shall be accomplished in accordance with state regulations by an individual certified by the state to perform such tests. If no state requirement exists, the Contractor shall have the manufacturer's representative test the device to ensure the unit is properly installed and performing as intended. Prior to start of construction; provide a list of backflow prevention devices that will be installed for this project to AWO&M, Inc. (Bldg. 49002, 254-213-0382), Include the BPD type, size, location and purpose (what system it's protecting) for DPW records. Add vacuum breakers to all hose bibs installed in the Contract. At the time of the final inspection for the facility, the Contractor shall provide written documentation, including the original BPD test record and TCEQ Appendix F form, that the tests have been performed and that the backflow preventers operate properly. The ORIGINAL of the signed and dated forms and documents will be retained by AWO&M, Inc. (Bldg. 49002, 254-213-0382). A copy of the TCEQ rule and sample of the form ("Appendix F Sample Backflow Prevention Assembly Test and Maintenance Report") can be obtained from the TCEQ's home page at the web site: <http://163.234.20.106/index.html> or

http://info.sos.state.tx.us/fids/30_0290_0047-23.html.

Certification of Natural Gas Heating Equipment

The Contractor shall comply with the Texas Commission on Environmental Quality (TCEQ) air emission requirement for water heaters, small boilers and process heaters. Submit a document or certificate to verify that the natural gas-fired heating equipment having a maximum rated rating capacity of 2.0 million British Thermal Units per hour (MBtu/hr) or less is in compliance with the Nitrogen Oxide limits as specified in 30 Texas Administrative Code (TAC), Part 1, Chapter 117, Subchapter D, division 1, Rule 117.465.

Waste Diversion Report; G

Submit a monthly Waste Diversion Report to the Installation's Solid Waste Program Office, located at Bldg 4622, Engineer Drive, in accordance with this Section.

De-chlorination of Super-chlorinated New Water Supply System; G

Submittal on method of de-chlorination in accordance with paragraph RECYCLING AND SOLID WASTE MINIMIZATION, this Section, and the utility provider (American Water Operations & Maintenance, Inc. (AWO&M, Inc.)) specifications.

De-chlorination Method of Wastewater from Disinfecting Water Line and Water Storage Tanks; G

Submittal of de-chlorination method and location for discharge of wastewater from disinfection of waterline and water tank.

Certificate of Proof on Asbestos Free Construction Material and Safety Data Sheet (SDS) for Construction Materials and Products; G

Submittal of a certificate of proof on asbestos free construction (per TAC 295.34 j) shall provide to the DPW-ENV office and also no other regulated materials. An Asbestos Certification form is appended to this Section. Also include SDS of all construction chemical products to DPW-ENV Air Program Manager.

Potable Water Lines

Provide copies of results of bacteriological (bac-t) testing when placing new potable water lines in service AWO&M (Bldg. 49002, 254-213-0382).

List of Regulated Material On-site and SDS

Submittal of regulated materials list and SDS to AWO&M.

SD-10 Operation and Maintenance Data

Operation And Maintenance Manuals

Provide six complete copies of maintenance instructions listing routine maintenance procedures, possible breakdowns and repairs, and troubleshooting guides for electro-mechanical door devices. The instructions for electric locks, electric strikes,

electro-magnetic closer holder release devices, and electric exit devices shall include simplified diagrams as installed.

1.4 FORT HOOD INSTALLATION DESIGN GUIDE

In addition to the requirements of these specifications, the requirements of the FHIDG applies to this project.

1.5 DESIGN REVIEWS

For design-build projects, all projects over \$25,000 are subject to Fort Hood's Installation Project Review Board (IPRB) review. The Board meets weekly. For review of the interim, final, and backcheck design submissions, the Government shall be allowed fourteen (14) calendar days or the duration specified in Section 01 33 16, DESIGN AFTER AWARD, whichever is greater.

1.6 FORT HOOD CADD AND GIS DELIVERABLES

1.6.1 Data Standards

Spatial Data Standard for Facilities, Infrastructure and Environment (SDSFIE) current release shall be followed for Geospatial database structure and attributes to allow for data integration. CADD data shall be documented according to the current release of the Architecture, Engineering and Construction (AEC)/CADD standards. All GIS and CADD data will be documented in accordance with the Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata. Deviations from the standard described above will be rejected.

1.6.2 Coordinate System Projection And Datum

All GIS data shall use the Universal Transverse Mercator Zone 14 North projection, World Geodetic System of 1984 (WGS84) datum, and the North American Vertical Datum of 1988 (NAVD88) using Metric as the working units to ensure data alignment and accuracy.

CADD data shall be geo-referenced in the State Plane Coordinate System 1983, using the North American 1983 Geodetic Datum with Survey Feet as the working units.

The projection, datum and coordinate system must be defined and then documented in the metadata for both CADD and GIS and provided whenever the data is distributed.

1.6.3 CADD And GIS Deliverables

All CADD deliverables of As-built drawings shall be delivered in a MicroStation V8 .DGN compatible format.

All CADD references shall be removed from the submitted DGN file.

Files with raster's attached as the sole contents of the file are not acceptable. DGN files with vector edits made over an attached raster will be accepted.

Individual as-built sheets have one to one correspondences to individual dgn files.

Each dgn file will be named in such a way to easily reflect the order and As-Built sheet it represents.

A seed file can be obtained from the Fort Hood DPW CADD/GIS Center. If a seed file other than the Fort Hood seed file is used, the contractor must provide a copy of the file with the submittal.

GIS deliverables shall be delivered in current Bentley file format or an ArcGIS shape file format.

Contact: Fort Hood DPW CADD/GIS Center (254) 285-6851.

1.7 FORT HOOD AIRFIELD USE

Contractors performing work under this contract may use airfields at Fort Hood with prior written notification and approval, providing:

a. All requests for Installation Airfield use shall be coordinated through the Office of the Commander, Installation Airfields, AFZF-DPC-AC, Hood Army Airfield, Fort Hood, TX 76544, telephone (254) 287-4266/5838.

b. Potential users shall submit completed DA Forms 5205-R (Certificate of Insurance), 5206-R (Civil Aircraft Landing Permit), and 5207-R (Hold Harmless Agreement). Forms are available through the Point of Contact (POC) mentioned in paragraph (a) above. User requests and specified forms shall be submitted at least 60 days before the first intended landing.

1.8 ENVIRONMENTAL PROTECTION PLAN

The environmental protection plan shall include all elements addressed in Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION, paragraph 1.7.2 "Content." Include the following:

(a) List of all on-site regulated materials, Safety Data Sheet (SDS), List of Construction Materials and Products (mastic, sealants, etc.), and SDS shall be submitted through the Contracting Officer to the installation DPW-Environmental Office.

(b) All required pre-construction permits, registration, notifications, certifications applicable to the Contract.

1.9 SURFACE WATER MANAGEMENT

1.9.1 Temporary Water Use Permit

All construction that requires the storage, obtaining, and diversion surface water flow, except potable water, requires a Temporary Water Use Permit per Texas Water Code (TWC) Chapter 11. The Contractor shall obtain the permit, provide a copy of the permit and monthly reports of total surface water usage to the installation environmental office until project completion and acceptance.

1.9.2 Riparian Buffer Zones

All construction shall remain at least 50 meters from streams in order to maintain riparian buffer zones and reduce erosion. A reduced buffer zone may be approved on a case-by-case basis by DPW Environmental Division,

Natural Resources Management Branch.

1.10 PERMITS

1.10.1 Digging And Water Use Permits

1.10.1.1 Digging Permits

The Contractor shall obtain digging permits directly from the Fort Hood Post DPW before any drilling, digging, or excavation is undertaken (254-287-9735). Provide a completed form FHT 200-X10, Coordination for Land Excavation & Water Use, to the DPW building 40001 (Room S006), Fort Hood, Texas for each permit. A map with aerial imagery of the site must be attached to the excavation permit. Allow 30 days for Government review of digging permit requests. A digging permit for a specified area of excavation expires 15 days after the issue date; Contractor must re-apply for a new permit to perform excavation in the area if the excavation was not started within the 15-day period. Permits will identify all underground utilities within 5 feet of the designated area. Contractor shall be responsible for all repairs, costs, and damages due to excavating without permit or damaging an identified utility. Unidentified utilities shall be repaired by the Contractor at Government expense.

All personnel performing the digging, including all subcontractor personnel must be present at the digging permit inspection. Subcontractors must submit and obtain their own dig permit.

All personnel performing the digging, including all subcontractor personnel must be present at the digging permit inspection.

1.10.1.2 Water Use Permit

Contractor shall obtain a Fort Hood Water Use Permit directly from Fort Hood post DPW prior to any use of surface or ground water on Fort Hood. All usage of surface water or ground water must be coordinated in writing also using Fort Hood 200-X10 with both the DPW Environmental Management Branch and Natural Resources Management Branch, at least 30 days in advance of such a need. The information required includes the proposed use for the water, estimated dates of the operation, estimated amount of water to be used, and desired locations of the water source.

A temporary water use permit from the TCEQ will also be required (<http://www.tnrcc.state.tx.us/permitting/waterperm/wrpa/permits.html#temporary>). Such permits can be anticipated to take a minimum of 30 days and require a \$100 application fee plus other minor application-related expenses.

Any alteration to the stream such as dikes or other modifications involving placing fill in the stream would require a Section 404 Permit application and approval. This process is elaborate and 180 days should be allowed for the process. Contact DPW Environmental Division, Natural Resources Management Branch for assistance with this type of permit.

1.10.2 Clean Water Act Section 404 Permit

A Section 404 permit is required for any alteration to the stream such as dikes or other modifications which involve placing fill, excavation, or otherwise changing the bottom elevation in the stream. Depending on the activity and extent of impacts to the stream, coordination

with and approval from USACE Fort Worth District Regulatory Branch may be required. If coordination with the USACE Fort Worth District Regulatory Branch is necessary, acquiring approval may take 3-12 months depending on the level of permitting and coordination required. Contact DPW Environmental Division, Natural Resources Management Branch early in the planning process for assistance with Section 404 permitting.

1.10.3 Army Radiation Permits (ARP)

Non-Army agencies (including other military services, vendors, and civilian contractors) require an ARP to use, store, or possess ionizing radiation sources on an Army installation (see 32 CFR 655). Non-Army applicants will apply by letter with supporting documentation (see para 2-4a, below) to the garrison commander. The letter should be submitted such that the garrison commander receives the application at least 30 days before the requested start date of the permit (see AR 385-10, chap 7).

a. The ARP application will specify start and stop dates for the ARP and describe the intended use of the radioactive material. For sealed sources, an affirmation that leak test requirements are current shall be included in the application. The garrison commander will approve the application only if the applicant provides evidence to show that one of the following is true:

(1) For installations that maintain exclusive Federal jurisdiction, and installations in NRC non-agreement states, the ARP applicant must possess one of the following that allows the applicant to use the source as specified in the ARP application:

(a) A valid NRC license.

(b) A Department of Energy (DOE) radiological work permit (for work performed under DOE regulations).

(c) A State radioactive material license with an NRC reciprocity agreement. The ARP applicant establishes reciprocity by submitting an NRC Form 241 (Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction or Offshore Waters) to the NRC in accordance with 10 CFR 150.20. The NRC limits work performed under a reciprocity agreement to 180 days in a calendar year. Otherwise, an NRC license is required.

1.11 UTILITY INSTALLATION REQUIREMENTS

1.11.1 Plastic Marking Tape and Tracer Wire

Marking tape to be manufactured with integral wires or foil backing. Furnish and install the following marking tape and tracer wire:

a. Plastic Marking Tape

Plastic marking tape shall be acid and alkali-resistant polyethylene film, 6 inches wide with minimum thickness of 0.004 inch. Tape shall have a minimum strength of 1750 psi lengthwise and 1500 psi crosswise. The tape shall be of a type specifically manufactured for marking underground utilities. Tape shall be color as specified in Table 1 and bear a continuous printed inscription describing the specific utility.

TABLE 1. Tape Color

Red:	Electric
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Orange:	Telephone, Telegraph, Television, Police, and Fire Communications
Yellow:	Gas
Blue	Water
Green	Wastewater

b. Tracer Wire

For gas, communications, water, force sanitary sewer mains, sewer service lines, gas service lines, water service lines, and other pressurized utility systems, place No.10 AWG, THWB, CU, Direct burial in trench bottom prior to sand bedding, and brought up in valve boxes, risers, manholes and cleanouts, with 12 inches minimum leads above finished grade. Only direct -burial splices shall be used. Trace wire is not required for underground electrical. Water and Sewer shall follow the American Water Guide Specs, Details and Design Guide

c. Fire Hydrant Tags

All Hydrants shall include a brass identification tag with the Hydrant's ID Number based on American Water's numbering system, date of installation, and physically attached to the hydrant. Contractor to contact the Government for these numbers prior to project completion.

1.11.2 Jacking, Boring, and Tunneling

Conduct boring and jacking in a manner which does not interfere with the operation of the railroad or street or weakens or damages the embankment or structure. Bore or jack from the low or downstream end wherever possible. Unless otherwise shown or specified, the top of the casing pipe shall be a minimum of 3 feet below the finished road surface and 4 feet below the bottom of the railroad track ballast.

a. Utilities

Excavate where possible and verify the location and depth of buried utilities which will be crossed.

b. Casing Pipe

Smooth wall steel pipe, ASTM A53/A53M with welded joints. Minimum wall thickness of 3/16 inch unless otherwise shown or specified.

c. Casing

Unless otherwise indicated or specified, install a casing pipe of a diameter which provides a minimum of 2 inches clearance between the outside diameter of the carrier pipe joint and the inside wall of the casing. Upon installation of the carrier pipe, sand grout the entire annular space between the casing and carrier pipe walls.

1.12 POTABLE WATER LINES

When placing new potable water lines in service, provide copies of results of bacteriological (bac-t) testing to American Water. Every 1000 feet of installed pipeline requires a negative bac-t result prior to placing in service.

1.13 POLLUTION PREVENTION OF POTABLE WATER SUPPLY SYSTEM

Verification of water line disinfection shall be performed per AWWA C651. The samples shall be analyzed by an analytical lab that holds the current state license and certification. Repeating disinfection protocols are required until satisfactory results are obtained -- that being two consecutive sets of acceptable samples taken 24 hours apart. The water sample analytical results shall be provided to American Water for record-keeping. One water sample at each 1000 linear feet of disinfected water line shall be obtained. Water sample shall be placed in proper sterilized containers and a bacterial examination shall be performed in accordance with state approved methods. The water supply system shall not approve for service until each test result is negative for bacteria examination.

NOTE: In the State of Texas, new water supply system Certification and drinking water well certification are required. The potable water supply system and water quality shall be in accordance with 30 TAC Chapter 290, subchapter D. In compliance with 30 TAC 290.39, the Contractor shall submit to Texas Commission on Environmental Quality (TCEQ) a written application (with plans, specifications, and related document) for review. The revision period could be 60-day in duration. In addition, the Contractor shall submit the post construction water system completion notification to TCEQ after completion of the new water supply system.

1.14 SPILL CONTROL

POL storage greater than 55 gallons requires secondary containment and possible modification to the Installation's existing spill prevention control and countermeasures plan, and are subject to review and approval by the Installation's DPW Environmental Division. All activities that store or use POL or hazardous substances and have the potential of spilling those products must take into consideration secondary containment of the storage container and must have compatible spill cleanup materials on hand at all times. The site environmental protection plan should address the POL or hazardous substances, their storage containers, secondary containment, and how you will immediately respond to and cleanup spills of those substances in any amount. It also will include notification to the Fort Hood Fire Department (254-287-3908) and Contracting Officer of any spills of five gallons or greater to the land and any amount into a water body such as a creek, pond, river or lake.

The contractor will not report any spills to state or federal regulatory agencies. DPW Environmental will assess the spill and conduct regulatory reporting if necessary.

1.15 AIR POLLUTION CONTROL

Provide certifications from equipment manufacturers verifying that the small combustion equipment emission (i.e. with rated capacity less than 2.0 MMBtu/hr) is in compliance with the Texas Commission on Environmental Quality (TCEQ), per 30 TAC 117.3205 (Texas Administrative Code (TAC), Title 30, Chapter 117 Control of Pollution From Nitrogen Compounds, Subchapter E Small Combustion Sources, Division 3 Water Heaters, Small Boilers, and Process Heaters, Rule 117.465 Emission Specifications) and Rule 117.3210 Certification Requirements.

Document all equipment emission data from combustion devices to be used in this Contract per 30 TAC 106.183. All equipment air emission data shall be provided to the Installation Air Program Manager to assist revision of

the TITLE V Federal Air Permit. An Emission Inventory is included with the Environmental Design Analysis for information only. The Contractor shall use the manufacturer equipment information to prepare an Emission Inventory based on equipment from the manufacturer, the emission inventory form is attached at the end of this Section. Provide generator USEPA issued Certificates of Conformity for all generators. Provide a Refrigerant Report for all air-conditioning equipment to Fort Hood DPW-ENV, Air Program Office.

1.16 WASTE WATER MANAGEMENT

In the waste water management plan, identify the source of wastewater at job site such as sanitary and construction derived waste waters. Address methods and procedures for management and/or discharge of waste waters which are from construction activities such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines (i.e. new main disinfection (or hyper-chlorinated water), concrete wash water, hydrostatic test water, vehicle wash water, etc.).

Wastewater from water main disinfection shall be de-chlorinated to less than 4 ppm residual chlorine prior to discharge to the sediment pond or the sanitary sewer system when approved by the Contracting Officer with prior approval and/or notification to the local Waste Water Treatment Plant. A chlorine residual test is required to submit to COR prior to land disposal of wastewater from disinfection of water supply system. . If there are any questions about potential harmful consequences of a specific discharge due to proximity to a sensitive environmental area (e.g., creek, wetlands, etc.) or the volume of the discharge (i.e. wastewater from disinfecting water storage tank), the Contractor shall contact area office Contracting Officer for further guidance. Disinfection of water lines and water storage tank required in Section 33 11 00 WATER DISTRIBUTION SYSTEM and Section 22 00 00 PLUMBING, GENERAL requires de-chlorination. Submit the method of de-chlorination for approval.

No foreign items, construction debris, chemicals, oils, etc., shall be introduced into the sanitary sewer collection system. Storm water runoff shall be directed away from the sanitary sewer collection system and storm water shall not be disposed into the sanitary collection system.

Wastewater discharge permit is required, except for the following:

- fire fighting activities,
- fire hydrants flushing,
- vehicle wash waters which do not contain detergent or leaked fluids
- minimal dust control runoff to minimize off-site tracking of vehicles,
- potable water from uncontaminated waterline flushing,
- routine external building wash down which does not use detergents and the exterior paint that does not contain mercury, lead, cadmium, and mildewcides,
- pavement wash waters where spills or leaks do not contain hazardous, toxic, radiological material or detergent,
- air conditioning condensate,
- uncontaminated spring or ground water,
- foundation and footing drains which do not contain contaminated process materials such as solvents.
- lawn watering and similar irrigation drainage, provided that all

- pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portion of the facility, but excluding intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains); and other discharges described in Part V of the Multi Sector General Permit (TPDES General Permit TXR050000) that are subject to effluent guidelines and effluent limitations.

1.17 RECYCLING AND SOLID WASTE MINIMIZATION

Army military construction, renovation, and demolition projects shall achieve a minimum of 60 percent diversion of construction and demolition (C&D) waste, by weight, from landfill disposal.

In accordance with Fort Hood Regulation 420-6 (Recycling), all Contractors must participate in the Installation's recycling program.

Source Separation Method. Waste products and materials that are recyclable will be separated from trash and debris and sorted into appropriately marked separate containers and then transported to the respective recycling facility. Deliver materials in accordance with recycling or reuse facility requirements (e.g. free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process).

The Fort Hood Recycle Center will support recycling efforts and provide roll off container service for paper, plastic, cardboard, and metal. The Fort Hood Recycle Center is located in Building 4626, at 72nd Street and Railhead Drive. The Recycle Center can be reached at 254.287.2336 and is open from 0730 - 1630, Monday - Friday and on the 2nd Saturday of each month. The Contractor can contact the Recycle Center for these support services. Fort Hood Recycle has a certified scale and can help provide weights, reporting, and other diversion information. These services are provided free of charge to the contractor. Please contact the recycle center for specific questions and scheduling.

The Contractor shall contact the Fort Hood Sanitary Landfill concerning wood recycling for trees removed from site clearing and grubbing. The trees may be shredded on-site and the shredded material spread over adjacent vegetative areas for "soil amendments". Do not spread the material to exceed 2.5 inches 63.5 mm in depth, unless otherwise approved by the Contracting Officer. Trees may be loaded and hauled to the Fort Hood Sanitary Landfill (telephone 287-532-2256) where they will be weighed and dumped in the recycle yard for processing.

At Fort Hood range training areas, or areas where erosion rates are known to exceed tolerable limits, the trees identified to be removed shall be cut and shredded on-site and the residue spread over construction areas for temporary soil stabilization. The shredded material shall be spread to not exceeding 6 inches in depth.

Conserve natural resources during site clearing and grubbing operations. Trees identified to remain shall be preserved in accordance with applicable notes and specifications.

Avoid using organic material for temporary stabilization in areas that are

to be paved.

Shredded material used for soil stabilization and erosion control shall be no more than ½-inch diameter and no more than 3-inch in length. Trees to be used for soil amendments and/or as mulch may be shredded and the material stockpiled in an area pre-determined and pre-approved by the Contracting Officer.

A copy of each pre-construction and post construction notification, registrations, certifications, and recycling/reuse waste diversion report with disposal receipts, shall be provided to both the Contracting Officer and the Installation's environmental authorized personnel at project completion with other close-out documents.

1.18 INDOOR RADON PREVENTION

The Contractor shall comply with Indoor Radon Prevention and Mitigation design CODE A - Radon Passive Barrier (see <http://www.hnd.usace.army.mil/techinfo/ti/810-91.pdf>). CODE A, Radon Passive Barriers shall require the Contractor to provide 6-mil polyethylene sheeting under floor slabs on-grade, a capillary water barrier below floor slabs on-grade, and on the finished grade below the suspended slab. Sealants shall be placed in all joints in floor slabs and around all pipe and conduit penetrations. Joint sealants will be selected and installed according to TM 5-805-6 www.usace.army.mil/publications/armytm/tm5-805-6 and Section 07 92 00 JOINT SEALANTS. Polyethylene sheets will be lapped and sealed with adhesives or pressure sensitive tape and sealed at foundation walls with mastic. Reference structural foundation detail drawing.

1.19 CERTIFICATION OF NON-ASBESTOS CONTAINING MATERIALS AND PRODUCTS

The construction Contractor shall provide a Certification of Non-Asbestos Containing Materials and Products in construction. A signed statement by a corporate officer, an architect, engineer or State Department of Health Inspector identifying presence or absence of asbestos containing material in all construction building materials. The Contractor shall submit a Certification and Safety Data Sheet (SDS) on each construction material and products (i.e. interior & exterior material of construction including mastic, sealant, roofing felt, roofing coating, non-roofing coating, floor tile and mastic, pipeline wrap, any type of friction material, etc.) and equipment. If SDS of product or material does not have asbestos containing material data, a state licensed analytical lab shall obtain three bulk samples of from the same material or product for analytical analyses. The SDS can be kept as a separate binder at the job site. A copy of the SDS binder shall submit with the Certification at project closeout.

1.20 CERTIFICATION OF NATURAL GAS HEATING EQUIPMENT

a. The construction Contractor shall provide a Certification of Natural Gas Heating Equipment. (Note: The Contractor shall comply with the Texas Commission on Environmental Quality (TCEQ) air emission requirement for water heaters, small boilers and process heaters. Submit a document or certificate to verify that the natural gas-fired heating equipment having a maximum rated rating capacity of 2.0 million British Thermal Units per hour (MBtu/hr) or less is in compliance with the Nitrogen Oxide limits as specified in 30 Texas Administrative Code (TAC), Part 1, Chapter 117, Subchapter E, Division 3, Rule 117.3205.)

b. The construction Contractor shall provide data of HVAC Units and initial HVAC Service and Maintenance Record. It shall include all new HVAC units and related data of each unit (i.e. name of manufacturer, model number, type of refrigerants and total charge amount (in pounds). At least a copy of the log shall be provided to the Air Program Manager for the new/renovated facility to capture refrigerants which contribute to greenhouse gas emissions.

1.21 ENVIRONMENTAL SUSTAINABLE PAINT SYSTEM

The Contractor shall provide statement of proof on environmental sustainable paint system to verify interior and exterior paint systems have meet the low volatile organic compounds (VOC) criteria and lead concentration on proposed facilities shall not exceed Consumer Safety Act criteria <http://www.cpsc.gov/businfo/leadguid.html>.

1.22 CONDITIONS FOR USE OF FORT HOOD LANDFILL

Use of the Fort Hood Municipal Solid Waste Landfill, located at the intersection of Turkey Run Road and Clark Road, by the Contractor is subject to the operating requirements imposed on the landfill by the Landfill Operating Permit (TCEQ MSW Permit #1866). All waste delivered to the landfill will be secured and covered and will be inspected by the landfill operating Contractor for materials that are not authorized for disposal in the landfill before entry into the landfill is allowed. Containers that contain unauthorized waste will be diverted for removal of unauthorized material before entry into the landfill. Landfill operating hours are 0730-1700 Monday through Friday and 0730-1400 on Saturday. Questions concerning landfill policy and procedures shall be directed to the landfill at 254-532-2256.

The following classes of materials are NOT authorized in the Fort Hood Municipal Solid Waste Landfill and shall be diverted as described below:

Recyclable Materials: Cardboard and paperboard, various metals, aluminum and steel, paper, 1-7 plastics, and serviceable pallets shall be delivered to the Fort Hood Recycle center. Contact the Recycle Center for roll off support and other questions regarding disposal of these items. In general, roll off support is provided free of charge to the contractor.

Compost Materials: Untreated wood, branches, shrubs, grass, wood chips, unserviceable or odd sized pallets shall be separated from the refuse load and delivered to the Fort Hood Compost Center. The Compost Center is located in the vicinity of the Landfill (corner of Clarke Road and Turkey Run Road). All materials must go through the landfill scales for inspection and weight measurements. Solid Waste Contractor personnel will direct disposition of compost materials. Cedar trees may not be composted and must be delivered to an area designated by the Government for deposition.

Inert Constructions and Demolition Debris: Inert C&D debris includes: clean fill; sand; sod; rock; clean masonry; brick; concrete; and asphalt. The Contractor shall transport these materials off Government property and dispose of them in compliance with Federal, State, and local requirements. The Contractor shall submit non-hazardous waste disposal reports to the Contracting Officer IAW 01 57 20.00 10-1.7.2(h). The Installation prefers these materials are recycled and a weight ticket provided for the

diversion. Diversion reports are to be submitted on a monthly basis to the DPW-ENV Net Zero Manager, 254-287-8712. Some clean fill, sand, or sod may be needed on the Installation; however it is not a guaranteed disposal method. Contact the DPW Natural Resources Management Branch to coordinate (254-287-2885).

Salvageable Items: Engine and machine parts shall be delivered to the Defense Logistics Agency Disposition Services office (DLADS). The DLADS is located in building 25030 Ivy Division Rd. The phone number is 254-287-8822. Call for hours of operation and turn-in procedures.

Serviceable Pallets: Serviceable pallets are to be delivered to the Fort Hood Recycling Center Bldg. 4621, located at 72th St. and Railhead Dr. Phone 287-2336, Monday-Friday, 0730-1600 and on the 2nd Saturday of each month.

Freon: Freon and other refrigerants shall be collected in designated recovery cylinders/drums (R-123) and separately labeled. Recovered R-12, R-22, R-134a and R-123 refrigerants shall be turned in to DPW-Classification Unit (CU) Building 1346 for processing. All other blends shall become property of the contractor for disposal or re-use. Empty containers can be issued to the Contractor for recovery operations if necessary. Each container shall be labeled (i.e. R-12, R-22, etc.) and shall not be mixed. If refrigerants are unintentionally mixed, the Contractor shall properly label the container as "MIXED REFRIGERANTS" and inform the DPW-CU of the suspected mixture. The Contractor shall be responsible for all associated fees and disposal cost. All Freon is received and issued through the DPW-Classification Unit (CU). Contractors are NOT allowed to bring nor authorize the use of Freon from off-post sources. For more information on Freon issue, and/or turn-in call the DPW-CU at 254.288.7627 (SNAP).

Regulated Waste: Liquid waste, fluorescent light bulbs, oil filters, ordinance, explosives, pressurized gases, PCB (TCB, DEPH or fluid-typed) ballasts, paints, solvents, antifreeze, pesticides, herbicides, radioactive materials, and biohazardous materials are prohibited from disposal at the Fort Hood landfill. All turn-ins to the DPW Classification Unit are by appointment only. For more information on the management of regulated wastes on Fort Hood, call the DPW-CU at 254.288.7627 (SNAP). The DPW Classification Unit can assist Contractors with packing procedures, waste classifications, and the proper disposal method. The Contractor shall be responsible for all associated fees and disposal cost.

Asbestos Containing Materials (ACM): The management of asbestos on Fort Hood requires special procedures mandated by the State of Texas. Contact the Fort Hood Asbestos Program Champion prior to the start of work activities for guidance on asbestos waste management. The Contractor shall be responsible for all associated fees and disposal cost. A complete survey, abatement, and any documentation that is sent to the State of Texas on abatement must also be forwarded to the DPW Environmental Division. If ACM is to be disposed at the Fort Hood Landfill the manifest must be signed by a DPW-ENV authorized representative located at Building 4622, Engineer Drive, 254-288-7627. If ACM is disposed off post a copy of the manifest must be provided to the DPW-ENV waste representative located at Building 4622.

Special Wastes: POL contaminated soil and demolition debris contaminated with lead paint are considered special wastes in the State of Texas.

These special wastes require special handling procedures mandated by the State of Texas. Contact the Fort Hood Environmental Division prior to the start of work activities for guidance on special waste management. The Contractor shall be responsible for all associated fees and disposal cost.

Wastewater from Water Line Disinfection: Initial and subsequent wastewater discharge from water main or storage tank disinfection (or flushing) shall be de-chlorinated to less than 4 ppm residual chlorine prior to discharge to the sediment pond or the sanitary sewer system when approved by Contracting Officer Representative (COR). There is a large volume of the discharge from disinfecting water storage tank, the Contractor shall contact COR and DPW for further guidance. De-chlorinate super-chlorinated wastewater from water line and water storage tank disinfection in accordance with AWWA C651 for Section 33 11 00 WATER DISTRIBUTION SYSTEM and AWWA C651 and C652 in Section 22 00 00 PLUMBING, GENERAL. The Contractor is responsible for labor, equipment, all associated fees of for testing, and cost of treatment to meet this requirement.

Verification of water line disinfection shall be performed per AWWA C651-05. The samples shall be analyzed by an analytical lab that holds the current state license and certification. Repeating disinfection protocols per AWWA C651 are required until satisfactory results are obtained -- that being two consecutive sets of acceptable samples taken 24 hours apart. The water sample analytical results shall be provided to AWO&M, Inc. (Bldg. 49002, 254-213-0382) for record-keeping. One water sample at each 1000 linear feet of disinfected water line shall be obtained. Water sample shall be placed in proper sterilized containers and a bacterial examination shall be performed in accordance with state approved methods. The water supply system shall not approve for service until each test result is negative for bacteria examination.

Water Main or Storage Tank Disinfection: The disinfection of new or repaired water mains must be done in accordance with state requirements, currently presented in 30 TAC 290.46(g). Wastewater discharges from water main or storage tank disinfection (or flushing) shall be de-chlorinated to less than 4 ppm total chlorine residual prior to discharge to the environment or the sanitary sewer system, and when approved by Contracting Officer Representative (COR). Care must be taken to not cause erosion during the discharge of this wastewater. In addition, water with any detectable total chlorine residual may not be discharged in such a manner that it enters any surface water body. The de-chlorination of super-chlorinated water shall be done in accordance with current AWWA guidance. The Contractor is responsible for all labor, equipment, and costs or fees associated with the testing, treatment or disposal of wastewater to meet this requirement.

The sample results must indicate that the water main or storage tank is free of microbiological contamination before it is placed into service. A copy of the bacteriological sample results shall be provided to the water distribution system operator, AWO&M, Inc. The American Water POC may be contacted at 254-213-0382.

1.22.1 Landfill Permit

Contractor shall complete the attached Landfill Permit and give copies, laminated or inserted in page protectors, to drivers so that the drivers could leave them in their trucks. Drivers can just hand the permit to the scale operator at the landfill rather than having to remember all information.

1.23 HVAC REFRIGERANTS

For new HVAC equipment installation or replacement, provide the make, model, serial number, refrigerant type, total refrigerant charge and date of installation of the equipment to the Contracting Officer Representative (COR) (use the Emission Inventory Form).

For air conditioning equipment replacement, remove refrigerant prior to the removal of the air conditioning unit (removal shall be accomplished by an EPA-certified technician). Refrigerant recovery units shall be registered by completing the EPA Refrigerant Recovery Form. Recovered R-12, R-22, R-134a and R-123 refrigerant shall be turned in to the DPW Classification Unit, Building 1348 at Ivy Division Rd and 37th St, (254) 288-7627. All refrigerant installed into appliances on Fort Hood must be obtained from the Classification Unit and not brought from off-post. Technicians performing A/C work must be certified by an approved EPA program and carry their certification card with them at all times while performing work on Fort Hood. COR shall also obtain a copy of the technician certification card and provide that, as well as the contract company information to the Air Program along with other submittals.

All HVAC equipment installation, replacement, or service work conducted on units that contain 50 pounds or greater of refrigerant shall be documented on the Refrigerant Service Log and submitted to the COR within 7 days of completing the work. The form shall be filled out completely and thoroughly and must include total refrigerant charge to the system per circuit. This includes amount of refrigerant in the appliance itself and refrigerant downstream in any accumulators, driers, coils etc. to bring the system to a full operating charge.

Because the phaseout of Class II (HCFC) refrigerants such as R-22 began in January 2010, any new cooling system installed shall operate on a HydroFluoroCarbon (HFC) type refrigerant such as R-134A, R-410A, or EPA SNAP Program approved alternative, etc.

1.24 SOLID WASTE AND CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

The Contractor shall transport solid waste which is not permitted in the Fort Hood Municipal Landfill off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Waste materials shall be hauled to the Government landfill site designated by the Contracting Officer.

1.24.1 Fuel and Lubricants

All above ground POL storage tanks installed shall be designed for aboveground storage of flammable and combustible liquids at atmospheric pressure and must comply with the latest edition of National Fire Protection Association NFPA 30 Flammable and Combustible Liquids Code. Tanks shall be of double wall construction and provide complete secondary containment of the primary storage tank's contents by an impervious outer wall. The double wall meets the EPA's secondary containment requirements and does not require an external berm. Thermal insulation that provides a

minimum two-hour fire rating shall be installed at the factory within the interstitial space between the inner and outer wall. The tank's primary and secondary containment must be tested for tightness in the factory and in the field before commissioning. Inner and Outer Tank shall be manufactured in accordance with UL-142 Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids. Entire tank shall be labeled for Underwriters Laboratories UL 2085 Standard for Insulated Secondary Containment Aboveground Tank for Flammable Liquids. The tank design shall comply with UL 2085 "Protected" Tank standard and shall be tested for Ballistics, Impact, Hose Stream, and Pool Fire UL-2085 performance standards. Each tank shall be delivered as a complete UL-listed assembly with two factory supplied, welded-on saddles to keep tanks off the ground and to permit viewing underneath the tank. Tanks to be set level on a solid foundation. Tank exterior must be chalk white or white in color and protected with a non corrosive coating. Each tank shall be grounded and bonded as specified in NFPA 30. The exterior of all POL storage tanks must be clearly labeled with the contents of the tank and the NFPA 704 hazard identification label. For used product tanks the labels must use the term "Used" rather than "Waste". Lifting lugs shall be provided at balancing points to facilitate handling and installation where applicable. Tanks shall be installed according to manufacturer's recommendations. Tanks shall be supplied with all components necessary to operate and required by NFPA and EPA as listed below:

- . One 2" - Interstitial Monitoring Port
- . One 2" - Normal Working Vent, Primary Tank; top must be at least 12 feet above ground
- . One 4", 6", or 8" - Emergency Vent, Primary Tank
- . One 4", 6", or 8" - Emergency Vent, Secondary Tank
- . One 2", 4" or 6" - Product Fill with 7 gal. Spill/Overfill Container designed so liquids will automatically flow into fill port. Top of fill tube should be flush with bottom of spill container
- . One 2" or 4" - Product Pump or Supply
- . One 2" or 4" - Direct Read Liquid Level Gauge

A single walled tank will only be allowed temporarily for construction sites and must be equipped with secondary containment in accordance with provisions of 40 CFR 112, 302 and 30 TAC 334. Storage tanks must have a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation, usually 110% of the largest container. Basin materials must be compatible with the products stored in the tanks. Single walled tanks will not be allowed for permanent installation on Fort Hood.

1.25 INTEGRATED PEST MANAGEMENT AND PESTICIDE USE

The contractor shall submit a proposed treatment plan and update the treatment plan, as information becomes available. Include in the plan: names and qualifications of the applicators, proposed control methods and procedures to include: control equipment, pesticides, application rates, and the sequence of treatment dates, times, and locations.

A Copy of the applicator license must be provided to DPW Installation Pest Management Coordinator (IPMB) through the COR before pesticide or herbicide application begins. Applicators must have valid commercial certification in the category of work being performed as required by Texas Department of Agriculture (TDA).

Use only pesticides that that have been installation approved for the contract use (Pesticide List available from IPMB upon request).

1.26 CUSTOMER SERVICE INSPECTIONS

1.26.1 Certification Requirements

A Customer Service Inspection and Certification must be performed in accordance with the Texas Administrative Code, Title 30, Part 1, Chapter 290, Subchapter D, Rule 290.46 before providing continuous water service to new construction; on any existing service when the water purveyor has reason to believe that cross-connections or other potential contaminant hazards exist; or after any material improvement, correction, or addition to the private water distribution facilities.

1.26.2 Inspection

The Customer Inspection certifies that all performed work meets the requirements of the Texas Administrative Code, Title 30, Part 1, Chapter 290, Subchapter D, Rule 290.46.

1.26.3 Inspection Personnel

Customer Service Inspections must be performed by personnel meeting the requirements described in the Texas Administrative Code, Title 30, Part 1, Chapter 290, Subchapter D, Rule 290.46.

1.26.4 Inspection Certification Form

Original copies of the Customer Service Inspection Certification shall be provided to the Contracting Officer's Representative prior to final inspection and acceptance. Certification forms will be maintained by the by AWO&M, Inc. (Bldg. 49002, 254-213-0382). A sample form is provided at the end of this section. The form submitted shall meet all provisions of Rule 290.46. The form (appendix D) can also be downloaded from the TNRC's home page at the web site:

http://info.sos.state.tx.us/fids/30_0290_0047-22.html.

1.27 Appendix F Sample Backflow Prevention Assembly Test & Maint. Report

The certificate "Appendix F. Sample Backflow Prevention Assembly Test and Maintenance Report" is attached at the end of this section.

1.28 PROTECTION OF NATURAL RESOURCES

1.28.1 Migratory Bird Treaty Act

The Migratory Bird Treaty Act states that, "Unless and except as permitted by regulations... it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill... any migratory bird, any part, nest, or eggs of any such bird...concluded November 19, 1976." Therefore, tree removal must be limited to MBTA nesting season, 15 March through 15 August annually. Any tree or standing vegetation must be cleared by a Fort Hood MBTA biologist no more than 48 hours before the tree is to be trimmed or removed. If a nest is found, the nest shall be flagged and a 100 foot buffer will be observed around the tree, including ground around the tree, until the

nest has fledged. No take of nest, eggs, or hatchlings will be allowed under any circumstances.

1.28.2 Endangered Species

The management and monitoring of federally listed species on Fort Hood is a natural resource management obligation for the Army and Fort Hood. In accordance with the Endangered Species Act (ESA) 1973, as amended, the Army must assist in recovery of all listed threatened and endangered (T&E) species and their habitats under the Army's land management Plan (ESMP) for all listed T&E and candidate proposed T&E species. The U.S. Fish and Wildlife Service Biological Opinion for Fort Hood provides terms and conditions for endangered species management on Fort Hood. The objective of the ESMP is to provide a comprehensive plan for conserving and protecting populations and habitats of federally listed species and species of concern on Fort Hood while maintaining mission readiness in a manner consistent with Army and Federal environmental regulations.

1.28.3 Landscaping and Tree Replacement

All native hardwood trees greater than 3 inches in diameter at breast height must be replaced at a ratio of 10 new native hardwood trees for every 1 removed. Tree species will be selected from the Fort Hood Landscape Guide, and all plant species must be approved by the Fort Hood Agronomist. Planting locations for the replacement trees will be determined by the Fort Hood Agronomist. Newly planted trees must be maintained for 1 year. Any trees that die within that year must be replaced and maintained for an additional year. The planting location may be at any location within the three cantonment areas on the installation. Siting will be located within the same cantonment area as the project: North Fort Hood, West Fort Hood, or Main Cantonment.

All landscape plans and seed mixes/sod must be reviewed and approved by Fort Hood NRMB Agronomist. All landscaping plant selections must come from the Approved Landscaping Plant List. All landscape plants must come with a full year (360 day) warranty and maintenance. Tree stakes should be removed upon completion of warranty period.

1.29 PROCEDURE FOR RECEIPT OF MECHANICAL DOOR KEYS FROM CONTRACTORS (MAY 2005)

1.29.1 Attachment

The attachment "PROCEDURE FOR RECEIPT OF MECHANICAL KEYS FROM CONTRACTORS" is located at the end of the section.

1.29.2 1.23.2 Keyway

For all projects, the keyway will be a single bitted, 5 disc keyway based on the Fort's Lock KS00V key blank key coded to CAT 15.

Disassembly of knob or lockset shall not be required to remove core from lockset. All locksets, exit devices, and padlocks shall accept same interchangeable cores. Cores shall fit locksets without the use of adaptors and without play. The key shall easily lock and unlock the lockset without binding or other difficulties. Control key shall easily remove and install cores.

1.30 DOOR HARDWARE REQUIREMENTS FOR FORT HOOD

1.30.1 Robert Gray Army Airfield

Install mortise locksets only; bored locksets are not allowed.

1.30.2 Closers:

ANSI/BHMA A156.4, Surface type closers shall be Grade 1, Series C02000 Full Cover with options PT-4H, Size 1 or 2 through Size 6, and PT-4D with back check position valve. Provide with brackets, arms, mounting devices, fasteners, full size covers, except at storefront mounting, pivots, cement cases, and other features necessary for the particular application. Provide manufacturer's 10 year warranty.

(1) Closers for outswinging exterior doors shall have parallel arms or shall be top jamb mounted. Provide narrow projection closers for doors close to a wall so as not to strike the wall at the 90-degree open position.

(2) Closers on doors accessible to the physically handicapped shall have the closing force set for a push-pull of 2.27 kg (5 pounds) applied at the knob or handle for interior doors; for exterior doors, set to the minimum required to re-latch the door.

1.31 CONSTRUCTION MATERIALS TESTING FREQUENCIES

Soils:

- Building Pads ---- 1 test per 2000 square feet for subgrade and select/non-expansive fill using other than hand operated equipment
- 1 test per 500 square feet for subgrade and select/nom-expansive fill using hand operated equipment
- Moisture density curve, atterberg limits and classification for each different material
- When using nuclear density gauges to determine density, check tests (sand cone) will be taken for the first five tests and every fifth test thereafter.
- 6 inch compacted tests 92% compaction (ASTM 1557 Method C)
- Non-expansive fill: THD Item 247 Type A Grade 1 or 2 (PI < 12)
- Select Fill: Liquid limit < 35 and PI < 20

General cut and fill areas:

- 1 test per 2000 square yards for raw subgrade using other than hand operated equipment
- 1 test per 500 square yards using hand operated equipment
- 1 test per 100 linear feet in all roadways
- Moisture density curve, atterberg limits and classification for each different material
- 6 inch compacted lifts-----90% compaction (ASTM C1557 Method C)
- 1 test per 6 inch compacted lift on each manhole, inlet or other walls and structures
- When using nuclear density guages, check tests (sand cone) will be taken for the 1st 5 tests and every fifth test thereafter.

Subbase

- 1 density test per 1000 square yards for each 6 inch compacted lift
- THD Item 247 Type A Grade I or 2

- Wear test < 50% loss
- Sieve analysis-1 test per each day material delivered
- In place sieve analysis and wear test (1test per 3000 square yards)completed base
- Check tests (sand cone) for 1st five test and every fifth test thereafter

Aggregate base Course:

- One density test per 500 square yards for each 6 inch compacted lift
- Item 247 Type A Grade I
- Wear test < 50%
- 1 sieve analysis each day material is delivered
- 1 sieve analysis and wear test per 3000 square yards of completed base
- Check test (sand cone) for 1st 5 tests and every 5th test thereafter

Utilities:

- Initial backfill for bedding and extending a minimum of 1 foot above the pipe shall conform to ASTM D 448 size #6 stone
- Final density---1 density test per 100 linear feet for each 6 inch compacted lift in roads, paved and traffic areas
- 1 density test per 300 linear feet for each 12 inch compacted lift In grassed and turfed areas

** All testing technicians shall be NICET Level Soils certified.

Concrete:

** All testing technicians shall be ACI Level I concrete field testing certified

Slumps:

- Piers-----5 to 7 inch
- Grade beams--- 2-4 inch
- Slabs ----- 1-3 inch
- Curb and gutter/ Sidewalks -1-3 inch
- ** Pumped concrete---6 inch slump

All exposed concrete shall have air contents between 3-5%
Maximum concrete temperature--- 85 degrees unless retarder is used-then 90degrees

Strengths:

- Piers/slabs/grade beams -----3000psi
- Slabs subject to vehicular traffic----650 psi flexural strength
- Curb & gutter? Sidewalks-----3500 psi
- Miscellaneous structures-----3000 psi

Strength testing----one test per 150 cubic yards or every 5000 square feet, whichever is greater

Aggregate testing -one test per week on both coarse and fine aggregate

Asphalt:

Mix gradation shall conform to THD Item 341 Type D.
Marshall method (ASTM D 1559) 50 blow shall be used for specimens
----Stability -500 (if high stability areas then 1800)

----Flow < 16
----% voids 3-5%
----% void filled 75-85%

The mixture shall be tested once every 200 hundred tons for:

----gradation (extraction test---mechanical or ignition oven allowed)
----lab density, flow, stability
----maximum theoretical density

Field density test shall be tested using drilled cores. Three cores per 200 tons (two mats and one joint). Cores will be used for thickness tests also.

Density requirements--Mat density 97% of lab compacted density
---Joint density 95% of lab compacted density

Masonry:

Mortar test---one test per day (ASTM C 780)---1800 psi
Grout test---one test per day (ASTM C 39)---2000 psi
----9-11 inch slump

1.32 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area stabilized unless otherwise indicated.

Excavation, filling, and plowing of roadways will be required to restore the area to near normal conditions and permit the growth of vegetation thereon. The disturbed areas shall be graded and filled. Sufficient topsoil shall be spread to - provide a minimum depth of 100-mm (4 inches) of suitable soil for the growth of grass. The entire area seeded, and a uniform perennial vegetative cover with a density of 70 percent established. Restoration to original contours is not required.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 FORMS

3.1.1 Landfill Permit

LANDFILL PERMIT
US ARMY Corps of Engineers

COE POC and telephone phone number: _____

Contract Name: _____

Contract Number: _____

Contract completion date or end of authorization date: _____

Building or areas affected (i.e., Soldier's Development Center):

Prime Contractor's Name: _____

Contractor POC and phone (i.e. someone on site that can get immediate action): _____

3.1.2 Appendix D. Customer Service Inspection Certificate

Figure: 30 TAC §290.47(d)

Page 1 of 2

Figure: 30 TAC §290.47(d)

Appendix D: Customer Service Inspection Certificate

Customer Service Inspection Certificate

Name of PWS

US Army South Fort Hood	I.D.# 0140107 ()
US Army North Fort Hood	I.D.# 0500037 ()
US Army Belton Lake Outdoor Recreation Area	I.D.# 0140156 ()

Reason for Inspection: New construction. ()
 Existing service where contaminant hazards are suspected ()
 Major renovation or expansion of distribution facilities ()

I _____, upon inspection of the private water distribution facilities connected to the aforementioned public water supply do hereby certify that, to the best of my knowledge:

	Compliance	Non-Compliance
(1) No direct connection between the public drinking water supply and a potential source of contamination exists. Potential sources of contamination are isolated from the public water system by an air gap or an appropriate backflow prevention assembly in accordance with Commission regulations.	()	()
(2) No cross-connection between the public drinking water supply and a private water system exists. Where an actual air gap is not maintained between the public water supply and a private water supply, an approved reduced pressure-zone backflow prevention assembly is properly installed and a service agreement exists for annual inspection and testing by a certified backflow prevention assembly tester.	()	()
(3) No connection exists which would allow the return of water used for condensing, cooling or industrial processes back to the public water supply.	()	()
(4) No pipe or pipe fitting which contains more than 8.0% lead exists in private water distribution facilities installed on or after July 1, 1988.	()	()
(5) No solder or flux which contains more than 0.2% lead exists in private water distribution facilities installed on or after July 1, 1988.	()	()

I further certify that the following materials were used in the installation of the private water distribution facilities:

http://info.sos.state.tx.us/fids/30_0290_0047-22.html

Figure: 30 TAC §290.47(d)

Page 2 of 2

Service lines Lead () Copper () PVC () Other ()
 Solder Lead () Lead Free () Solvent Weld () Other ()

I recognize that this document shall become a permanent record of the
aforementioned Public Water System and that I am legally responsible for
the validity of the information I have provided.

Remarks:

Signature of Inspector

Registration Number

Title

Type of Registration

Date

http://info.sos.state.tx.us/fids/30_0290_0047-22.html

3.1.3 AFCM Certification Letter

**Asbestos Free Construction Material
Certification Letter**

Project Name: _____

Name of Contractor: _____

Project Delivery Order Number: _____

Facility Number: _____

Date: _____

To Whom It May Concern:

This letter is to certify that the project indicated above has been constructed using no asbestos containing materials in accordance with the design requirements.

Sincerely,

Typed Name: _____

Written / Typed Name _____

PROCEDURE FOR RECEIPT OF MECHANICAL KEYS FROM CONTRACTORS

~ MAY 2005 ~

1. **PURPOSE:** To outline the procedure to perform all contracting and credit card purchases for installation of locking devices or duplicating key requirements.
2. **OBJECTIVE:** To provide a simplified procedure to facilitate lock and key control at Fort Hood.
3. **APPLICABILITY:** This Standard Operating Procedure (SOP) is applicable to Contractors, Contracting Officer Representatives (COR) and Corps of Engineer personnel. The SOP applies to all types of locks/keys used on Fort Hood Real Property facilities except for "card reader" (plastic) type locks and keys. Card reader and cardkey operations are covered under separate SOP.

4. RESPONSIBILITIES

A. Existing Facilities

(1) Contractors, Directorate of Public Works (DPW) and Corps of Engineer personnel will provide keys that match the key codes and hardware in all existing facilities where locking mechanisms are being installed or replaced.

(2) For contract orders that do not require total replacement of the locking system for a facility, the appropriate facility key codes will be obtained from the DPW Lock Shop located in building 4208. The purpose of this requirement is to ensure that new or replacement keys are compatible with the respective existing building key system(s).

(3) There will be five keys provided consisting of four facility manager keys and one key to be used as a board key by the DPW Lock Shop. The keys will be marked as specified in paragraph 5 below.

(4) The contractor will provide an updated key schedule and building floor plan through the Contracting Officer Representative (COE) or Corps of Engineers representative to the Real Property office located in building 4612 before an action can be completed for payment for completion of contract and/or services. The floor plan will be in one-half print size drawing or larger. Key designations will be legible to the eye.

**STANDING OPERATING
PROCEDURE**
No. MNT 02-04

Directorate of Public Works
III Corps and Fort Hood, TX
Fort Hood, TX 76544-5028

- (5) Mechanical/electrical/utility rooms are keyed with a 3-1 keyed core. The Lock Shop will provide 3-1 keys to the contract COR for the use by the contractor until contract completion.

If the project contract adds one or more mechanical/electrical/utility rooms to the building(s), the contractor will provide required L keyway blank cores to the project COR. The COR will provide the blank cores to the Lock Shop and submit a service order request to Work Services for the Lock Shop to have the new cores pinned to 3-1 keys. The COR will insure that all 3-1 locks are installed and working properly.

B. New Facilities.

(1) Contractors, DPW and Corps of Engineer personnel will provide keys, key schedules, key codes, hardware list and floor plans for all facilities where locking mechanisms are being installed. This will occur no later than 30 days prior to turn over of facility to DPW. If the 30 days suspense cannot be met the COR will negotiate a new suspense with Real Property.

(2) Locks will be keyed in sets or subsets as scheduled by contract specifications. The following types and amounts of keys will be provided:

(a) Five change keys per lock set provided for each room door and each entry and/or exit door in the facility. The five keys will consist of four facility manager keys (in one envelope or on one key ring) for Real Property and one key (in one envelope or on one key ring) to be used as a board key by the DPW Lock Shop.

(b) Twelve master keyed sets (master, grandmaster and/or great grandmaster key(s) as appropriate for use by the DPW Lock Shop and by Emergency Services (Fire Department).

(c) Six control/core keys will be provided by for use by the DPW Lock Shop.

(d) The keys will be marked as specified in paragraph 5 below.

(3) The contractor will maintain secure control of all keys until turned over to Real Property.

(4) Keys, key schedules, key codes, hardware list and floor plans will be provided through the COR to Real Property located in building 4612 before any action can be completed for Final payment.

(5) The keys are to be provided to Real Property the day of final inspection and acceptance of the new facility.

**STANDING OPERATING
PROCEDURE**

No. MNT 02-04

Directorate of Public Works
III Corps and Fort Hood, TX
Fort Hood, TX 76544-5028

(6) The Project COR will be responsible for turning in all keys, key schedules, biting codes, and facility floor plans as referenced in paragraph 4.B.(1) above to DPW Real Property. This must occur before final payment is made to the Contractor.

(7) Locks shall be Grade #1 with 7 pin interchangeable cores (IC) Best brand or approved equal.

5. KEY MARKING:

A. "US GOVERNMENT/DO NOT DUPLICATE" will be marked on keys provided.

B. The four Facility Manager keys will be marked with the building code and room number. (See enclosure 1).

C. The DPW Lock Shop board key will be marked with the facility number and room number. The board key will not be marked with the code of the facility/building. (See enclosure 2).

D. The 12 Master keys will be marked with building number, building code and an "M" (Master), "GM" (Grandmaster) or "GGM" (Great Grandmaster) as applicable.

E. The six core keys will be marked with building number, building code, and a "C".

F. Key markings will be between 1/16 inch and 1/8 inch and be legible to the eye.

Encls

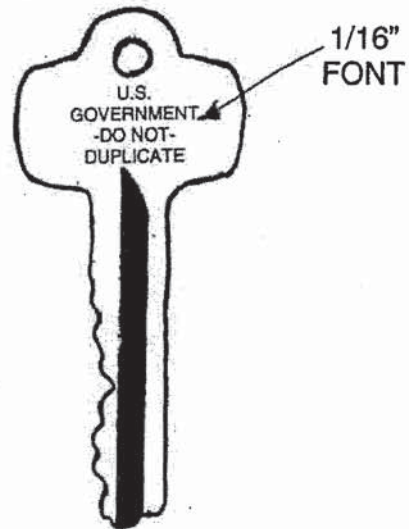
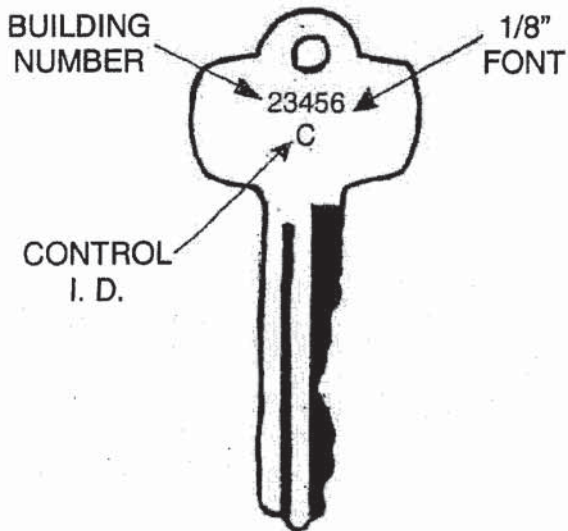
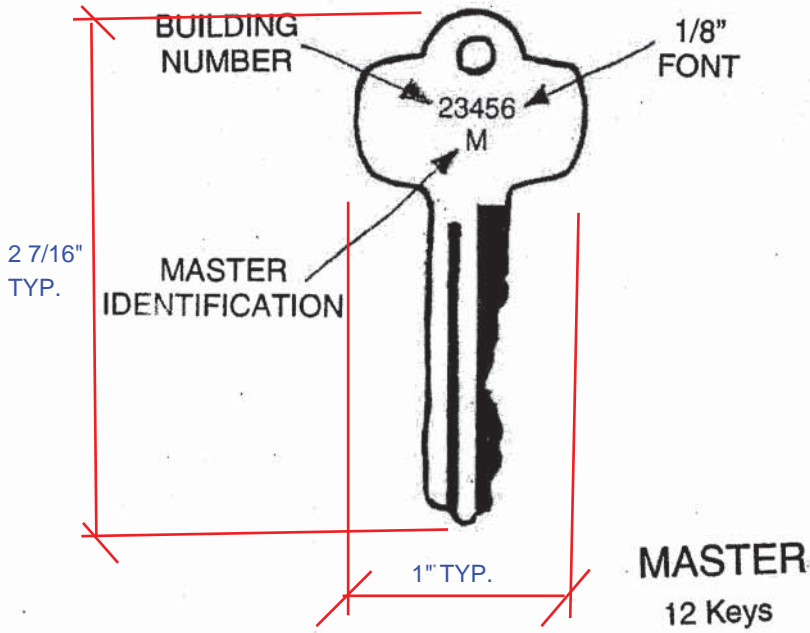
RODERICK A. CHISOLM
Director of Public Works

CF:
All DPW Divisions

STANDARD KEY MARKINGS

FRONT

BACK

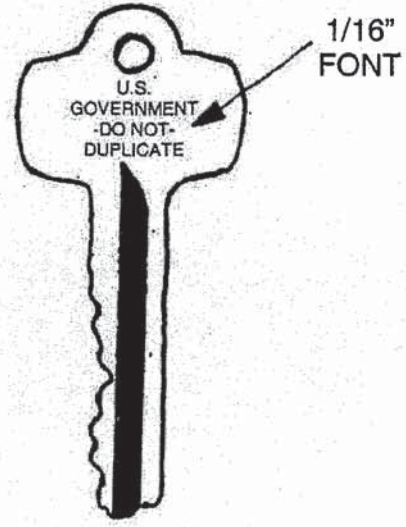
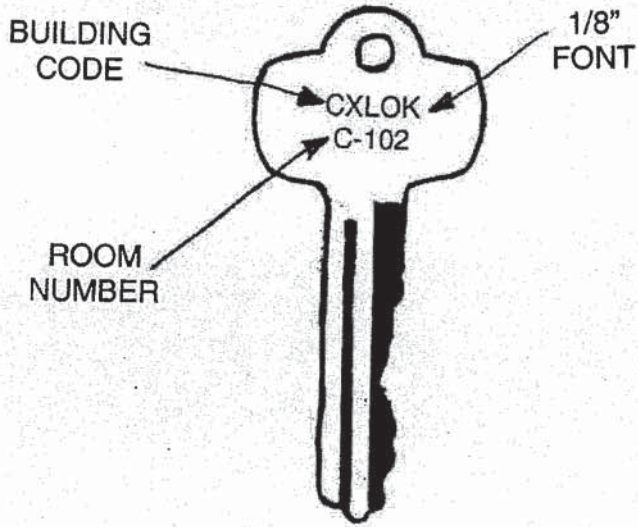


CONTROL / CORE
6 Keys

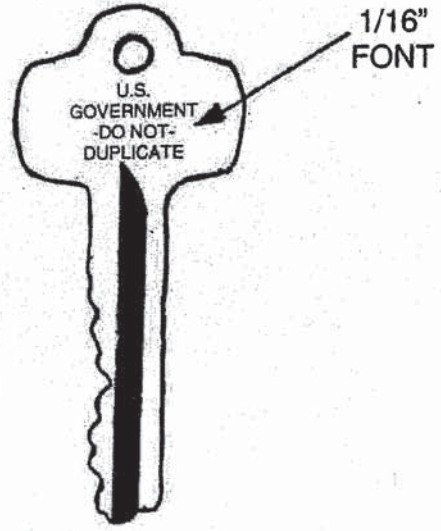
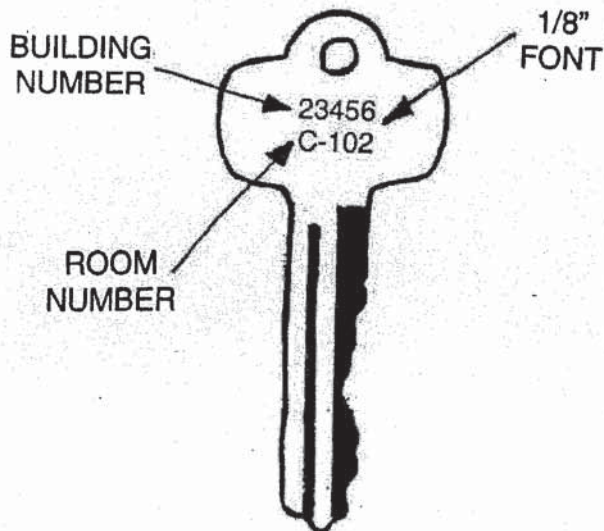
STANDARD KEY MARKINGS

FRONT

BACK



CHANGE KEY
4 Keys



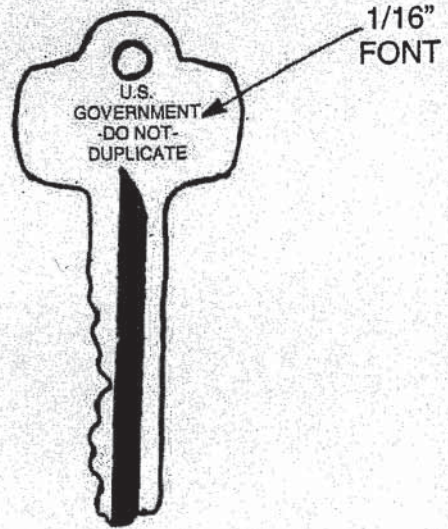
CHANGE KEY
(BOARD KEY)
1 Key

STANDARD KEY MARKINGS

FRONT



BACK



BLANKS

C&D DISPOSAL LOG

- 1. Contract # _____
- 2. Contractor _____
- 3. Vehicle # _____

DATE	DESCRIPTION OF DEBRIS	BLDG#	DRIVER	WEIGHT	RECEIVER

NOTE: IMMU IS NO LONGER OPERATIONAL.



LANDFILL
Special Waste such as dead animals, regulated and non-regulated asbestos containing material, lead-based paint are accepted with manifest from DPW Classification Unit.
All Municipal Solid Waste

NEW DIRT ROAD
SCALE
M-F 0730-1630; Sat 0730-1330.
Loads must be tarped and completely contained in the vehicle to obtain entrance into the landfill. Contractor must have Contract # and Bldg # to provide to the scale operator.

SEE BACK OF SHEET

TURKEY RUN ROAD

TANK DESTROYER BLVD

GO TO SCALE 1ST
HARD WOOD
CEDAR, OAK, OTHER TREES. MUST BE SEPARATED. TREES MUST BE CUT 8' OR SHORTER. NO ROOT BALLS.

CLARKE ROAD

WFH GATE

GO TO SCALE 1ST
COMPOST
YARD WASTE, TRIMMINGS, MANURE, LIMBS, LEAVES, SHRUBS, UNTREATED LUMBER. LUMBER MUST BE CUT 8' OR SHORTER. NO METAL PIECES EXCEPT FOR SMALL NAILS AND SCREWS.

FORT HOOD RECYCLE CENTER
BLDG #4621. Located at 72nd St and Railhead Dr., 287-6732. M-F 0730-1600
Center accepts cardboard, paper, metal, useable pallets. **NOT SHOWN.**

DLADS: BLDG # 25030. Located on Ivy Division Rd, 287-8822/3037.
M-TH 0730-1300. DLADS accepts tires, white goods, engine and machine parts. Appointment only facility. **NOT SHOWN.**

DPW CLASSIFICATION UNIT:
BLDG #1345. Located at 37th and Ivy Division Rd, 288-7627. M-TH 0730-1630 Unit accepts regulated wastes and provides waste manifests. Appointment only facility. **NOT SHOWN.**

CLEAR CREEK

79TH STREET
79TH GATE

HVAC Service/Maintenance Report Log

Building Number _____ **Appliance/Unit Serial Number** _____ **Total Installed Charge** _____
Maximum Allowable Annual Leakage Rate¹ _____

Date	Service / Maintenance Action	Technician	Refrigerant Added (lbs)	Refrigerant Removed (lbs)	Loss Due To ² Accidental Venting (lbs)	Net Leakage ³ (lbs)	Annualized Leakage Rate ⁴ (%)	Leak Repaired (Yes/No/NA)	Comments

- Notes:
1. Maximum Annual Leakage = 35% (Refrigeration) or 15% (Air Conditioning).
 2. Each time an accidental or unintentional release occurs, the technician must document the release on an accidental/unintentional release form (Attachment (2)).
 3. Net Leakage (lb) Since Last Charging = Refrigerant Added (lb) Since Last Charging - Refrigerant Removed (lb) Since Last Charging - Loss Due to Accidental or Unintentional Venting (lb) Since Last Charging.
 4. Annualized Leakage Rate = (Net Leakage / Installed Charge) x (365 / Number of Days Since Refrigerant Last Added) x 100.

Maintain for Record Purposes for 5 Years

Proposed Project Emissions Inventory Questionnaire for New Sources

Title V Operating Permit / New Source Review

Purpose: This form is used to capture detailed information about new air emission sources which have the potential to emit pollutants into the atmosphere. Information from this form will be used to address permit requirements such as new applications, notifications, amendments or revisions under Fort Hood's Title V Air Operating Permit # O-01659. The form shall be completed as soon as required equipment data is known to allow sufficient time to prepare permit applications for new sources prior to startup. **Reminder:** Some types of emission sources (e.g. boilers, generators and tanks) may also require startup or initial notifications to the Environmental Protection Agency.

Indicate proposed emission source type and complete all applicable fields for each piece of equipment. Complete the questionnaire sheet for each emission source type in this facility. Forms must be returned to the DPW, Environmental Division, Air Quality Program, Bldg 4622, (254) 287-8714 or (254) 286-6262.

Requestor: _____ Date: ___ / ___ / ___ Phone: _____ Project#: _____

Building#: _____ Descriptive Name of Facility: _____

Location of Facility: _____ UTM Coordinate: Zone: 14 Northing: _____ Easting: _____

AUTHORIZATION FOR STARTUP

Authorized by: _____ Title: _____

Signature: _____ Date of Startup: ___ / ___ / ___

ENV Use Only

Received on ___ / ___ / ___ Permitted by _____ (Permit By Rule or Permit)

AUTHORIZATION TO PROCEED WITH CHANGE

Authorized by: _____ Title: _____

Signature: _____ Date: ___ / ___ / ___

Proposed Project Emissions Inventory Questionnaire for New Sources

<p>INTERNAL COMBUSTION UNITS (e.g. Generators, Test Cells, Covered by 30 TAC 106.511 and 30 TAC 106.512)</p> <p>Make _____ Model _____ Serial # _____</p> <p>Power Rating: _____ Kw; Horsepower: _____ HP</p> <p>Engine Type: 4SLB, 4SRB, 2SLB, Other (Circle one)</p> <p>Fuel Type: Natural Gas/Propane/Diesel; Integrated Fuel Tank Capacity: _____ gallons</p> <p>Make _____ Model _____ Serial # _____</p> <p>Power Rating: _____ Kw; Horsepower: _____ HP</p> <p>Engine Type: 4SLB, 4SRB, 2SLB, Other (Circle one)</p> <p>Fuel Type: Natural Gas/Propane/Diesel; Integrated Fuel Tank Capacity: _____ gallons</p> <p>Make _____ Model _____ Serial # _____</p> <p>Power Rating: _____ Kw; Horsepower: _____ HP</p> <p>Engine Type: 4SLB, 4SRB, 2SLB, Other (Circle one)</p> <p>Fuel Type: Natural Gas/Propane/Diesel; Integrated Fuel Tank Capacity: _____ gallons</p> <p>Separate Fuel Tank(s): YES / NO (circle one) Complete Separate Questionnaire for Each Tank</p> <p>For Generators provide a copy of the Manufacturer's Emission Certification</p> <p>Seasonal Operating Percentage for This Emission Point:</p> <p>Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100% Normal _____%</p> <p>Operating Schedule: Start Time _____ hours/day _____ days/week _____ weeks/year _____</p> <p>Normal Operating Rate: _____ gallons or CuFT/yr</p>	<p>FUEL STORAGE TANKS (Covered by 30 TAC 106.473 , 30 TAC 106.478 and 30 TAC Chap 115)</p> <p>Make _____ Model _____ Serial# _____</p> <p>Tank Volume: _____ gals; Tank Dimensions (ft): Diameter: _____ Length: _____</p> <p>Height: _____</p> <p>Make _____ Model _____ Serial# _____</p> <p>Tank Volume: _____ gals; Tank Dimensions (ft): Diameter: _____ Length: _____</p> <p>Height: _____</p> <p>Make _____ Model _____ Serial# _____</p> <p>Tank Volume: _____ gals; Tank Dimensions (ft): Diameter: _____ Length: _____</p> <p>Height: _____</p> <p>Tank Type: Aboveground / Underground (circle one);</p> <p>Vapor Control Equipped: YES / NO (circle one)</p> <p>Roof Type: Horizontal Fixed Roof / Vertical Fixed Roof / Internal Floating Roof / Pressure Tank External Floating Roof(circle one)</p> <p>Seasonal Operating Percentage for This Emission Point:</p> <p>Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100%</p> <p>Normal Operating Schedule: Start Time _____ hours/day _____ days/week _____ weeks/year _____ Normal</p> <p>Operating Rate: _____ gallons/year</p> <p>Maximum Operating Rate: _____ gallons/hour</p>
<p>EXTERNAL COMBUSTION UNITS (e.g. Boilers & Heaters Covered by 30 TAC 106.102 or 30 TAC 106.183)</p> <p>Fuel Type: Natural Gas / Diesel (circle one)</p> <p>Make: _____ Model: _____ Serial#: _____ Input Rating: _____ MMBTUH</p> <p>Height of Stack: _____ ft ; Diameter of Stack: _____ ft; Stack Velocity: _____ ft / sec</p> <p>Make: _____ Model: _____ Serial#: _____ Input Rating: _____ MMBTUH</p> <p>Height of Stack: _____ ft ; Diameter of Stack: _____ ft; Stack Velocity: _____ ft / sec</p> <p>Make: _____ Model: _____ Serial#: _____ Input Rating: _____ MMBTUH</p> <p>Seasonal Operating Percentage for This Emission Point:</p> <p>Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100%</p> <p>Normal Operating Schedule: Start Time _____ hours/day _____ days/week _____ weeks/year _____</p> <p>Normal Operating Rate: _____ Cuft or gallons/year</p>	<p>FUEL DISPENSING UNITS (Covered by 30 TAC 106.412)</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Fuel Type: MUR / Diesel / JP-8 / Other (Circle one)</p> <p>Dispensing Type: Retail / Bulk (circle one)</p> <p>Vapor Control Equipped : YES / NO (circle one)</p> <p>Dispenser Pump rate: _____ gallons/minute</p> <p>Seasonal Operating Percentage for This Emission Point:</p> <p>Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100%</p> <p>Normal Operating Schedule: Start Time _____ hours/day _____ days/week _____ weeks/year _____ Normal Operating Rate: _____ gallons/year</p>

Proposed Project Emissions Inventory Questionnaire for New Sources

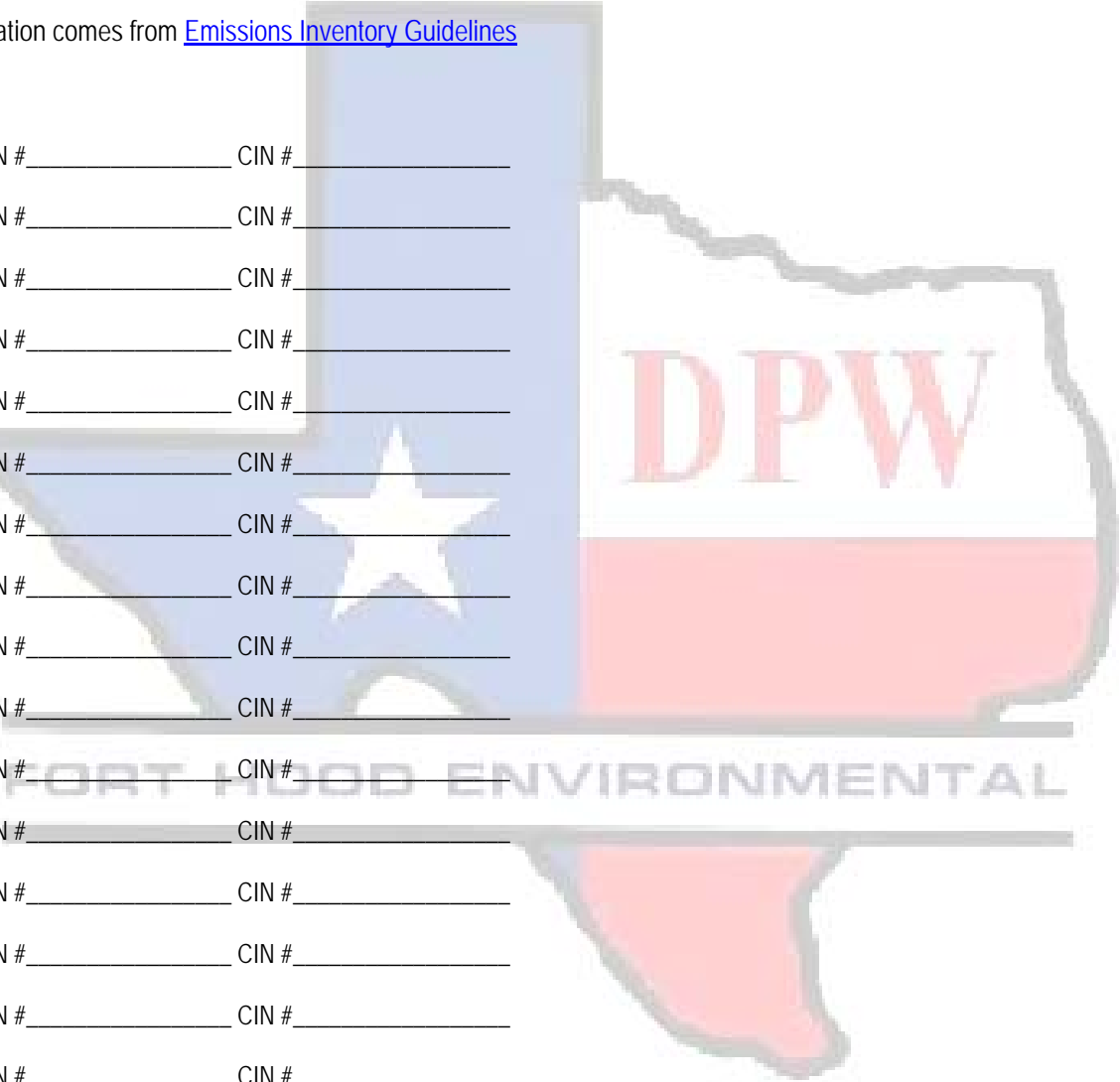
<p>SURFACE COATING OPERATIONS (Covered by 30 TAC 106.433 , 30 TAC 106.436 or 30 TAC 116.110)</p> <p>Attach approved MSDS of each coating and solvent used in process</p> <p>Particulate Matter Control Efficiency of Booth: _____%</p> <p>Booth Air Flow Rate: _____scfm</p> <p>Transfer Efficiency of Paint Gun: _____%</p> <p>Number of Paint Guns: _____</p> <p>Associated Heater: YES / NO (circle one) Complete Separate Questionnaire for Each Heater</p> <p>Associated Gun Cleaner: YES / NO (circle one) Complete Separate Questionnaire for Each Cleaner on degreaser section</p> <p>Seasonal Operating Percentage for This Emission Point: Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100%</p> <p>Normal Operating Schedule: Start Time _____hours/day _____days/week _____weeks/year _____</p> <p>Normal Operating Rate: _____gallons/year (each coating and solvent)</p>	<p>REFRIGERATION EQUIPMENT (e.g. Air Conditioning, Freezer) (Covered by 30 TAC 106.103)</p> <p>Make _____ Model _____ Serial# _____</p> <p>No. of compressors: _____</p> <p>Refrigerant Type: _____ Amount of Charge: _____lbs; Initial Charge Date: ____/____/____</p> <p>Make _____ Model _____ Serial# _____</p> <p>No. of compressors: _____</p> <p>Refrigerant Type: _____ Amount of Charge: _____lbs; Initial Charge Date: ____/____/____</p> <p>Make _____ Model _____ Serial# _____</p> <p>No. of compressors: _____</p> <p>Refrigerant Type: _____ Amount of Charge: _____lbs; Initial Charge Date: ____/____/____</p> <p>Make _____ Model _____ Serial# _____</p> <p>No. of compressors: _____</p> <p>Refrigerant Type: _____ Amount of Charge: _____lbs; Initial Charge Date: ____/____/____</p>
<p>WELDING OPERATIONS (Covered by 30 TAC 106.227)</p> <p>Attach approved MSDS of each welding rod type used in process</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Make: _____ Model: _____ Serial#: _____</p> <p>Particulate Matter Control Efficiency of hood (if available): _____%</p> <p>Exhaust Fan Ventilation Rate : _____scfm</p> <p>Acetylene on hand: _____lbs of gas</p> <p>Oxygen on hand: _____lbs of gas</p> <p>Seasonal Operating Percentage for This Emission Point: Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100%</p> <p>Normal Operating Schedule: Start Time _____hours/day _____days/week _____weeks/year _____</p> <p>Normal Operating Rate: _____# of rods/year</p>	<p>DEGREASERS (Covered by 30 TAC 106.454)</p> <p>Attach MSDS of proposed degreaser solvent</p> <p>Degreaser Type: Parts Cleaner / Paint Gun Cleaner (circle one)</p> <p>Make: _____ Model: _____ Serial #: _____</p> <p>Make: _____ Model: _____ Serial #: _____</p> <p>Make: _____ Model: _____ Serial #: _____</p> <p>Make: _____ Model: _____ Serial #: _____</p> <p>Seasonal Operating Percentage for This Emission Point: Spring _____% Summer _____% Fall _____% Winter _____% Note: Total Must Equal 100%</p> <p>Normal Operating Schedule: Start Time _____hours/day _____days/week _____weeks/year _____</p> <p>Normal Operating Rate: _____gallons/year</p>

Proposed Project Emissions Inventory Questionnaire for New Sources

ENV Use Only

FIN, EPN and CIN determination comes from [Emissions Inventory Guidelines](#)

FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____
FIN # _____	EPN # _____	CIN # _____



Fort Hood Refrigerant Equipment Service Log

DPW Maintenance Shop # _____

Certified Technician Name				Equipment Maintenance/Service/Repair				
Building Number or Location				Make				
Date Leak Discovered / Unit Serviced				Model Number				
Does serviced unit contain more than 50 lbs. refrigerant? Yes / No				Serial Number				
Equipment Duty Type?				Refrigerant Type				
<input type="checkbox"/> Comfort Cooling <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial/Process				Location of Leak on Equipment				
Service Order Number (SO#)				Unit Refrigerant Full Charge	Per Circuit	1	2	3
				Refrigerant Recovered (lbs.oz)	Per Circuit	1	2	3
				Recovered Refrigerant was:	Re-used	Taken to C.U.		
Equipment Removal/Disposal				Recovery Cylinder #				
<i>Compressor Serial Number</i>				Vacuum Level Achieved (In Hg)				
Make				Refrigerant Added (lbs.oz)	Per Circuit	1	2	3
Model Number				Refrigerant Added Cylinder #				
Serial Number				Detailed Description of Repairs:				
Refrigerant Type								
Vacuum Level Achieved (inches Hg)								
Amount of Refrigerant Added								
Amount of Refrigerant Recovered								
Cylinder #								
Notes:								
				Initial Leak Verification (Conducted after repair but before charging)				
				Leak repaired ?	Yes / No	Date:		
				Method used for verification				
				If no, what action taken				
New Equipment Installation				Follow-up Leak Verification (Conducted at normal operating capacity)				
Make				Initial Leak repair effective ?	Yes / No	Date:		
Model Number				Method used for verification				
Serial Number				If no, what action taken				
Refrigerant Type				In compliance with the requirements of the Clean Air Act, Section 608, I certify that the refrigerant has been handled in accordance with U.S. EPA regulations at 40 CFR 82.156.				
Amount of Refrigerant Added								
Amount of Refrigerant Recovered								
Refrigerant Charge per Circuit	1	2	3					4
Cylinder #				Printed Name: Certified Technician				
Notes:								Signature of Certified Technician
				Printed Name: Supervisor/Reviewer				
				Signature of Supervisor/Reviewer				

Accidental or Unintentional Venting Report

Date _____

Location _____

Refrigeration Unit _____

Type of Refrigerant Vented _____ Approx. How Many Pounds Were Vented _____

Description of Accidental Venting Incident _____

What Was the Cause of the Release? _____

What Precautions Have Been Taken to Prevent This from Happening Again?

Technician Name/Rank or Grade _____ Certification Number _____

Shop Supervisor Signature _____ Date _____

Shop Supervisor Printed Name and Rank _____

Maintain for Record Purposes for 5 Years

Figure: 30 TAC §290.47(d)

Appendix D: Customer Service Inspection Certificate

Customer Service Inspection Certificate

Name of PWS _____ PWS I.D.# _____
 Location of Service _____

- Reason for Inspection: New construction.....
 Existing service where contaminant hazards are suspected
 Major renovation or expansion of distribution facilities

I _____, upon inspection of the private water distribution facilities connected to the aforementioned public water supply do hereby certify that, to the best of my knowledge:

- | | Compliance | Non-Compliance |
|---|--------------------------|--------------------------|
| (1) No direct connection between the public drinking water supply and a potential source of contamination exists. Potential sources of contamination are isolated from the public water system by an air gap or an appropriate backflow prevention assembly in accordance with Commission regulations. | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) No cross-connection between the public drinking water supply and a private water system exists. Where an actual air gap is not maintained between the public water supply and a private water supply, an approved reduced pressure-zone backflow prevention assembly is properly installed and a service agreement exists for annual inspection and testing by a certified backflow prevention assembly tester. | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) No connection exists which would allow the return of water used for condensing, cooling or industrial processes back to the public water supply. | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) No pipe or pipe fitting which contains more than 8.0% lead exists in private water distribution facilities installed on or after July 1, 1988. | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) No solder or flux which contains more than 0.2% lead exists in private water distribution facilities installed on or after July 1, 1988. | <input type="checkbox"/> | <input type="checkbox"/> |

I further certify that the following materials were used in the installation of the private water distribution facilities:

Figure: 30 TAC §290.47(f)

Appendix F: Sample Backflow Prevention Assembly Test and Maintenance Report

The following form must be completed for each assembly tested. A signed and dated original must be submitted to the public water supplier for record keeping purposes:

BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT

NAME OF PWS: _____
PWS I.D. # _____
MAILING ADDRESS _____
CONTACT PERSON _____
LOCATION OF SERVICE: _____

The backflow prevention assembly detailed below has been tested and maintained as required by TCEQ regulations and is certified to be operating within acceptable parameters.

TYPE OF ASSEMBLY

- | | |
|---|--|
| <input type="checkbox"/> Reduced Pressure Principal | <input type="checkbox"/> Reduced Pressure Principle-Detector |
| <input type="checkbox"/> Double Check Valve | <input type="checkbox"/> Double Check-Detector |
| <input type="checkbox"/> Pressure Vacuum Breaker | <input type="checkbox"/> Spill-Resistant Pressure Vaccum Breaker |

Manufacturer _____ Size _____
Model Number _____ Located At _____
Serial Number _____

Is the assembly installed in accordance with manufacturer recommendations and/or local codes? _____

Figure: 30 TAC §290.47(f)

	Reduced Pressure Principle Assembly			Pressure Vacuum Breaker	
	Double Check Valve Assembly			Air Inlet	Check Valve
	1st Check	2nd Check	Relief Valve		
Initial Test	Held at ___ psid Closed Tight <input type="checkbox"/> Leaked <input type="checkbox"/>	Held at ___ psid Closed Tight <input type="checkbox"/> Leaked <input type="checkbox"/>	Opened at ___ psid Did not open <input type="checkbox"/>	Opened at ___ psid Did not open <input type="checkbox"/>	Held at ___ psid Leaked <input type="checkbox"/>
Repairs and Materials Used					
Test After Repair	Held at ___ psid Closed Tight <input type="checkbox"/> Leaked <input type="checkbox"/>	Held at ___ psid Closed Tight <input type="checkbox"/> Leaked <input type="checkbox"/>	Opened at ___ psid	Opened at ___ psid	Held at ___ psid

Test gauge used: Make/Model _____ SN: _____ Calibration Date: _____

Remarks: _____

The above is certified to be true at the time of testing.

Firm Name _____ Certified Tester _____

Firm Address _____ Cert. Tester No. _____ Date _____

Firm Phone # _____

* TEST RECORDS MUST BE KEPT FOR AT LEAST THREE YEARS

** USE ONLY MANUFACTURER'S REPLACEMENT PARTS

Electrical Geographic Information System

1. PURPOSE: To outline the responsibilities for collecting, updating, and maintaining data required for key electrical point of interest in electric distribution system.
2. OBJECTIVE:
 - a. To keep GIS electrical data SDFIE compliant, accurate, and up to date to allow for inventory and modeling purpose
 - b. To provide worksheets and responsibilities for collecting data to be in stored in GIS SDFIE tables.
3. APPLICABILITY: This Standard Operating Procedure (SOP) is applicable to Contractors, Contracting Officer Representatives (COR), QA Design Team, and any and all entities making changes or additions to Fort Hood's electrical distribution system. The SOP applies to all facilities. Directorate of Public Works (DPW) Engineering has oversight of all contracts and work being executed that impacts the electric distribution system.
4. RESPONSIBILITY:
 - A. Contractor Responsibility
 - i. Shall gather all data required in worksheet to include a profile picture (jpg) on all key electrical points of interest after installation.
 - ii. All data shall be gathered for existing and new electrical points of interest.
 - iii. Shall verify all existing worksheet data provided by the government.
 - iv. New install worksheets shall be complete and accurate.
 - v. Shall ensure data is accurate and complete prior to final as-builts being turned- in. Applicable information shall be included on as-built drawings.
 - vi. All worksheets and other required information shall be turned-in to Electrical Champion through COR or Government Project Manager.
 - B. Government Project Manager Responsibilities
 - i. Shall provide ID for all new and replacements electrical points.
 - ii. Shall provide current data on all existing electrical points.
 - iii. Shall identify all electrical points of interests.
 - C. Government Exterior Electrical Maintenance Shop
 - i. Shall inform Electrical Champion of all repairs, demo, modifications, and additions, made to system via email.
 - ii. Shall complete worksheets with basic data (model, manufacture, KVA, type, wattage, date of installation, describe of repair, class, height) on all

repairs, new installations, and modifications made to system and turn worksheets in to Electrical Champion via email.

- iii. Ensure all data in worksheets are correct and accurate.
- iv. Shall include a sketch of location of the key element and electrical points of interest and turn worksheets in to Electrical Champion.

D. Government Electrical Champion responsibilities


- i. Shall assign ID's to all points of interest.
- ii. Maintain the master number tracking system.
- iii. Shall field ensure all data supplied by Maintenance shop and other entities.
- iv. Shall get coordinates and profile picture (jpg) of key element supplied by government Maintenance shop.
- v. Shall be technical adviser for all worksheets

5. ELECTRICAL POINTS OF INTEREST:

- A. Capacitor Banks
- B. Lights
- C. Meters
- D. Poles
- E. Regulators
- F. Switch
- G. Transformers
- H. Riser
- I. Man Holes

6. ATTACHMENTS

- A. Worksheet for Capacitor Banks
- B. Worksheet for Exterior Lights
- C. Worksheet for Meter
- D. Worksheet for Poles
- E. Worksheet for Regulators
- F. Worksheet for Switches
- G. Worksheet for Transformer and Transformer Banks
- H. Worksheet for Risers
- I. Worksheet for Man Holes



ROBERT D. ERWIN

Chief, Engineering and Services Division

Worksheet for Transformer and Transformer Banks

(For new and existing transformer bank)

Contractor shall fill in the following data on all transformers on project

- 1. Transformer ID _____
- 2. Disposition _____
- 3. Type of Mounting _____
- 4. Primary Voltage _____
- 5. Secondary Voltage _____
- 6. Number of Transformers _____
- 7. Number of Phases _____
- 8. KVA _____
- 9. Total KVA _____
- 10. Substation ID _____
- 11. Date of Installation _____
- 12. Date of Inspection _____
- 13. Condition _____
- 14. Feeder Number _____
- 15. Grid Value _____
- 16. Coordinate X _____
- 17. Coordinate Y _____
- 18. Coordinate Z _____
- 19. Narrative _____

Worksheet for Transformer and Transformer Banks

(For new and existing transformer bank)

1. User ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by T10# for pad mounted transformer bank and T20# for a pole mounted transformer bank. Each transformer bank ID shall be assigned by Project Manager of the project.
2. Disposition – The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

Abandoned
Permanent
Temporary
3. Type of mounting - The type of mounting for the transformer bank.

Pole mounted
Pad mounted
Wall mounted
Ceiling mounted
4. Primary Voltage - The line-to-line voltage of the electrical system that serves as the source for the transformer bank.
5. Secondary Voltage - The line-to-line voltage of the electrical system that the transformer bank serves.
6. Number of Transformers - The number of transformers in the transformer bank.
7. Total number of Phases - The number of phases of transformer group.
8. KVA - The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.
9. Total KVA - The total KVA rate for all transformers attached to the transformer bank.
10. Substation ID - An operator generated identifier locally used to identify the substation feeding this bus group. MF – Main Fort Hood Substation, WF – West Fort Hood Substation, CR- Clark Road Substation, NF – North Fort Hood Substation
11. Date of installation - The date on which the subject item was originally installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
12. Date of Inspection – The last inspection date of the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
13. Condition - The condition of the subject item when last inspected.
14. Feeder Number - An operator generated identifier locally used to identify the feeder to the transformer bank.
15. Grid Value – Grid number based on one to 100 grid system.
16. Coordinate X - The x component of individual coordinate point.

Worksheet for Transformer and Transformer Banks

(For new and existing transformer bank)

17. Coordinate Y - The y component of individual coordinate point.
18. Coordinate Z - The z component of individual coordinate point.
19. Narrative - A description or other unique information concerning the subject item to include manufacture, model number and serial numbers.

Worksheet for Switches

(For new and existing switches)

Contractor shall fill in the following data on switches on project

1. Switch ID _____
2. Disposition _____
3. Installation Type _____
4. Switch Type _____
5. Switch Rating _____
6. Voltage _____
7. Number of Switches _____
8. Number of Phases _____
9. Phase Letter _____
10. Serial numbers _____
11. Switch Position Condition _____
12. Switch Weight _____
13. Switch Dimension _____
14. Substation ID _____
15. Manufacture ID _____
16. Circuit ID _____
17. Grid Value _____
18. Coordinate X _____
19. Coordinate Y _____
20. Coordinate Z _____
21. Narrative _____

Worksheet for Switches

(For new and existing switches)

1. Switch ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by SW10# each switch shall be assigned by Project Manager of the project.
2. Disposition – The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
3. Installation Type - The installation type code.
Circuit breaker
Cubicle
Fuse Cutout
Gang Operated disconnect
Pad Mounted
Pole Mounted
Recloser
4. Switch Type - A label chosen from a standard list of labels indicating the characteristics of a switch.
5. Switch Rating - The maximum continuous amount of current to which the switch should be subjected.
6. Voltage - The system voltage of the electrical line at the point in which the switch is inserted.
7. Number of Switches - The number of phases opened by the switch
8. Number of Phases - The number of phases opened by the switch
9. Phase letter - The letter(s) of the phase(s) for the subject item.
10. Serial Number - The manufacturer's serial, or unique identification number of the subject item.
11. Switch Position Condition - The positional condition of a switch during normal circuit conditions (e.g., normally-open, normally closed).
12. Switch Weight - The force of the switch toward the center of the earth due to the switch's mass.
13. Switch Dimension - A three dimensional description of the amount of space which a switch occupies (e.g., 2 x 1 x 4).
14. Substation ID - An operator generated identifier locally used to identify the substation feeding this bus group. MF – Main Fort Hood Substation, WF – West Fort Hood Substation, CR- Clark Road Substation, NF – North Fort Hood Substation.
15. Manufacture ID – Manufacture name
16. Circuit ID – Feeder number switch is connected to
17. Grid Value - Grid number based on one to 100 grid system for Fort Hood
18. Coordinate X - The x component of individual coordinate point.
19. Coordinate Y - The Y component of individual coordinate point.

Worksheet for Switches

(For new and existing switches)

20. Coordinate Z - The Z component of individual coordinate point.
21. Narrative - A description or other unique information concerning the subject item, limited to 240 characters.

Worksheet for Risers

(For new and existing risers)

Contractor shall fill in the following data on all risers on the project

1. Riser ID _____
2. Narrative _____
3. Pole ID _____
4. Grid ID _____
5. Coordinate X _____
6. Coordinate Y _____
7. Coordinate Z _____
8. Voltage _____
9. Date of Installation _____

Worksheet for Risers

(For new and existing risers)

1. Riser ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by RP#### Riser ID shall be assigned by Project Manager of the project.
2. Narrative - A description or other unique information concerning the subject item, limited to 240 characters. Required will be size of conduit and wire of service.
3. Pole ID – Pole ID that riser is attached to
4. Grid ID - Grid number based on one to 100 grid system for Fort Hood
5. Coordinate X - The x component of individual coordinate point.
6. Coordinate Y - The x component of individual coordinate point.
7. Coordinate Z - The x component of individual coordinate point.
8. Voltage - The voltage associated with the riser.
9. Date of Installation - The date of Installation for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

Worksheet for Regulators

(For new and existing regulators)

Contractor shall fill in the following data on all regulators on the project

1. Regulator ID _____
2. Disposition _____
3. Regulator Type _____
4. Regulator Usage _____
5. Installation Type _____
6. Regulator Weigh _____
7. Phase Letters _____
8. Number of Phases _____
9. Primary Voltage _____
10. Percentage of tap _____
11. Number of Taps _____
12. KVA Rating _____
13. Fuse Type _____
14. Fuse Rating _____
15. Cooling Type _____
16. Oil Capacity _____
17. Manufacture _____
18. Model Number _____
19. Serial Number _____
20. Narrative _____
21. Substation ID _____

Worksheet for Regulators

(For new and existing regulators)

- 22. Secondary Voltage _____
- 23. Date of Manufacture _____
- 24. Grid Value _____
- 25. Coordinate X _____
- 26. Coordinate Y _____
- 27. Coordinate Z _____

Worksheet for Regulators

(For new and existing regulators)

1. User ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by R10# Each Regulator ID shall be assigned by Project Manager of the project.
2. Disposition – the status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

Abandoned
Permanent
Temporary
3. Regulator type - The type of voltage regulator.
4. Regulator Usage - An indication of whether the regulator is on a line or in a substation.
5. Installation type - The type installation of the subject item.
6. Regulator Weight - The force of the regulator toward the center of the earth due to the regulator's mass. (lbs)
7. Phase Letters - The letter(s) of the phase(s) for the subject item.
8. Number of phases - The number of phases regulated by this device.
9. Primary Voltage - The voltage on the source side of the regulator with the associated units given.
10. Percentage of Tap - The percentage of the voltage that will be changed by moving the connection up or down one tap.
11. Number of Taps - The number of available points of connection on the regulator which may be used to change the voltage.
12. KVA Rating - The maximum continuous complex power rating of the regulator.
13. Fuse Type - A label chosen from a standard list of labels describing the characteristics of the fuse.
14. Fuse Rating - The current rating of the fuse protecting the regulator. This will be on the primary side.
15. Cooling Type - The method of controlling the temperature of the regulator.
16. Oil Capacity - The manufacturer suggested volume of oil that should be maintained inside the regulator to assure safe and efficient operation. (gallon)
17. Manufacture – Name of the manufacture
18. Model Number - The Model, Product, Catalog, or Item Number of subject item.
19. Serial Number - The manufacturer's serial or unique identification number of the subject item.
20. Narrative - A description or other unique information concerning the subject item, limited to 240 characters.

Worksheet for Regulators

(For new and existing regulators)

21. Substation ID - Substation ID - An operator generated identifier locally used to identify the substation feeding this bus group. MF – Main Fort Hood Substation, WF – West Fort Hood Substation, CR- Clark Road Substation, NF – North Fort Hood Substation
22. Secondary voltage - The voltage on the load side of the regulator with the associated units given.
23. Date of Manufacture - The date of manufacturer for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
24. Grid Value - Grid number based on one to 100 grid system for Fort Hood
25. Coordinate X - The x component of individual coordinate point.
26. Coordinate Y - The x component of individual coordinate point.
27. Coordinate Z - The x component of individual coordinate point

Worksheet for Poles

(For new and existing poles)

Contractor shall fill in the following data on all poles on project

1. Pole ID _____
2. Pole Height _____
3. Class of Pole _____
4. Type of Pole _____
5. Material Composition _____
6. Treatment Type _____
7. Grid Value _____
8. Coordinate X _____
9. Coordinate Y _____
10. Coordinate Z _____
11. Date Acquired _____
12. Date Treated _____
13. Manufacture _____
14. Grounded _____
15. Condition _____
16. Capped _____
17. Narrative _____

Worksheet for Poles

(For new and existing poles)

1. Pole ID - A unique, user defined identifier for each record or instance of an entity. Shall be given by DPW Project Manager.
2. Pole Height – The height of the pole measured from the ground surface to the top. (ft)
3. Class of pole - A classification of the pole diameter, and consequently the breaking strength, of wooden poles.
4. Type of Pole – A field indicating the kind, class, or group of the subject item.
5. Material Composition - The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc to include type of wood.
6. Treatment Type - Defines any treatment applied to the pole to improve its life.
7. Grid Value – Based on Fort Hoods 1 to 100 Grid system
8. Coordinate X - The x component of individual coordinate point. Format (WGS_1984_UTM_ZONE14N)
9. Coordinate Y - The y component of individual coordinate point. Format (WGS_1984_UTM_ZONE14N)
10. Coordinate Z - The z component of individual coordinate point. Format (WGS_1984_UTM_ZONE14N)
11. Date Acquired - The date on which the subject item was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
12. Date Treat - The date that the pole was last treated/ born on date. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915).
13. Manufacture – Name of manufacture
14. Grounded - An indicator as to whether or not the pole is grounded. (yes or no)
15. Condition - Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
16. Capped - Indicates whether or not the pole is capped (yes/no).
17. Narrative - A description or other unique information concerning the subject item, limited to 240 characters.

Worksheet for Meter

(For new and existing meters)

Contractor shall fill in the following data on all meters on project

1. Meter ID _____
2. Disposition _____
3. Manufacture _____
4. Meter Type _____
5. Serial Number _____
6. Voltage _____
7. Capacity of KVA _____
8. Frequency of system _____
9. KW Rate _____
10. Facility Number _____
11. AMP Rate _____
12. Multiplication Factor _____
13. Model _____
14. Number of phase _____
15. Phases _____
16. Watt Node Meter _____
17. Grid Value _____
18. Coordinate X _____
19. Coordinate Y _____
20. Coordinate Z _____
21. Narrative _____

Worksheet for Meter

(For new and existing meters)

1. Meter ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by MR000# each meter number shall be assigned by Project Manager of the project.
2. Disposition – The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
3. Manufacture - Manufacture name
4. Meter Type - A label describing the features of the electrical system that the meter is measuring.
5. Serial Number - The manufacturer's serial or unique identification number of the subject item.
6. Voltage - The potential of the electrical system on which the meter may be used.
7. Capacity of KVA - The limit of the complex power which the demand meter can record.
8. Frequency of system - The frequency of the electrical system on which the meter should be used.
9. KW Rate - The power rating on the meter based on the current and potential transformer ratios.
10. Facility Number – Facility Meter is measuring service
11. AMP rate - The maximum continuous current rating of the meter.
12. Multiplication Factor - The multiplication factor by which one must multiply the difference in present and previous meter readings to determine actual power consumed.
13. Model - The Model, Product, Catalog, or Item Number of subject item.
14. Number of phase - The number of phases that the meter monitors.
15. Phases - The letter(s) of the phase(s) for the subject item.
16. Watt Node Meter – Is Watt node meter part of the system . yes/ no
17. Grid Value - Grid number based on one to 100 grid system for Fort Hood
18. Coordinate X - The x component of individual coordinate point. Format (WGS_1984_ UTM_Zone14N)
19. Coordinate Y - The Y component of individual coordinate point. Format (WGS_1984_ UTM_Zone14N)

Worksheet for Meter

(For new and existing meters)

20. Coordinate Z - The Z component of individual coordinate point. Format (WGS_1984_ UTM_Zone14N)

21. Narrative - A description or other unique information concerning the subject item.

Worksheet for Exterior Lights

(For new and existing Exterior Lights)

Contractor shall fill in the following data on all Exterior Lights detached from the building on project

1. User ID _____
2. Light Type _____
3. Number of Lamps _____
4. Watts _____
5. Voltage _____
6. Pole ID attached _____
7. Grid Value _____
8. Coordinate X _____
9. Coordinate Y _____
10. Coordinate Z _____
11. Mounted Height _____
12. Date of Installation _____
13. Narrative _____

Worksheet for Exterior Lights

(For new and existing Exterior Lights)

1. User ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by LE1000#. Each ID shall be assigned by Project Manager of the project.
2. Light Type - Various kinds of mounts for external lights
3. Number of Lamps - The total number of lamps in fixture.
4. Watts - The light fixture wattage specification.
5. Voltage - The system voltage applied to the light fixture.
6. Pole ID – Pole ID Light attached too
7. Grid Value - A numeric identification of a raster element in an image or grid that represents the feature.
8. Coordinate X - The x component of individual coordinate point. Format (WGS_1984_UTM_Zone 14N)
9. Coordinate Y - The y component of individual coordinate point. Format (WGS_1984_UTM_Zone 14N)
10. Coordinate z - The z component of individual coordinate point. Format (WGS_1984_UTM_Zone 14N)
11. Mount Height - The fixture mounting height in feet
12. Date of Installation – The date on which the subject item was installed. Format for date is YYYYMMDD
13. Narrative – additional info on light

Worksheet for Manholes / Hand holes

(For new and existing risers)

Contractor shall fill in the following data on all manholes and hand holes on the project

- 1. Type _____
- 2. Material Type _____
- 3. Disposition _____
- 4. Narrative _____
- 5. Grid ID _____
- 6. Coordinate X _____
- 7. Coordinate Y _____
- 8. Coordinate Z _____
- 9. Manufacture _____
- 10. Manhole Diameter _____
- 11. Number Cables _____
- 12. Date of Installation _____

Worksheet for Manholes / Hand holes

(For new and existing risers)

1. Type – A field indicating the kind, class, or group of manhole for the subject utility. Handhole or Manhole
2. Material type - The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc
3. Disposition - The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
4. Narrative - A description or other unique information concerning the subject item, limited to 240 characters. To include model number
5. Grid ID - Grid number based on one to 100 grid system for Fort Hood
6. Coordinate X - The x component of individual coordinate point.
7. Coordinate Y - The x component of individual coordinate point.
8. Coordinate Z - The x component of individual coordinate point.
9. Manufacture – Manufacture of Manhole
10. Manhole Diameter - The maximum linear distance measured horizontally across a manhole.
11. Number of Cables - A number representing the total number of cables in the manhole. A cable passing through the manhole counts as one cable and a cable tying into another cable inside the manhole counts as one cable
12. Date of Installation - The date of Installation for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

Worksheet for Capacitor Banks

(For new and existing capacitor banks)

Contractor shall fill in the following data on all capacitors on project

1. Capacitor ID _____
2. Disposition _____
3. Type of Installation _____
4. Switch _____
5. Voltage _____
6. Capacitor KV rating _____
7. Unit of Measure for Capacitor _____
8. Letter phase Connected _____
9. Number of Phases _____
10. Control Type _____
11. Manufacture _____
12. Model Number _____
13. Grid Value _____
14. Coordinate X _____
15. Coordinate Y _____
16. Coordinate Z _____
17. Substation ID _____
18. Facility ID _____
19. Date of Installation _____
20. Narrative _____

Worksheet for Capacitor Banks

(For new and existing capacitor banks)

1. Capacitor ID – First digits will reference 1 to 100 grid Fort Hood ID. Followed by CB000#. The capacitor bank ID shall be assigned by Project Manager of the project.
2. Disposition – The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
3. Type of Installation - The type installation of the subject item.
4. Switch - This indicates whether the capacitor is presently in the circuit or is not presently in the circuit.
5. Voltage - The system voltage across the capacitor.\
6. Capacitor KV Rating - The rating of the capacitor's ability to provide reactive power to a circuit.
7. Unit of Measure for Capacitor - The unit of measure for the electrical capacitor.
8. Letter phase Connected - The letter(s) of the phase(s) for the subject item..
9. Number of Phases - The number of phases to which this device provides reactive power..
10. Control Type - The method of adjusting the kilovar output of the capacitor..
11. Manufacture - The name of the manufacture
12. Model Number - The Model, Product, Catalog, or Item Number of subject item.
13. Grid Value – Grid number based on one to 100 grid system.
14. Coordinate X - The x component of individual coordinate point.
15. Coordinate Y - The y component of individual coordinate point.
16. Coordinate Z - The z component of individual coordinate point.
17. Substation ID - An operator generated identifier locally used to identify the substation feeding this bus group. MF – Main Fort Hood Substation, WF – West Fort Hood Substation, CR- Clark Road Substation, NF – North Fort Hood Substation
18. Facility ID – Facility the it may be associated with
19. Date of Installation – The date on which the subject item was installed. Format for date is YYYYMMDD
20. Narrative – A description or other unique information concerning the subject item, limited to 240 characters.

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

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

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.32	(2004) Fall Protection
ASSE/SAFE A10.34	(2001; R 2005) Protection of the Public on or Adjacent to Construction Sites
ASSE/SAFE Z359.1	(2007) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME B30.22	(2005) Articulating Boom Cranes
ASME B30.3	(2009) Tower Cranes
ASME B30.5	(2007) Mobile and Locomotive Cranes
ASME B30.8	(2010) Floating Cranes and Floating Derricks

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	(2010) Standard for Portable Fire Extinguishers
NFPA 51B	(2009; TIA 09-1) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
NFPA 70	(2011) National Electrical Code
NFPA 70E	(2009; Errata 09-1) Standard for Electrical Safety in the Workplace

SCAFFOLD INDUSTRY ASSOCIATION (SIA)

SIA ANSI A92.6	(1999) Self-Propelled Elevating Work Platforms
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U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual
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U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

- 29 CFR 1910.146 Permit-required Confined Spaces
- 29 CFR 1926 Safety and Health Regulations for Construction
- 29 CFR 1926.500 Fall Protection

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

Government acceptance is required for submittals with a "G, A" designation.

SD-01 Preconstruction Submittals

- Accident Prevention Plan (APP); G, A
- Activity Hazard Analysis (AHA); G, A
- Crane Critical Lift Plan; G, A
- Proof of qualification for Crane Operators; G, A
- Supporting Systems calculations;

SD-02 Shop Drawings

- Temporary Support Data
- Temporary support data, including shop drawings, product data, calculations, and certifications, for structural steel, concrete masonry units, and elevated concrete floors.

SD-06 Test Reports

- Reports
 - Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."
- Accident Reports
- Crane Reports
- Gas Protection for NASA projects
- Doctor's Reports

SD-07 Certificates

- Confined Space Entry Permit

Hot work permit

License Certificates

Submit one copy of each permit/certificate attached to each Daily Quality Control Report.

1.3 DEFINITIONS

- a. Not Used
- b. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.
- c. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.
- d. Not Used.
- e. Not Used.
- f. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
 - (1) Death, regardless of the time between the injury and death, or the length of the illness;
 - (2) Days away from work (any time lost after day of injury/illness onset);
 - (3) Restricted work;
 - (4) Transfer to another job;
 - (5) Medical treatment beyond first aid;
 - (6) Loss of consciousness; or
 - (7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.
- g. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.
- h. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; and/or collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped

load, roll over, etc.) Any mishap meeting the criteria described above shall be documented in both the Contractor Significant Incident Report (CSIR) and using the NAVFAC prescribed Navy Crane Center (NCC) form submitted within five days both as provided by the Contracting Officer.

1.4 Not Used.

1.5 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, comply with the most recent addition of USACE EM 385-1-1, and the following federal, state, and local, laws, ordinances, criteria, rules and regulations, including those of Texas. The latest version of EM 385-1-1 is available at <http://www.swf.usace.army.mil/About/Organization/SafetyandOccupationalHealth.aspx>. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.6.1 Personnel Qualifications

1.6.1.1 Site Safety and Health Officer (SSHO)

The contractor shall provide a Safety oversight team that includes a minimum of one (1) Competent Person at each project site to function as the Safety and Health Officer (SSHO). The SSHO shall be at the work site at all times, unless specified differently in the contract, to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor, and their training, experience, and qualifications shall be as required by EM 385-1-1 paragraph 01.A.17 and all associated sub-paragraphs. A Competent Person shall be provided for all of the hazards identified in the Contractor's Safety and Health Program in accordance with the accepted Accident Prevention Plan, and shall be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed. The credentials of the Competent Person(s) shall be approved by the Contracting Officer in consultation with the Safety Office.

The Contractor Quality Control (QC) person cannot be the SSHO on this project, even though the QC has safety inspection responsibilities as part of the QC duties. The SSHO shall be assigned no other duties.

The SSHO shall report to a senior corporate official.

1.6.1.2 Not Used

1.6.1.3 Crane Operators

Meet the crane operators requirements in USACE EM 385-1-1. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacities of 50,000 pounds or greater, designate crane operators as qualified by a source that qualifies crane operators (i.e., union, a government agency, or an organization that tests and qualifies crane operators). Provide proof of current qualification.

1.6.2 Personnel Duties

1.6.2.1 Site Safety and Health Officer (SSHO)

- a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily quality control report.
- b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.
- c. Maintain applicable safety reference material on the job site.
- d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.
- e. Implement and enforce accepted APPS and AHAs.
- f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. Post a list of unresolved safety and health deficiencies on the safety bulletin board.
- g. Ensure sub-contractor compliance with safety and health requirements.

Failure to perform the above duties will result in dismissal of the superintendent, QC Manager, and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

- h. Maintain a list of hazardous chemicals on site and their material safety data sheets.

1.6.3 Meetings

1.6.3.1 Preconstruction Conference

- a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).
- b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.
- c. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor

shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

- d. The functions of a Preconstruction conference may take place at the Post-Award Kickoff meeting for Design Build Contracts.

1.6.3.2 Not Used

1.7 ACCIDENT PREVENTION PLAN (APP)

Use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer, the Contractor Quality control Manager, and any designated CSP and/or CIH.

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSSH and quality control manager. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34,) and the environment.

Copies of the accepted plan will be maintained at the resident engineer's office and at the job site.

Continuously reviewed and amended the APP, as necessary, throughout the life of the contract. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered.

1.7.1 EM 385-1-1 Contents

In addition to the requirements outlines in Appendix A of USACE EM 385-1-1, the following is required:

- a. Not Used.
- b. Not Used.
- c. Not Used.
- d. Not Used.
- e. Not Used.
- f. Occupant Protection Plan. The safety and health aspects of lead-based paint removal, prepared in accordance with Section 02 82 16.00 20 LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES.
- g. Lead Compliance Plan. The safety and health aspects of lead work, prepared in accordance with Section 02 83 13.00 20 LEAD IN CONSTRUCTION.
- h. Asbestos Hazard Abatement Plan. The safety and health aspects of asbestos work, prepared in accordance with Section 02 82 14.00 10 ASBESTOS ABATEMENT.
- i. Site Safety and Health Plan. The safety and health aspects prepared in accordance with Section 01 35 29.13 HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES FOR CONTAMINATED SITES.
- j. PCB Plan. The safety and health aspects of Polychlorinated Biphenyls work, prepared in accordance with Sections 02 84 33 REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENALS and 02 61 23 REMOVAL AND DISPOSAL OF PCB CONTAMINATED SOILS.
- k. Site Demolition Plan. The safety and health aspects prepared in accordance with Section 02 41 00 DEMOLITION and referenced sources.
- l. Excavation Plan. The safety and health aspects prepared in accordance with Section 31 00 00 EARTHWORK.

1.8 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, Section 1. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

1.9 DISPLAY OF SAFETY INFORMATION

Within 1 calendar days after commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, shall be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, section 01.A.07. Additional items required to be posted include:

- a. Confined space entry permit.
- b. Hot work permit.

1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.11 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.12 REPORTS

1.12.1 Accident Reports

- a. Conduct an accident investigation for recordable injuries and illnesses, as defined in 1.3.h and property damage accidents resulting in at least \$2,000 in damages, to establish the root cause(s) of the accident, complete the USACE Accident Report Form 3394 and provide the report to the Contracting Officer within 5 calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.
- b. Conduct an accident investigation for any weight handling equipment accident (including rigging gear accidents) to establish the root cause(s) of the accident, complete the WHE Accident Report (Crane and Rigging Gear) form and provide the report to the Contracting Officer within 30 calendar days of the accident. Do not proceed with crane operations until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer. The Contracting Officer will provide a blank copy of the accident report form.

1.12.2 Accident Notification

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000, or any weight handling equipment accident. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description

of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.12.3 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, and as specified herein with Daily Reports of Inspections.

1.12.4 Certificate of Compliance

Provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). State within the certificate that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR 1926 and USACE EM 385-1-1. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. Also certify that all of its crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices). Post certifications on the crane.

1.12.5 Not Used

1.12.6 Doctor's Reports

The Contractor shall provide, in the event of any Contractor/subcontractor employee lost time injury accident, a doctor's report of examination which states the number of days that the physician recommends the employee recuperate before returning for work. This requirement shall be in addition to other reporting requirements and may, in specific instances, be waived by the Contracting Officer.

1.13 HOT WORK

Submit and obtain a written permit prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, from the Fire Division. A permit is required from the Explosives Safety Office for work in and around where explosives are processed, stored, or handled. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 30 minutes after completion of the task or as specified on the hot work permit.

When starting work in the facility, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Division phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DIVISION IMMEDIATELY.

1.14 LANGUAGE

For each work group that has employees who do not speak English, the

Contractor shall provide a bilingual foreman who is fluent in English and in the language of the workers. The Contractor will implement the requirements of EM 385-1-1, paragraphs 01.B.01, 01.B.02, and 01.C.02 through these foremen.

1.15 FACILITY OCCUPANCY CLOSURE

Streets, walks, and other facilities occupied and used by the Government shall not be closed or obstructed without written permission from the Contracting Officer.

1.16 Not Used

1.17 Not Used

1.18 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

- a. Secure outside equipment and materials and place materials that could be damaged in protected areas.
- b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.
- c. Ensure that temporary erosion controls are adequate.

1.19 CONFINED SPACE ENTRY REQUIREMENTS.

Contractors entering and working in confined spaces performing shipyard industry work are required to follow the requirements of OSHA 29 CFR Part 1915 Subpart B. Contractors entering and working in confined spaces performing general industry work are required to follow the requirements of OSHA 29 CFR Part 1926.

Navy personnel entering and working in confined spaces performing naval maritime facility work are required to follow the requirements of NAVSEA S6470-AA-SAF-101 Rev. 03. Navy personnel entering and working in confined spaces performing non-maritime facility work are required to follow the requirements of OPNAVINST 5100.23G Chapter 27.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

3.1.1 Not Used

3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with

radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. The Radiation Safety Officer (RSO) must be notified prior to excepted items of radioactive material and devices being brought on base.

3.1.3 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e. 29 CFR Part 1910.1000). If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

3.2 PRE-OUTAGE COORDINATION MEETING

Contractors are required to apply for utility outages at least 14 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Special requirements for electrical outage requests are contained elsewhere in this specification section. Once approved, and prior to beginning work on the utility system requiring shut down, attend a pre-outage coordination meeting with the Contracting Officer and the Installation representative to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.

3.3 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Contractor shall ensure that each employee is familiar with and complies with these procedures and USACE EM 385-1-1, Section 12, Control of Hazardous Energy.

Contracting Officer will, at the Contractor's request, apply lockout/tagout tags and take other actions that, because of experience and knowledge, are known to be necessary to make the particular equipment safe to work on for government owned and operated systems.

No person, regardless of position or authority, shall operate any switch, valve, or equipment that has an official lockout/tagout tag attached to it, nor shall such tag be removed except as provided in this section. No person shall work on any energized equipment including, but not limited to activities such as erecting, installing, constructing, repairing, adjusting, inspecting, un-jamming, setting up, trouble shooting, testing, cleaning, dismantling, servicing and maintaining machines equipment of processes until an evaluation has been conducted identifying the energy source and the procedures which will be taken to ensure the safety of personnel.

When work is to be performed on electrical circuits, only qualified personnel shall perform work on electrical circuits.

A supervisor who is required to enter an area protected by a lockout/tagout tag will be considered a member of the protected group provided he notifies the holder of the tag stub each time he enters and departs from the protected area.

Identification markings on building light and power distribution circuits shall not be relied on for established safe work conditions.

Before clearance will be given on any equipment other than electrical (generally referred to as mechanical apparatus), the apparatus, valves, or systems shall be secured in a passive condition with the appropriate vents, pins, and locks.

Pressurized or vacuum systems shall be vented to relieve differential pressure completely.

Vent valves shall be tagged open during the course of the work.

Where dangerous gas or fluid systems are involved, or in areas where the environment may be oxygen deficient, system or areas shall be purged, ventilated, or otherwise made safe prior to entry.

3.3.1 Tag Placement

Lockout/tagout tags shall be completed in accordance with the regulations printed on the back thereof and attached to any device which, if operated, could cause an unsafe condition to exist.

If more than one group is to work on any circuit or equipment, the employee in charge of each group shall have a separate set of lockout/tagout tags completed and properly attached.

When it is required that certain equipment be tagged, the Government will review the characteristics of the various systems involved that affect the safety of the operations and the work to be done; take the necessary actions, including voltage and pressure checks, grounding, and venting, to make the system and equipment safe to work on; and apply such lockout/tagout tags to those switches, valves, vents, or other mechanical devices needed to preserve the safety provided. This operation is referred to as "Providing Safety Clearance."

3.3.2 Tag Removal

When any individual or group has completed its part of the work and is clear of the circuits or equipment, the supervisor, project leader, or individual for whom the equipment was tagged shall turn in his signed lockout/tagout tag stub to the Contracting Officer. That group's or individual's lockout/tagout tags on equipment may then be removed on authorization by the Contracting Officer.

3.4 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

Establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

3.4.1 Training

Fall Protection Trainers. All fall protection trainers must meet or exceed the experience, knowledge, training, and education requirements for any category of person that they are training, in accordance with ANSI/ASSE Z359.2, Section 3, Paragraph 3.3. In addition, all Qualified/Competent Person trainers must have at least 2 years of experience as a fall protection trainer and demonstrated experience supervising and managing fall protections programs in construction. These requirements are mandatory and in addition to other fall protection requirements in the contract. Examples of documents to be submitted are completion of Fall Protection Competent Person training course, Train the Trainer course (Construction or General Industry), OSHA 3110/3115 (Fall Protection) or an equivalent Fall Protection training course and resume showing at least 2 years of instructing a Competent Person Fall Protection training course. The Contractor shall submit documentation to the contracting officer/COR substantiating the qualifications of all fall protection trainers.

3.4.2 Fall Protection Equipment and Systems

Enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, Paragraphs 21.N through 21.N.04. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with 29 CFR 1926.500, Subpart M, USACE EM 385-1-1 and ASSE/SAFE A10.32.

3.4.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ASSE/SAFE Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 6 feet. The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

3.4.3 Fall Protection for Roofing Work

Implement fall protection controls based on the type of roof being constructed and work being performed. Evaluate the roof area to be accessed for its structural integrity including weight-bearing capabilities for the

projected loading.

a. Low Sloped Roofs:

- (1) For work within 6 feet of an edge, on low-slope roofs, Protect personnel from falling by use of personal fall arrest systems, guardrails, or safety nets.
- (2) For work greater than 6 feet from an edge, erect and install warning lines in accordance with 29 CFR 1926.500 and USACE EM 385-1-1.

b. Steep-Sloped Roofs: Work on steep-sloped roofs requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also includes residential or housing type construction.

3.4.4 Existing Anchorage

Certified (or re-certified) by a qualified person for fall protection existing anchorages, to be used for attachment of personal fall arrest equipment in accordance with ASSE/SAFE Z359.1. Existing horizontal lifeline anchorages must be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

3.4.5 Horizontal Lifelines

Design, install, certify and use under the supervision of a qualified person horizontal lifelines for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500).

3.4.6 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1 and 29 CFR 1926 Subpart M.

3.4.7 Rescue and Evacuation Procedures

When personal fall arrest systems are used, the contractor must ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the Accident Prevention Plan (APP).

3.5 Not Used

3.6 SCAFFOLDING

Provide employees with a safe means of access to the work area on scaffolding. Scaffolding is specified in EM 385-1-1.

3.7 EQUIPMENT

3.7.1 Material Handling Equipment

- a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
- b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
- c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.
- d. Rollover Protective Structures (ROPS): ROPS for rollers and compactors shall be certified to meet SAE requirement J1040C.
- e. Pulverizers: ROPS, as required by EM 385-1-1, paragraph 16.B.12, includes self-propelled pulverizers.
- f. Self-Propelled Elevating Work Platforms: All self-propelled elevating work platforms will be designed, constructed, maintained, used, and operated in accordance with the guidance provided in American National Standard for Self-Propelled Elevating Work Platforms (SIA ANSI A92.6) together with any amendments which may be in force at time contract is awarded.
- g. Radiation Permits or Authorizations: Contractors contemplating the use of radioactive materials or radiation producing equipment while performing work on this Contract shall obtain written authorization from the Department of the Army or Department of the Air Force, as applicable.
 - (1) A 45-day lead time should be programmed for obtaining this written authorization.
 - (2) When requested, the Contracting Officer's Authorized Representative will assist Contractor in obtaining the required permit or authorization.
- h. Telephone: Provide an accessible telephone or equivalent means to immediately initiate emergency response services at the job site at all times while work is underway.

3.7.2 Weight Handling Equipment

- a. Equip cranes and derricks as specified in EM 385-1-1, section 16.
- b. Not Used
- c. Comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.
- d. Comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes,

and ASME B30.8 for floating cranes and floating derricks.

- e. Under no circumstance shall a Contractor make a lift at or above 90 percent of the cranes rated capacity in any configuration.
- f. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and follow the requirements of USACE EM 385-1-1 Section 11 and ASME B30.5 or ASME B30.22 as applicable.
- g. Do not crane suspended personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane.
- h. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- i. All employees must keep clear of loads about to be lifted and of suspended loads.
- j. Use cribbing when performing lifts on outriggers.
- k. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.
- l. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- m. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.
- n. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.
- o. Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

3.8 EXCAVATIONS

Perform soil classification by a competent person in accordance with 29 CFR 1926.

3.8.1 Utility Locations

Prior to digging, the appropriate digging permit must be obtained. All underground utilities in the work area must be positively identified by a private utility locating service in addition to any station locating service and coordinated with the station utility department. Any markings made during the utility investigation must be maintained throughout the contract.

3.8.2 Utility Location Verification

The Contractor must physically verify underground utility locations by hand

digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within 2 feet of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility expose the utility by hand digging every 100 feet if parallel within 5 feet of the excavation.

3.8.3 Shoring Systems

Trench and shoring systems must be identified in the accepted safety plan and AHA. Manufacture tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on-site for review. Job-made shoring or shielding must have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electric underground cables.

3.8.4 Trenching Machinery

Operate trenching machines with digging chain drives only when the spotters/laborers are in plain view of the operator. Provide operator and spotters/laborers training on the hazards of the digging chain drives with emphasis on the distance that needs to be maintained when the digging chain is operating. Keep documentation of the training on file at the project site.

3.9 UTILITIES WITHIN CONCRETE SLABS

Utilities located within concrete slabs or pier structures, bridges, and the like, are extremely difficult to identify due to the reinforcing steel used in the construction of these structures. Whenever contract work involves concrete chipping, saw cutting, or core drilling, the existing utility location must be coordinated with station utility departments in addition to a private locating service. Outages to isolate utility systems must be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

3.10 ELECTRICAL

3.10.1 Conduct of Electrical Work

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers will be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective

equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA.

3.10.2 Portable Extension Cords

Size portable extension cords in accordance with manufacturer ratings for the tool to be powered and protected from damage. Immediately removed from service all damaged extension cords. Portable extension cords shall meet the requirements of NFPA 70E and OSHA electrical standards.

3.11 WORK IN CONFINED SPACES

Comply with the requirements in Section 34 of USACE EM 385-1-1, OSHA 29 CFR 1910.146 and OSHA 29 CFR 1926.21(b)(6). Any potential for a hazard in the confined space requires a permit system to be used.

3.12 CONSTRUCTION/ERECTION SUPPORTS AND LOADS

3.12.1 Lateral Stability

The lateral stability of this structure is dependent on the total completion of all interconnected structural roof, wall, and floor framing/decking systems. The Contractor shall provide and adequately install and maintain all temporary supports such as temporary guys, lateral bracing, falsework, cribbing, and any other type structural supports required for a safe erection operation to maintain stability of the structure until all structural systems are interconnected as required by the contract plans and specifications.

3.12.2 Temporary Support Data

At least 60 days prior to the start of vertical construction and prior to the commencement of structural steel, concrete or masonry walls, elevated floors, and roofs, the Contractor shall submit detailed drawings, catalog data and calculations for all temporary supports as described in paragraph above, which will be used on this contract. These detailed drawings, catalog data, and calculations shall be prepared and certified by a Registered Structural Engineer. The minimum for vertical loads shall be actual dead loads plus a minimum live load of 25 psf, but use higher live loads if needed due to the Contractor's plan of erection. No load reductions will be allowed. Bracing shall be designed for a minimum wind load of 20 psf. Wind loadings will not be reduced from the design wind load provided and all temporary supports will be designed with a minimum safety factor of 1.5.

3.12.3 Installation And Maintenance

After submission of the temporary support system and calculations, the Contractor shall install and maintain the temporary structural support system in strict compliance with the submitted drawings. Daily inspections will be conducted by the Contractor's Quality Control Inspector to assure all supports are installed as approved and properly maintained.

3.12.4 Architectural Or Structural Precast Or Tilt-Up Wall Panels

Temporary supports for architectural or structural precast or tilt-up wall panels will be designed as indicated above. Pipe or other bracing shall have lateral cross bracing between each pipe support. Tension guy wires or cables will not be acceptable. Bolted or welded connections into the concrete floors and concrete wall panels will be designed with a safety factor of 3.0. Immediately after erecting each concrete wall panel, the bottom of the panel shall be secured by welding the weld plates or by bolting in place. Panels will not be temporarily placed in a vertical position until they are ready to be erected in their final position. If possible, all structural steel will be erected prior to erection of wall panels. If not, the structural steel will be commenced immediately after the last wall panel is set in the smallest section/bay possible. The Contractor shall not start a new wall section/bay until the structural steel is completed in the last section/bay.

-- End of Section --

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)
1800 East Oakton Street
Des Plaines, IL 60018-2187
Ph: 847-699-2929
Fax: 847-768-3434
E-mail: customerservice@asse.org
Internet: <http://www.asse.org>

AMERICAN WATER WORKS ASSOCIATION (AWWA)
6666 West Quincy Avenue
Denver, CO 80235
Ph: 800-926-7337
Fax: 303-347-0804
Internet: <http://www.awwa.org>

ASME INTERNATIONAL (ASME)
Three Park Avenue, M/S 10E
New York, NY 10016
Ph: 212-591-7722 or 800-843-2763
Fax: 212-591-7674
E-mail: infocentral@asme.org
Internet: <http://www.asme.org>

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959
Ph: 610-832-9500
Fax: 610-832-9555
E-mail: service@astm.org
Internet: <http://www.astm.org>

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)
355 Lexington Avenue
17th Floor
New York, NY 10017
Ph: 212-297-2122
Fax: 212-370-9047
E-mail: assocmgmt@aol.com
Internet: <http://www.buildershardware.com>

FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH
(FCCCHR)
University of South California
Kaprielian Hall 200
Los Angeles, CA 90089-2531
Ph: 213-740-2032 or 800-545-6340
Fax: 213-740-8399
E-mail: fccchr@usc.edu
Internet: <http://www.usc.edu/dept/fccchr>

ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)
120 Wall Street, 17th Floor
New York, NY 10005
Ph: 212-248-5000
Fax: 212-248-5018
E-mail: iesna@iesna.org
Internet: <http://www.iesna.org>

INTERNATIONAL CODE COUNCIL (ICC)
5360 Workman Mill Road
Whittier, CA 90601
Ph: 562-699-0541
Fax: 562-699-9721
E-mail: webmaster@iccsafe.org
Internet: www.iccsafe.org

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA 02169-7471
Ph: 617-770-3000
Fax: 617-770-0700
E-mail: webmaster@nfpa.org
Internet: <http://www.nfpa.org>

U.S. ARMY (DA)
U.S. Army Publishing Directorate
Internet: <http://www.apd.army.mil>

U.S. ARMY CORPS OF ENGINEERS (USACE)
Order CRD-C DOCUMENTS from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services
Branch, TIC
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
Ph: 601-634-2664
Fax: 601-634-2388
E-mail: mtc-info@erdc.usace.army.mil
Internet: <http://www.wes.army.mil/SL/MTC/handbook.htm>

Order Other Documents from:
 USACE Publications Depot
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 2803 52nd Avenue
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 Ph: 301-394-0081
 Fax: 301-394-0084
 E-mail: pubs-army@usace.army.mil
 Internet: <http://www.usace.army.mil/publications>
 or <http://www.hnd.usace.army.mil/techinfo/engpubs.htm>

U.S. DEPARTMENT OF DEFENSE (DOD)
 Directorate for Public Inquiry and Analysis
 Office of the Secretary of Defense (Public Affairs)
 Room 3A750 -- The Pentagon
 1400 Defense Pentagon
 Washington, DC 20301-1400
 Ph: 703-428-0711
 E-mail: pia@hq.afis.asd.mil
 Internet: <http://www.dod.gov>

Order DOD Documents from:
 National Technical Information Service (NTIS)
 5285 Port Royal Road
 Springfield, VA 22161
 Ph: 703-605-6585
 FAX: 703-605-6900
 E-mail: info@ntis.gov
 Internet: <http://www.ntis.gov>

Order Military Specifications, Standards and Related Publications
 from:
 Department of Defense Single Stock Point for (DODSSP)
 Defense Automation and Production Service (DAPS)
 Building 4D
 700 Robbins Avenue
 Philadelphia, PA 19111-5098
 Ph: 215-697-2179
 Fax: 215-697-1462
 Internet: <http://www.dodssp.daps.mil>
www.daps.dla.mil

- - - - - Detail Series Documents - - - - -

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
 Ariel Rios Building
 1200 Pennsylvania Avenue, N.W.
 Washington, DC 20460
 Ph: 202-272-0167
 Internet: <http://www.epa.gov>

--- Some EPA documents are available only from:
 National Technical Information Service (NTIS)
 5285 Port Royal Road
 Springfield, VA 22161
 Ph: 703-605-6585
 Fax: 703-605-6900
 E-mail: info@ntis.gov

Internet: <http://www.ntis.gov>

U.S. FEDERAL AVIATION ADMINISTRATION (FAA)
Order for sale documents from:
Superintendent of Documents
U.S. Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: <http://www.gpoaccess.gov>

Order free documents from:
Federal Aviation Administration
Department of Transportation
800 Independence Avenue, SW
Washington, DC 20591
Ph: 1-866-835-5322
Internet: <http://www.faa.gov>

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)
Office of Highway Safety (HHS-31)
400 Seventh Street, SW
Washington, DC 20590-0001
Ph: 202-366-0411
Fax: 202-366-2249
Internet: <http://www.fhwa.dot.gov>
Order from:

Superintendent of Documents
U. S. Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: <http://www.gpoaccess.gov>

U. S. GREEN BUILDING COUNCIL (USGBC)
1015 18th Street, NW, Suite 508
Washington, D.C. 20036
Ph: 202-828-7422
Fax: 202-828-5110
E-mail: info@usbc.org
Internet: <http://www.usgbc.org>
AOK: 2/04
LOK: 2/04

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph: 866-272-6272
Fax: 301-837-0483
Internet: <http://www.archives.gov>

Order documents from:
Superintendent of Documents
U.S. Government Printing Office (GPO)

732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: <http://www.gpoaccess.gov>

-- End of Section --

SECTION 01 45 00.00 10

QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM D 3740 (2008) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (2009) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all associated costs will be included in the applicable Bid Schedule unit or lump-sum prices.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Establish and maintain an effective quality control (QC) system in compliance with the Contract Clause titled "Inspection of Construction." QC consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. Cover all construction operations, both onsite and offsite, and be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. In this context the highest level manager responsible for the overall construction activities at the site, including quality and production is the project superintendent. The project superintendent must maintain a physical presence at the site at all times and is responsible for all construction and related activities at the site, except as otherwise acceptable to the Contracting Officer.

3.2 QUALITY CONTROL PLAN

Submit no later than 10 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the

requirements of the Contract Clause titled "Inspection of Construction." The Government will consider an interim plan for the first 60 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional work.

3.2.1 Content of the CQC Plan

Include, as a minimum, the following to cover all operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff will implement the three phase control system for all aspects of the work specified. Include a CQC System Manager who reports to the project manager.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. Letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities will be issued by the CQC System Manager. Copies of these letters must be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures must be in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.
- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities approved by the Contracting Officer must be used.)
- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by

different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

- j. Contractor to set up designated area for workers to eat lunch and take breaks.

3.2.2 Acceptance of Plan

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

3.2.3 Notification of Changes

After acceptance of the CQC Plan, notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details must be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government, signed by both the Contractor and the Contracting Officer and will become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The CQC Manager and the submittals clerk shall be full time employees with no other duties. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff must maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff will be subject to acceptance by the Contracting Officer. Provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Promptly complete and furnish all letters, material

submittals, shop drawing submittals, schedules and all other project documentation to the CQC organization. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.4.2 CQC System Manager

Identify as CQC System Manager an individual within the onsite work organization who is responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager must be a graduate of construction management, with a minimum of five years construction quality control experience on construction similar to this contract, or a person with a minimum of ten years construction experience, of which a minimum of five years experience must be in construction quality control on construction similar to this contract. This CQC System Manager must be on the site at all times during construction and be employed by the prime Contractor. The CQC System Manager must be assigned no other duties. Identify in the plan an alternate to serve in the event of the CQC System Manager's absence. The requirements for the alternate are the same as the CQC System Manager.

The QC Systems Manager shall report to a senior corporate official.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract; provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: electrical; mechanical; civil; structural; environmental; architectural; submittals clerk; concrete, paving and, soils materials technician; TAB Personnel; and plumbing.. These individuals may be employees of the prime or subcontractor; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan.

Experience Matrix

Area	Qualifications
a. Civil	Construction Manager with 5 years experience in the type of work being performed on this project or technician with 5 yrs related experience.
b. Electrical	Construction Manager with 5 yrs related experience or person with 5 yrs related experience, or Master Electrician an ICC certification as a Commercial Electrical Inspector with 5 yrs related experience.
c. Submittals	

Experience Matrix

Area	Qualifications
------	----------------

Submittal Clerk with 1 yr experience

h. Concrete, Pavements and Soils

Concrete, Pavements and Soils Materials Technician with 2 yrs experience for the appropriate area

3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager must have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered at various locations within the Corps of Engineers Fort Worth District geographical area. For locations and schedules of training courses, please connect to the following link:

<http://www.swf.usace.army.mil/BusinessWithUs/ConstructionQualityManagementTraining.aspx>

Registration is required; call the Contracting Officer's Representative for times and reservations. There is no charge for the course; however the Contractor will pay for travel and per diem costs.

3.4.5 Organizational Changes

Maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, must comply with the requirements in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the contract requirements. When Section 23 08 00.00 10 COMMISSIONING OF HVAC SYSTEMS are included in the contract, the submittals required by those sections must be coordinated with Section 01 33 00 SUBMITTAL PROCEDURES to ensure adequate time is allowed for each type of submittal required.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control must be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.6.1 Preparatory Phase

This phase is performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase includes:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. Make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by Government personnel until final acceptance of the work.
- b. Review of the contract drawings.
- c. Check to assure that all materials and/or equipment have been tested, submitted, and approved. The Contractor shall ensure that all FIO Submittals have been submitted and all FX comments satisfactorily resolved no less than 14 calendar days prior to scheduling a Preparatory inspection.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. Examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. Review of the appropriate activity hazard analysis to assure safety requirements are met. Activity Hazard Analysis to be provided to the Government 72 hours before preparatory meeting.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. Check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government must be notified at least 72 hours in advance of beginning the preparatory control phase. Include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. Document the results of the preparatory phase actions by separate minutes prepared by the CQC System Manager and attach to the daily CQC report. Instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.
- l. All references listed in each particular specification section shall be provided by the contractor and made available on site in either electronic format or hardcopy. These references include NFPA, I3A, ASTMs, ect.

3.6.2 Initial Phase

This phase is accomplished at the beginning of a definable feature of

work. Accomplish the following:

- a. Check work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government must be notified at least 24 hours in advance of beginning the initial phase. Prepare separate minutes of this phase by the CQC System Manager and attach to the daily CQC report. Indicate the exact location of initial phase for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Perform daily checks to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. Record the checks in the CQC documentation. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work which may be affected by the deficient work. Do not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

Perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. Procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. Perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Record results of all tests taken, both passing and failing on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.
- f. Provide certified and signed test reports by a Registered Professional Engineers.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel must meet criteria detailed in ASTM D 3740 and ASTM E 329. current list of USACE validated laboratories may be found at the following link:

<http://www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/>

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$2,000 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials will be borne by the Contractor. Samples of materials for test verification and

acceptance testing by the Government must be delivered to the Government-contract laboratory designated by the Area Office.

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Conduct an inspection of the work by the CQC Manager near the end of the work, or any increment of the work established by a time stated in the Contract SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications. Prepare and include in the CQC documentation a punch list of items which do not conform to the approved drawings and specifications, as required by paragraph DOCUMENTATION. Include within the list of deficiencies the estimated date by which the deficiencies will be corrected. Make a second inspection the CQC System Manager or staff to ascertain that all deficiencies have been corrected. Once this is accomplished, notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. Ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Correct any items noted on the Pre-Final inspection in a timely manner. These inspections and any deficiency corrections required by this paragraph must be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative must be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notify the Contracting Officer at least 14 days prior to the final acceptance inspection and include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.9 DOCUMENTATION

Maintain current records providing factual evidence that required quality control activities and/or tests have been performed. Include in these

records the work of subcontractors and suppliers on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. Identify the control phase (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. Cover both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. Furnish the original and one copy of these records in report form to the Government daily within 12 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, prepare and submit one report for every 7 days of no work and on the last day of a no work period. All calendar days must be accounted for throughout the life of the contract. The first report following a day of no work will be for that day only. Reports must be signed and dated by the CQC System Manager. Include copies of test reports and copies of reports prepared by all subordinate quality control personnel within the CQC System Manager Report.

3.10 SAMPLE FORMS

Quality control forms such as the daily construction quality control report and the required preparatory and initial inspection documentation are included in the QCS software.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. Take immediate corrective

action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, will be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

SECTION 01 45 00.10 10

QUALITY CONTROL SYSTEM (QCS)

PART 1 GENERAL

1.1 Contract Administration

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor must use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. The Contractor module, user manuals, updates, and training information can be downloaded from the RMS web site. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

- Administration
- Finances
- Quality Control
- Submittal Monitoring
- Scheduling
- Import/Export of Data

1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record will also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01 32 01.00 10 PROJECT SCHEDULE, Section 01 33 00 SUBMITTAL PROCEDURES, and Section 01 45 00.00 10 QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith will be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor will be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

1.3 SYSTEM REQUIREMENTS

The following is the minimum system configuration that the Contractor must have to run QCS:

QCS and QAS System

Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor
256+ MB RAM for workstation / 512+ MB RAM for server
1 GB hard drive disk space for sole use by the QCS system
Compact Disk (CD) Reader 8x speed or higher
SVGA or higher resolution monitor (1024x768, 256 colors)
Mouse or other pointing device
Windows compatible printer. (Laser printer must have 4 MB+ of RAM)
Connection to the Internet, minimum 56k BPS

Software

MS Windows 2000, XP, Vista or Windows 7
QAS-Word Processing software: MS Word 2000 or newer
Latest version of: Netscape Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher
Electronic mail (E-mail) MAPI compatible
Virus protection software that is regularly upgraded with all issued manufacturer's updates

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, download instructions for the installation and use of QCS from the Government RMS Internet Website. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

1.4.2 Contractor Quality Control (CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government will provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by using

the Government's SFTP repository built into QCS import/export function. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

Establish, maintain, and update data in the QCS database throughout the duration of the contract at the Contractor's site office. Submit data updates to the Government (e.g., daily reports, submittals, RFI's, schedule updates, payment requests, etc.) using the Government's SFTP repository built into QCS export function. If permitted by the Contracting Officer, e-mail or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA CD-ROM). The QCS database typically includes current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

Contain within the database the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, deliver Contractor administrative data in electronic format.

1.6.1.2 Subcontractor Information

Contain within the database the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Assign each subcontractor/trade a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, deliver subcontractor administrative data in electronic format.

1.6.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office with "H". Letters must be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

1.6.1.4 Equipment

Contain within the Contractor's QCS database a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.1.6 Request For Information (RFI)

Exchange all Requests For Information (RFI) using the Built-in RFI generator and tracker in QCS.

1.6.2 Finances

1.6.2.1 Pay Activity Data

Include within the QCS database a list of pay activities that the Contractor must develop in conjunction with the construction schedule. The sum of all pay activities must be equal to the total contract amount, including modifications. Group pay activities Contract Line Item Number (CLIN); the sum of the activities must equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

Prepare all progress payment requests using QCS. Complete the payment request worksheet, prompt payment certification, and payment invoice in QCS. Update the work completed under the contract, measured as percent or as specific quantities, at least monthly. After the update, generate a payment request report using QCS. Submit the payment request, prompt payment certification, and payment invoice with supporting data using the Government's SFTP repository built into QCS export function. If permitted by the Contracting Officer, e-mail or a CD-ROM may be used. A signed paper copy of the approved payment request is also required, which will govern in the event of discrepancy with the electronic version.

1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements. Maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. Provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01 45 00.00 10 QUALITY CONTROL. Within seven calendar days of Government acceptance, submit a QCS update reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS must be the Contractor's official report. Summarize data from any supplemental reports by the Contractor and consolidate onto the QCS-generated Daily CQC Report. Submit daily CQC Reports as required by Section 01 45 00.00 10 QUALITY CONTROL. Electronically submit reports to the Government, with electronic signature, within 24 hours after the date covered by the report.

1.6.3.2 Deficiency Tracking.

Use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. Maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The

Government's QA punch list items will be included in its export file to the Contractor. Regularly update the correction status of both QC and QA punch list items.

1.6.3.3 QC Requirements

Develop and maintain a complete list of QC testing and required structural and life safety special inspections required by the International Code Council (ICC), transferred and installed property, and user training requirements in QCS. Update all data on these QC requirements as work progresses, and promptly provide this information to the Government via QCS.

1.6.3.4 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.5 Labor and Equipment Hours

Log labor and equipment exposure hours on a daily basis. This data will be rolled up into a monthly exposure report.

1.6.3.6 Accident/Safety Reporting

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. Regularly update the correction status of the safety comments. In addition, utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 300.

1.6.3.7 Features of Work

Include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.8 Hazard Analysis

Use QCS to develop a hazard analysis for each feature of work included in the QOC Plan. Address any hazards, or potential hazards, that may be associated with the work.

1.6.4 Submittal Management

The Government will provide the initial submittal register in electronic format. Thereafter, maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. Use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update must be produced using QCS. QCS and RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 Schedule

Develop a construction schedule consisting of pay activities, in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE. Input and maintain in the QCS database this schedule either manually or by using the Standard Data Exchange Format (SDEF) (see Section 01 32 01.00 10 PROJECT SCHEDULE). Include with each pay request the updated schedule.

1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data from RMS, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA CD-ROM

The Government-preferred method for Contractor's submission of QCS data is by using the Government's SFTP repository built into QCS export function. Other data should be submitted using E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of CD-ROM for data transfer. Export data onto CDs using the QCS built-in export function. If used, submit CD-ROMs in accordance with the following:

1.8.1 File Medium

Submit in English required data on CD-ROM conforming to industry standards used in the United States.

1.8.2 CD-ROM Labels

Affix a permanent exterior label to each CD-ROM submitted. Indicate on the label in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The files will be automatically named by the QCS software. The naming convention established by the QCS software must not be altered.

1.9 MONTHLY COORDINATION MEETING

Update the QCS database each workday. At least monthly, generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, meet with the Government representative to review the planned progress payment data submission for errors and omissions.

Make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by

incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, will be deemed sufficient for the purpose of notification.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

SECTION 01 45 35

SPECIAL INSPECTIONS

PART 1 GENERAL

1.1 REFERENCES

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

INTERNATIONAL CODE COUNCIL (ICC)

ICC IBC (2012) International Building Code

1.2 GENERAL REQUIREMENTS

Perform Special Inspections in accordance with the Statement of Special Inspections, Schedule of Special Inspections and Chapter 17 of ICC IBC. The Statement of Special Inspections and Schedule of Special Inspections are included as an attachment to this specification. Special Inspections are to be performed by an independent third party and are intended to ensure that the work of the prime contractor is in accordance with the Contract Documents and applicable building codes. Special inspections do not take the place of the three phases of control inspections performed by the Contractor's QC Manager or any testing and inspections required by other sections of the specifications.

1.3 DEFINITIONS

1.3.1 Continuous Special Inspections

Continuous Special Inspections is the constant monitoring of specific tasks by a special inspector. These inspections must be carried out continuously over the duration of the particular tasks.

1.3.2 Periodic Special Inspections

Periodic Special Inspections is Special Inspections by the special inspector who is intermittently present where the work to be inspected has been or is being performed.

1.3.3 Perform

Perform these Special Inspections tasks for each welded joint or member.

1.3.4 Observe

Observe these Special Inspections items on a random daily basis. Operations need not be delayed pending these inspections.

1.3.5 Special Inspector (SI)

A qualified person retained by the contractor and approved by the Contracting Officer as having the competence necessary to inspect a

particular type of construction requiring Special Inspections. The SI must be an independent third party hired directly by the Prime Contractor.

1.3.6 Associate Special Inspector (ASI)

A qualified person who assists the SI in performing Special Inspections but must perform inspection under the direct supervision of the SI and cannot perform inspections without the SI on site.

1.3.7 Third Party

A third party inspector must not be company employee of the Contractor or any Sub-Contractor performing the work to be inspected.

1.3.8 Contracting Officer

The Government official having overall authority for administrative contracting actions. Certain contracting actions may be delegated to the Contracting Officer's Representative (COR).

1.3.9 Contractor's Quality Control (QC) Manager

An individual retained by the prime contractor and qualified in accordance with the Section 01 45 00.00 10 QUALITY CONTROL having the overall responsibility for the contractor's QC organization.

1.3.10 Designer of Record (DOR)

A registered design professional contracted by the Government as an A/E responsible for the overall design and review of submittal documents prepared by others. The DOR is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws in state in which the design professional works. The DOR is also referred to as the Engineer of Record (EOR) in design code documents.

1.3.11 Statement of Special Inspections (SSI)

A document developed by the DOR identifying the material, systems, components and work required to have Special Inspections.

1.3.12 Schedule of Special Inspections

A schedule which lists each of the required Special Inspections, the extent to which each Special Inspections is to be performed, and the required frequency for each in accordance with ICC IBC Chapter 17.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submittals with an "S" are for inclusion in the Sustainability Notebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Special Inspections Agency's Written Practices
 NDT Procedures and Equipment Calibration Records

SD-06 Test Reports

Special Inspections Daily Reports
 Special Inspections Biweekly Reports

SD-07 Certificates

Fabrication Plant
 Steel Joist Institute Membership
 Certificate of Compliance
 Special Inspector Qualifications; G
 Qualification Records for NDT technicians

SD-11 Closeout Submittals

Comprehensive Final Report of Special Inspections; G

1.5 SPECIAL INSPECTOR QUALIFICATIONS

Submit qualifications for each special inspector.

Certifying Associations	
AABC	Associated Air Balance Council
ACI	American Concrete Institute
AWCI	Association of the Wall and Ceiling Industry
AWS	American Welding Society
FM	Factory Mutual
ICC	International Code Council
NDT	Nondestructive Testing
NICET	National Institute for Certification in Engineering Technologies
PCI	Precast/Prestressed Concrete Institute
PTI	Post-Tensioning Institute
UL	Underwriters Laboratories

1.5.1 Steel Construction and High Strength Bolting

1.5.1.1 Special Inspector

- a. ICC Structural Steel and Bolting Special Inspector certificate with one year of related experience, or
- b. Registered Professional Engineer with related experience

- c. High strength bolts can be inspected by an AWS Certified welding inspector.

1.5.1.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.2 Welding Structural Steel

1.5.2.1 Special Inspector

- a. ICC Structural Welding Special Inspector certificate with one year of related experience, or
- b. AWS Certified Welding Inspector

1.5.2.2 Associate Special Inspector

AWS Certified Associate Welding Inspector

1.5.3 Nondestructive Testing of Welds

1.5.3.1 Special Inspector

NDT Level III Certificate

1.5.3.2 Associate Special Inspector

NDT Level II Certificate plus one year of related experience

1.5.4 Cold Formed Steel Framing

1.5.4.1 Special Inspector

- a. ICC Structural Steel and Bolting Special Inspector certificate with one year of related experience, or
- b. ICC Commercial Building Inspector with one year of experience, or
- c. Registered Professional Engineer with related experience

1.5.4.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.5 Concrete Construction

1.5.5.1 Special Inspector

- a. ICC Reinforced Concrete Special Inspector Certificate with one year of related experience, or
- b. ACI Concrete Construction Special Inspector, or
- c. NICET Concrete Technician Level III Certificate in Construction Materials Testing, or
- d. Registered Professional Engineer with related experience

- e. Concrete, mortar and grout can be inspected by an ACI Certification Field grade 1 Inspector.

1.5.5.2 Associate Special Inspector

- a. ACI Concrete Construction Special Inspector in Training, or
- b. Engineer-In-Training with one year of related experience

1.5.6 Masonry Construction

1.5.6.1 Special Inspector

- a. ICC Structural Masonry Special Inspector Certificate with one year of related experience, or
- b. Registered Professional Engineer with related experience

1.5.6.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.7 Verification of Site Soil Condition, Fill Placement and Load-Bearing Requirements

1.5.7.1 Special Inspector

- a. ICC Soils Special Inspector Certificate with one year of related experience, or
- b. NICET Soils Technician Level II Certificate in Construction Material Testing, or
- c. NICET Geotechnical Engineering Technician Level II Construction or Generalist Certificate, or
- d. Geologist-In-Training with one year of related experience, or
- e. Registered Professional Engineer with related experience

1.5.7.2 Associate Special Inspector

- a. NICET Soils Technician Level I Certificate in Construction Material Testing with one year of related experience, or
- b. NICET Geotechnical Engineering Technician Level I Construction or Generalist Certificate with one year of related experience, or
- c. Engineer-In-Training with one year of related experience

1.5.8 Deep Foundations

1.5.8.1 Special Inspector

- a. NICET Soils Technician Level II Certificate in Construction Material Testing, or
- b. NICET Geotechnical Engineering Technician Level II Construction or Generalist Certificate, or

- c. Geologist-In-Training with one year of related experience, or
- d. Registered Professional Engineer with related experience

1.5.8.2 Associate Special Inspector

- a. NICET Soils Technician Level I Certificate in Construction Material Testing with one year of related experience, or
- b. NICET Geotechnical Engineering Technician Level I Construction or Generalist Certificate with one year of related experience, or
- c. Engineer-In-Training with one year of related experience

1.5.9 Fire-Resistant Penetrations and Joints

1.5.9.1 Special Inspector

- a. Passed the UL Firestop Exam with one year of related experience, or
- b. Passed the FM Firestop Exam with one year of related experience, or
- c. Registered Professional Engineer with related experience

1.5.9.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

PART 2 PRODUCTS

2.1 FABRICATOR SPECIAL INSPECTIONS

Special Inspections of fabricator's work performed in the fabricator's shop is required to be inspected in accordance with the Statement of Special Inspections and the Schedule of Special Inspections unless the fabricator is certified by the approved agency to perform such work without Special Inspections. Submit the following certification to the Contracting Officer for information to allow work performed in the fabricator's shop to not be subjected to Special Inspections.

American Institute of Steel Construction (AISC) Certified Fabrication Plant, Category STD.
Steel Joist Institute Membership

At the completion of fabrication, submit a certificate of compliance, to be included with the comprehensive final report of Special Inspections, stating that the materials supplied and work performed by the fabricator are in accordance the construction documents.

PART 3 EXECUTION

3.1 RESPONSIBILITIES

3.1.1 Quality Control Manager

- a. Supervise all Special Inspectors required by the contract documents and the IBC.

- b. Verify the qualifications of all of the Special Inspectors.
- c. Verify the qualifications of fabricators.
- d. Maintain a 3-ring binder for the Special Inspector's daily and biweekly reports. This file must be located in a conspicuous place in the project trailer/office to allow review by the Contracting Officer and the DOR.
- e. Maintain a rework items list that includes discrepancies noted on the Special Inspectors daily report.

3.1.2 Special Inspectors

- a. Inspect all elements of the project for which the special inspector is qualified to inspect and are identified in the Schedule of Special Inspections.
- b. Attend preparatory phase meetings related to the Definable Feature of Work (DFOW) for which the special inspector is qualified to inspect.
- c. Submit Special Inspections agency's written practices for the monitoring and control of the agency's operations to include the following:
 - (1) The agency's procedures for the selection and administration of inspection personnel, describing the training, experience and examination requirements for qualifications and certification of inspection personnel.
 - (2) The agency's inspection procedures, including general inspection, material controls, and visual welding inspection.
- d. Submit qualification records for nondestructive testing (NDT) technicians designated for the project.
- e. Submit NDT procedures and equipment calibration records for NDT to be performed and equipment to be used for the project.
- f. Submit a copy of the daily reports to the QC Manager.
- g. Discrepancies that are observed during Special Inspections must be reported to the QC Manager for correction. If discrepancies are not corrected before the special inspector leaves the site the observed discrepancies must be documented in the daily report.
- h. Submit a biweekly Special Inspection Report until all inspections are complete. A report is required for each biweekly period in which Special Inspections activity occurs, and must include the following:
 - (1) A brief summary of the work performed during the reporting time frame.
 - (2) Changes and/or discrepancies with the drawings, specifications and mechanical or electrical component certification, that were observed during the reporting period.
 - (3) Discrepancies which were resolved or corrected.

(4) A list of nonconforming items requiring resolution.

(5) All applicable test result including nondestructive testing reports.

- i. At the completion of the project submit a comprehensive final report of Special Inspections that documents the Special Inspections completed for the project and corrections of all discrepancies noted in the daily reports. The comprehensive final report of Special Inspections must be signed, dated and indicate the certification of the special inspector qualifying them to conduct the inspection.

3.2 DEFECTIVE WORK

Check work as it progresses, but failure to detect any defective work or materials must in no way prevent later rejection if defective work or materials are discovered, nor obligate the Contracting Officer to accept such work.

-- End of Section --

SECTION 01 50 00

TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SUMMARY

Requirements of this Section apply to, and are a component of, each section of the specifications.

1.2 REFERENCES

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

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C511 (2007) Standard for Reduced-Pressure Principle Backflow Prevention Assembly

FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH (FCCCHR)

FCCCHR List (continuously updated) List of Approved Backflow Prevention Assemblies

FCCCHR Manual (10th Edition) Manual of Cross-Connection Control

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 241 (2013) Standard for Safeguarding Construction, Alteration, and Demolition Operations

NFPA 70 (2014; AMD 1 2013; Errata 1 2013; AMD 2 2013; Errata 2 2013; AMD 3 2014; Errata 3-4 2014; AMD 4-6 2014) National Electrical Code

U.S. FEDERAL AVIATION ADMINISTRATION (FAA)

FAA AC 70/7460-1 (2007; Rev K) Obstruction Marking and Lighting

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD (2009) Manual of Uniform Traffic Control Devices

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When

used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submitted the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals
Construction site plan; G
Traffic control plan; G

SD-06 Test Reports

Backflow Preventer Tests; G

SD-07 Certificates

Backflow Tester Certification; G

Backflow Preventers Certificate of Full Approval

1.4 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations and dimensions of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area and details of the fence installation. Identify any areas which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

1.5 BACKFLOW PREVENTERS CERTIFICATE

Certificate of Full Approval from FCCCHR List, University of Southern California, attesting that the design, size and make of each backflow preventer has satisfactorily passed the complete sequence of performance testing and evaluation for the respective level of approval. Certificate of Provisional Approval will not be acceptable.

1.5.1 Backflow Tester Certificate

Prior to testing, submit to the Contracting Officer certification issued by the State or local regulatory agency attesting that the backflow tester has successfully completed a certification course sponsored by the regulatory agency. Tester must not be affiliated with any company participating in any other phase of this Contract.

1.5.2 Backflow Prevention Training Certificate

Submit a certificate recognized by the State or local authority that states the Contractor has completed at least 10 hours of training in backflow preventer installations. The certificate must be current.

PART 2 PRODUCTS

2.1 TEMPORARY SIGNAGE

2.1.1 Bulletin Board

Immediately upon beginning of work, provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. Locate the bulletin board at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Display legible copies of the aforementioned data until work under the contract is complete. Upon completion of work under this contract, remove the bulletin board; it remains the property of the Contractor.

2.1.2 Project and Safety Signs

The requirements for the signs, their content, and location are as specified in Section 01 58 00 PROJECT IDENTIFICATION. Erect signs within 15 days after receipt of the notice to proceed. Correct the data required by the safety sign daily, with light colored metallic or non-metallic numerals.

Furnish and apply a decal of the Corps of Engineer's Castle and one for the user agency's shield. Stencils may be used in lieu of decals provided the dimensions are the same. Apply a thin coat of clear spar varnish to decals after application. If stencils are used, paint the Corps' castle with approved white and red colors and the Using Agency's shield with approved colors. Use semigloss, exterior type enamel or latex paint.

Upon completion of work under this contract, the project sign shall be removed from the job site and remain the property of the Contractor.

2.2 TEMPORARY TRAFFIC CONTROL

2.2.1 Haul Roads

At contractor's expense construct access and haul roads necessary for proper prosecution of the work under this contract. Construct with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic are to be avoided. Provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, must be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads are subject to approval by the Contracting Officer. Lighting must be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations.

2.2.2 Barricades

Erect and maintain temporary barricades to limit public access to hazardous areas. Whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic

barricades will be required. Securely place barricades clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

Temporary Safety Fencing: Furnish and erect safety fencing at temporary hazards and work site areas considered to be hazardous to the public. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 42 inches high, supported and tightly secured to steel posts located on maximum 10 foot centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the hazard and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

2.2.3 Fencing

- a. Provide fencing along the construction site at all open excavations and tunnels to control access by unauthorized people. Fencing must be installed to be able to restrain a force of at least 250 pounds against it.

2.2.4 Temporary Wiring

Provide temporary wiring in accordance with NFPA 241 and NFPA 70, Article 305-6(b), Assured Equipment Grounding Conductor Program. Include frequent inspection of all equipment and apparatus.

2.2.5 Backflow Preventers

Reduced pressure principle type conforming to the applicable requirements AWWA C511. Provide backflow preventers complete with 150 pound flanged, brass mounted gate valve and strainer, 304 stainless steel or bronze, internal parts. The particular make, model/design, and size of backflow preventers to be installed must be included in the latest edition of the List of Approved Backflow Prevention Assemblies issued by the FCCCHR List and be accompanied by a Certificate of Full Approval from FCCCHR List. After installation conduct Backflow Preventer Tests and provide test reports verifying that the installation meets the FCCCHR Manual Standards.

PART 3 EXECUTION

3.1 EMPLOYEE PARKING

Contractor employees will park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking must not interfere with existing and established parking requirements of the government installation.

3.2 AVAILABILITY AND USE OF UTILITY SERVICES

3.2.1 Temporary Utilities

Provide temporary utilities required for construction. Materials may be new or used, must be adequate for the required usage, not create unsafe conditions, and not violate applicable codes and standards.

3.2.2 Payment for Utility Services

Water, sewer, gas, electricity, and refuse service are available and

will be charged to the Contractor at rates as provided in Contract Clause 52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES.

Electricity and gas are Government owned. Water and sewer have been privatized and are 3rd party owned (American Water Enterprises (AWE)). Water and sewer systems shall be constructed to privatized utility provider's specifications. AWE utility design specifications and standard details (water and sewer) are located at the following web page (<http://www.amwater.com/products-and-services/Federal-Services/Military-Services/desi>). All utilities are administered by the Government regardless of ownership.

a) Use of Government services:

(1) Contractors must reimburse Government for utilities usage (electricity, gas, water, sewer, and refuse) for admin trailer and construction sites.

(2) A utilities sales agreement must be signed by Contractor prior to connection/use of utilities services.

(3) Contractor must provide all metering devices (per Fort Hood Specification) for trailer and construction project.

(4) Current utilities rates can be obtained from 254-287-7671.

b) Meters and Temporary Connections

The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall provide and maintain necessary temporary connections, distribution lines, and meter bases required to measure the amount of each utility used for the purpose of determining charges. The Contractor shall notify the Contracting Officer, in writing, 5 working days before utility (gas, water, sewer, electricity) connection is desired so that a utilities contract can be established. The Contractor will provide a meter and make the final hot connection after inspection and approval of the Contractor's temporary wiring installation. Sewage usage is based on water usage and does not require a meter.

c) Advance Deposit

An advance deposit for utilities consisting of an estimated month's usage or a minimum of \$50.00 will be required. The last monthly bills for the fiscal year will normally be offset by the deposit and adjustments will be billed or returned as appropriate. Services to be rendered for the next fiscal year, beginning 1 October, will require a new deposit. Notification of the due date for this deposit will be mailed to the Contractor prior to the end of the current fiscal year.

d) Final Meter Reading

Before completion of the work and final acceptance of the work by the Government, the Contractor shall notify the Contracting Officer, in writing, 5 working days before termination is desired. The Government will take a final meter reading; and thereafter, the Contractor shall disconnect service, and remove the meters. The Contractor shall also remove all the temporary distribution lines, meter bases, and associated paraphernalia. The Contractor shall pay all outstanding utility bills before final acceptance of the work by the Government.

3.2.3 Meters and Temporary Connections

At the Contractors expense and in a manner satisfactory to the Contracting Officer, provide and maintain necessary temporary connections, distribution lines, and meter bases (Government will provide meters) required to measure the amount of each utility used for the purpose of determining charges. Notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired so that a utilities contract can be established.

3.2.4 Advance Deposit

An advance deposit for utilities consisting of an estimated month's usage or a minimum of \$50.00 will be required. The last monthly bills for the fiscal year will normally be offset by the deposit and adjustments will be billed or returned as appropriate. Services to be rendered for the next fiscal year, beginning 1 October, will require a new deposit. Notification of the due date for this deposit will be mailed to the Contractor prior to the end of the current fiscal year.

3.2.5 Final Meter Reading

Before completion of the work and final acceptance of the work by the Government, notify the Contracting Officer, in writing, 5 working days before termination is desired. The Government will take a final meter reading; after which the Contractor shall disconnect service and remove the meters. Then remove all the temporary distribution lines, meter bases, and associated paraphernalia. Pay all outstanding utility bills before final acceptance of the work by the Government.

3.2.6 Sanitation

a. Provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer and periodically empty wastes into a municipal, district, or station sanitary sewage system, or remove waste to a commercial facility. Obtain approval from the system owner prior to discharge into any municipal, district, or commercial sanitary sewer system. Any penalties and / or fines associated with improper discharge will be the responsibility of the Contractor. Coordinate with the Contracting Officer and follow station regulations and procedures when discharging into the station sanitary sewer system. Maintain these conveniences at all times without nuisance. Include provisions for pest control and elimination of odors. Government toilet facilities will not be available to Contractor's personnel.

3.2.7 Telephone

Make arrangements and pay all costs for telephone facilities desired.

3.2.8 Obstruction Lighting of Cranes

Provide a minimum of 2 aviation red or high intensity white obstruction lights on temporary structures (including cranes) over 100 feet above ground level. Light construction and installation must comply with FAA AC 70/7460-1. Lights must be operational during periods of reduced visibility, darkness, and as directed by the Contracting Officer.

3.2.9 Fire Protection

Provide temporary fire protection equipment for the protection of personnel and property during construction. Remove debris and flammable materials daily to minimize potential hazards.

3.3 TRAFFIC PROVISIONS

3.3.1 Maintenance of Traffic

- a. Conduct operations in a manner that will not close any thoroughfare or interfere in any way with traffic on railways or highways except with written permission of the Contracting Officer at least 15 calendar days prior to the proposed modification date, and provide a Traffic Control Plan detailing the proposed controls to traffic movement for approval. The plan must be in accordance with State and local regulations and the MUTCD, Part VI. Make all notifications and obtain any permits required for modification to traffic movements outside Station's jurisdiction.. Contractor may move oversized and slow-moving vehicles to the worksite provided requirements of the highway authority have been met.
- b. Conduct work so as to minimize obstruction of traffic, and maintain traffic on at least half of the roadway width at all times. Obtain approval from the Contracting Officer prior to starting any activity that will obstruct traffic.
- c. Provide, erect, and maintain, at contractors expense, lights, barriers, signals, passageways, detours, and other items, that may be required by the Life Safety Signage, overhead protection authority having jurisdiction.

3.3.2 Protection of Traffic

Maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by the State and local authorities having jurisdiction. Protect the traveling public from damage to person and property. Minimize the interference with public traffic on roads selected for hauling material to and from the site. Investigate the adequacy of existing roads and their allowable load limit. Contractor is responsible for the repair of any damage to roads caused by construction operations.

3.3.3 Rush Hour Restrictions

Do not interfere with the peak traffic flows preceding and during normal operations without notification to and approval by the Contracting Officer.

3.3.4 Dust Control

Dust control methods and procedures must be approved by the Contracting Officer. Treat dust abatement on access roads with applications of calcium chloride, water sprinklers, or similar methods or treatment.

3.4 CONTRACTOR'S TEMPORARY FACILITIES

3.4.1 Safety

Protect the integrity of any installed safety systems or personnel safety devices. If entrance into systems serving safety devices is required, the Contractor must obtain prior approval from the Contracting Officer. If it is temporarily necessary to remove or disable personnel safety devices in order to accomplish contract requirements, provide alternative means of protection prior to removing or disabling any permanently installed safety devices or equipment and obtain approval from the Contracting Officer.

3.4.2 Administrative Field Offices

Provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

3.4.3 Storage Area

Construct a temporary 6 foot high chain link fence around trailers and materials. Include plastic strip inserts, colored green or brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Do not place or store Trailers, materials, or equipment outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site but within the installation boundaries. Trailers, equipment, or materials must not be open to public view with the exception of those items which are in support of ongoing work on any given day. Do not stockpile materials outside the fence in preparation for the next day's work. Park mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment within the fenced area at the end of each work day.

3.4.4 Supplemental Storage Area

Upon Contractor's request, the Contracting Officer will designate another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but will be within the installation boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor is responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

3.4.5 Appearance of Trailers

- a. Trailers utilized by the Contractor for administrative or material storage purposes must present a clean and neat exterior appearance and be in a state of good repair. Trailers which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not

be allowed on installation property.

- b. Paint using suitable paint and maintain the temporary facilities. Failure to do so will be sufficient reason to require their removal.

3.4.6 Maintenance of Storage Area

- a. Keep fencing in a state of good repair and proper alignment. Grassed or unpaved areas, which are not established roadways, will be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways, should the Contractor elect to traverse them with construction equipment or other vehicles; gravel gradation will be at the Contractor's discretion. Mow and maintain grass located within the boundaries of the construction site for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers will be edged or trimmed neatly.

3.4.7 New Building

In the event a new building is constructed for the temporary project field office, it will be a minimum 12 feet in width, 16 feet in length and have a minimum of 7 feet headroom. Equip the building with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. Provide a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building must be waterproof, supplied with a heater, have a minimum of two doors, electric lights, a telephone, a battery operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. Approved sanitary facilities must be furnished. Screen the windows and doors and provide the doors with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins will be non-removable. Arrange the windows to open and to be securely fastened from the inside. Protect glass panels in windows by bars or heavy mesh screens to prevent easy access. In warm weather, furnish air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature 20 degrees F below the outside temperature when the outside temperature is 95 degrees F. Any new building erected for a temporary field office must be maintained by the Contractor during the life of the contract and upon completion and acceptance of the work become the property of the Contractor and removed from the site. All charges for telephone service for the temporary field office will be borne by the Contractor, including long distance charges up to a maximum of \$75.00 per month.

3.4.8 Security Provisions

Provide adequate outside security lighting at the Contractor's temporary facilities. The Contractor will be responsible for the security of its own equipment; in addition, the Contractor will notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

3.4.9 Weather Protection of Temporary Facilities and Stored Materials

Take necessary precautions to ensure that roof openings and other critical openings in the building are monitored carefully. Take immediate actions required to seal off such openings when rain or other detrimental weather

is imminent, and at the end of each workday. Ensure that the openings are completely sealed off to protect materials and equipment in the building from damage.

3.4.9.1 Building and Site Storm Protection

When a warning of gale force winds is issued, take precautions to minimize danger to persons, and protect the work and nearby Government property. Precautions must include, but are not limited to, closing openings; removing loose materials, tools and equipment from exposed locations; and removing or securing scaffolding and other temporary work. Close openings in the work when storms of lesser intensity pose a threat to the work or any nearby Government property.

3.5 GOVERNMENT FIELD OFFICE

3.6 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor must install a satisfactory means of communication, such as telephone or other suitable devices and made available for use by Government personnel.

3.7 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, furnish and erect temporary project safety fencing around the construction site. The safety fencing shall be a 9 ga. chain link fencing, a minimum of 72 inches high, supported and tightly secured to steel posts located on maximum 10 foot centers, constructed at the approved location. Maintain the safety fencing during the life of the contract and, upon completion and acceptance of the work, will become the property of the Contractor and be removed from the work site.

3.8 CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. Store within the fenced area described above or at the supplemental storage area any materials resulting from demolition activities which are salvageable. Neatly stacked stored materials not in trailers, whether new or salvaged.

3.9 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletinboard, signs, barricades, haulroads, and any other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence that will become the property of the Contractor. Restore to the original or better condition, areas used by the Contractor for the storage of equipment or material, or other use. Gravel used to traverse grassed areas must be removed and the area restored to its original condition, including top soil and seeding as necessary.

-- End of Section --

SECTION 01 56 00.00 44

DUST CONTROL

PART 1 GENERAL

1.1 SUMMARY

The work covered by this section consists of furnishing all labor, materials and equipment and performing all work required for the control and prevention of fugitive dust during and as the result of construction operations under this contract except for those measures set forth in other Technical Provisions of these specifications. For the purpose of this specification, fugitive dust entails the generation of solid particles by the forces of wind or machinery acting upon exposed materials. Provisions of this specification shall prevent fugitive dust from adversely affecting human health or welfare; unfavorably altering ecological balances of importance to human life; affecting other species of importance to man; or degrading the utility of the environment for aesthetic and recreational purposes. Dust Control is a requirement in the EPA and state pollutant discharge elimination system or permit for discharging storm water during construction.

1.2 REFERENCES

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

CORPS OF ENGINEERS (COE)

COE EM 385-1-1 (Latest Version) Safety and Health Requirements Manual

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Dust Control; G.
Products and Procedures; G

Prior to commencement of the work, submit in writing a proposal to the Contracting Officer for implementing the provisions of this section for fugitive dust control. Address the plans, and the products to be used, to prevent and control fugitive dust through specific mitigative and preventative measures, . The effectiveness of the dust control program shall be periodically checked and reviewed. Revisions to the dust control plan shall be submitted to the Contracting Officer as changes are necessary

during the duration of this contract.

Material Safety Data Sheet; G.

- Material Safety Data Sheets include those for soil stabilization products.

Sandblasting; G.

SD-02 Shop Drawings

Recordkeeping; .

- Maintain and furnish records in accordance with PART 1 paragraph RECORDKEEPING.

1.4 IMPLEMENTATION MEETING

Prior to commencement of the work the Contractor shall meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with these provisions and administration of the dust control program in accordance with Section 01 31 00.00 44 PROJECT MEETINGS.

1.5 APPLICABLE REGULATIONS

In order to prevent and to provide control of pollution arising from the construction activities of the Contractor and his subcontractors in the performance of this contract, all applicable Federal, State, and local laws and regulations concerning environmental pollution control and abatement, and all applicable provisions of the COE EM 385-1-1 as well as the specific requirements stated in this section and elsewhere in the contract specifications. Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

1.6 NOTIFICATION OF NON-COMPLIANCE

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

1.7 RECORDKEEPING

The Contractor shall, at a minimum, maintain records indicating dust control measures taken. Information provided shall be sufficient to answer any questions regarding control methods utilized, products used, application rates, inspections performed. Additional information to be recorded, but not limited to reporting, includes treated area, operator, date and time of treatment, meteorological conditions and inspection and monitoring reports. Records shall be submitted every 30 days to the Contracting Officer.

PART 2 PRODUCTS

2.1 PRODUCTS AND PROCEDURES

Products and procedures used in controlling particulates and dust shall be in accordance with the Contractor's Environmental Protection Plan and the dust control plan required by this Section. Material Safety Data Sheets for soil binders for use in dust control shall be approved prior to application. Soil binders containing carcinogenic substances (e.g. acrylamides) are prohibited.

PART 3 EXECUTION

3.1 DUST CONTROL

Control techniques for fugitive dust sources shall involve watering. For arid regions and dusty work areas, dust control shall include water application with soil binders that is environmental sustainable and non-toxic. The methods utilized shall be cost effective, water conservation, and appropriate for the size and scope of the fugitive dust source. Methods and controls shall not have an adverse effects on plant and animal life, ecosystem, and facility air intakes, or contaminate the treated material.

Repeat methods at such intervals as to keep all parts of the disturbed area(s) treated at all times. Have sufficient competent equipment on the job to accomplish control techniques. Products shall provide a method to reduce dust-related environmental concerns and aid in complying with applicable regulations.

Products shall not in any form produce any adverse environmental effects through their use and shall provide an effective, clean, safe control of airborne dust and protection against soil erosion.

3.1.1 Preventative Techniques

The reduction of source extent, the incorporation of process modifications, or adjusted work practices, which reduce the amount of dust-generation, are preventative techniques for the control of fugitive dust emissions. These techniques include the elimination of mud and dirt carry-out onto paved roads at construction sites.

3.1.2 Mitigative Techniques

Mitigative measures entail the periodic removal of dust-producing material. Examples of mitigative control measures include clean-up of spillage on paved or unpaved travel surfaces and clean-up of material spillage at transfer points.

3.2 MATERIALS HANDLING

The Contractor shall take the following minimum precautions to limit fugitive dust emissions from material handling and transportation to achieve control of dust emissions to the extent practicable:

- a. Stockpiles

Apply water with an approved soil binder. Other alternatives include laydown top soil with organic matters that are removed from the disturbed area or placing a compounded fiber erosion control blanket to cover material stockpiles and other surfaces which can create airborne dust. BMP perimeter controls around the stockpile shall be placed at least 10 feet away from the toe of stockpiled material.

b. Transportation

At a minimum, complete covering, maintain a minimum 12 inch free-board space, and moistening of materials hauled from the construction site. Open truck beds, since they create airborne particulate matter, are prohibited. Additional application of water with approved soil binder shall be required if additional controls are considered necessary by the Contracting Officer.

c. Off-Site Tracking

Perform dust control as the work proceeds to minimize vehicle off-site tracking of sediment and generation of dust. Provide every effort, such as temporary paved roadways, to keep vehicles from tracking soils from the construction site. Gravel construction access roadways shall be at least 80 feet long and 30 feet wide for construction sites 5 acres or larger. The access roadway gravel blanket shall be 6-inch minimum in depth with gravel size of 3-inch minimum. Overlay gravel blankets on two layers of 0.015 mm 6-mil thick geotextile fabric or a single layer of 10-mil thick geotextile fabric. Control dust generation by water sprinkling. For water conservation, water may be applied with an approved soil binder.

3.3 CONSTRUCTION AND DEMOLITION

Control dust resulting from demolition and construction activities. No person may cause, suffer, allow, or permit a structure, road, street, alley, or parking area to be constructed, altered, repaired, or demolished, or land to be cleared without taking minimum precautions to achieve control of dust emissions.

3.3.1 Demolition

Control the amount of dust resulting from demolition to prevent the spread of dust to occupied portions of the construction site and to avoid creation of a nuisance in the surrounding area. The use of water, oil, or chemical treatment for control of dust in the demolition of structures, in construction operations, in work performed on a road, parking area, or in the clearing of land is required.

3.3.2 Sandblasting

Utilize adequate methods, including enclosure of work areas and debris, to prevent airborne particulate matter during sandblasting of painted and non-painted structures or other similar operations. Blast media and containment systems shall be approved prior to use.

3.4 ACCESS ROADS AND PARKING LOTS

No person may cause, suffer, allow, or permit any public, industrial, commercial, or private road, street, or alley to be used without taking precautions to achieve control of dust emissions.

In addition to mitigation and control techniques, the removal of soil or

other materials shall be periodically performed by mechanical sweepers or their equivalent. Spot clean dirty roadways and parking lots. These activities shall be performed as deemed necessary. Remove sand which is applied for the specific purpose of snow or ice control as soon as such control is no longer necessary.

3.4.1 Access Roads

The use of temporary asphalt pavement is required for major access roadways at extensive development sites (10 acres or larger) and/or construction periods longer than 3 months. Alternative method of dust control for access roads with uniform gravel cover (and geotextile fabric beneath gravel cover) is acceptable for site less than 10 acres of total disturbed area, and if construction period is shorter than 3 months. Site access roads may use uniform gravel cover (with geotextile fabric beneath gravel cover) and water sprinkling with soil binders for dust control.

The use of temporary asphalt or uniform gravel cover , as described above for control of Off-Site Tracking, with wheel wash is an acceptable method of dust control for roads leading to and from areas of construction activity.

3.4.2 Parking Lots

Parking surfaces with more than five parking spaces shall be paved. Temporary parking area(s) to be used 30 calendar days or more for the Contractor's equipment or personal vehicles shall be paved with temporary asphalt. Temporary lots used for less than one month may use uniform gravel, if required by Corps Area Office Contracting Officer (AOCO), applying water with approved soil binder may be necessary.

3.5 CONTROL STRUCTURES

Activities performed under this Contract shall conform with the specifications described herein along with other technical specifications, particularly Sections 01 57 20.00 10 ENVIRONMENTAL PROTECTION and 01 57 24.01 44 STORM WATER POLLUTION PREVENTION.

If the Contractor proposes to construct temporary structures, he shall submit the proposal for approval at least ten (10) days prior to the scheduled start of such temporary work. Modification of the Contractor's plans shall be made only with the written approval of the Contracting Officer.

3.6 MAINTENANCE

During the life of this contract, the Contractor shall maintain all facilities constructed for pollution control under this Contract as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created. Re-application of water by sprinkling or approved soil binder with water shall be required when the disturbed areas are not stabilized.

During the construction period the Contractor shall conduct frequent training courses for his maintenance personnel. The curricula shall

include methods of dust control, familiarity with pollution standards, and care of controls and measures to prevent and correct fugitive dust pollution.

The Contractor shall furnish daily services for the temporary control measures at the project site and perform any required maintenance as deemed necessary by and to the satisfaction of the Corps AOCO during the entire life of the Contract. Services shall be performed at such a time and in such a manner to least interfere with the operations.

The Contractor's designated Site Inspector shall inspect all pollution prevention measures in accordance with Sections 01 57 24 STORM WATER POLLUTION PREVENTION and 01 57 25.00 44 SWPP PLAN INSPECTION AND MAINTENANCE REPORT FORM or at the Contracting Officer's request. Application of soil binder with water is an acceptable temporary stabilization protocol when approved by the Contracting Officer.

-- End of Section --

SECTION 01 57 20.00 10

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY (DA)

DA AR 200-1 (2007) Environmental Protection and Enhancement

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011) Safety and Health Requirements Manual

WETLANDS DELINEATION MANUAL (1987) Corps of Engineers Wetlands Delineation Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328 Definitions of Waters of the United States
 40 CFR 150 - 189 Pesticide Programs
 40 CFR 260 Hazardous Waste Management System: General
 40 CFR 261 Identification and Listing of Hazardous Waste
 40 CFR 262 Standards Applicable to Generators of Hazardous Waste
 40 CFR 302 Designation, Reportable Quantities, and Notification
 40 CFR 355 Emergency Planning and Notification
 40 CFR 68 Chemical Accident Prevention Provisions
 49 CFR 171 - 178 Hazardous Materials Regulations

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life;

affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water. The Contractor is responsible to contain and dispose all brought on-site materials and products by recycling or reuse through manufacturer, local vendors or charitable organizations. Disposal at construction site is prohibited. Disposal to landfill or other disposal facility shall be pre-approved. The Contractor is responsible to provide SDS of all products or construction material brought on-site for review and approval by the DPW-Environmental Office, Hazardous Materials Program Management.

1.2.4 Installation Pest Management Coordinator

Installation Pest Management Coordinator (IPMC) is the individual officially designated by the Installation Commander to oversee the Installation Pest Management Program and the Installation Pest Management Plan.

1.2.5 Project Pesticide Coordinator

The Project Pesticide Coordinator (PPC) is an individual that resides at a Civil Works Project office and that is responsible for oversight of pesticide application on Project grounds.

1.2.6 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor must discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" shall occur. Land Application must be in compliance with all applicable Federal, State, and local laws and regulations. The construction site storm water discharge shall have an EPA or state permit. The Contractor shall routinely assess non-storm water discharge to be in accordance with Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN.

1.2.7 Pesticide

Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

1.2.8 Pests

The term "pests" means arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.9 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

1.2.10 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.11 Wetlands

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLANDS DELINEATION MANUAL.

1.3 GENERAL REQUIREMENTS

Minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work must be protected during the entire duration of this contract. Comply with all applicable environmental Federal, State, and local laws and regulations. Any delays resulting from failure to comply with environmental laws and regulations will be the Contractor's responsibility.

1.4 SUBCONTRACTORS

Ensure compliance with this section by subcontractors.

1.5 PAYMENT

No separate payment will be made for work covered under this section. Payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor (i.e. storm water construction permits, utilities, digging, Texas Department of Health (TDH) Demolition/Renovation Notification Form, occupational safety and health, pre-construction NOI,

post construction NOT, Contractor and Government annual permit fees, paint booths, welding, brake and clutch service, oil water separator, fuel storage tank, on-site septic system, licenses and permits required for workers, sub-contractors, and transporters), and payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations, are the Contractor's responsibility. All costs associated with this section must be included in the contract price.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G

The environmental protection plan.

Storm Water Pollution Prevention Plan; G

Submit a copy of the Contractor's Pollution Prevention Plan (SWPPP), including both narrative and the EROSION AND SEDIMENT CONTROL drawings, in accordance with Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN.

SD-02 Shop Drawings

Hazardous Substance Reporting; G

Submit a copy of the attached Emergency Planning and Community Right to Know notification and other reports to the Contracting Officer and to the Facility Emergency Coordinator (FEC) as specified in PART 3 paragraph EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW REQUIREMENTS.

1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern must be defined within the Environmental Protection Plan as outlined in this section. Address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but are considered necessary, must be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan must be current and maintained onsite by the Contractor.

1.7.1 Compliance

No requirement in this Section will relieve the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor will be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 Contents

Include in the environmental protection plan, but not limit it to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.
- b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.
- c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.
- e. An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan must include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water Pollution Prevention Plan (SWPPP) may be substituted for this plan. Prepare the Storm Water Pollution Plan in accordance with Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN. Include in the plan the name(s) and qualifications of person(s) responsible for monitoring compliance of erosion and sediment control for the duration of the construction until final acceptance by the Contracting Officer representative (COR).
- f. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.
- g. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.
- h. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.
- i. Drawing showing the location of borrow areas. Borrow Pits are not authorized to USACE contracts on Fort Hood.
- j. Include in the Spill Control plan the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance

regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. Include in this plan, as a minimum:

POL storage greater than 55 gallons requires secondary containment and possible modification to the Installation's existing spill prevention control and countermeasures plan, and are subject to review and approval by the Installation's DPW Environmental Division. All activities that store or use POL or hazardous substances and have the potential of spilling those products must take into consideration secondary containment of the storage container and must have compatible spill cleanup materials on hand at all times. The site environmental protection plan should address the POL or hazardous substances, their storage containers, secondary containment, and how you will immediately respond to and cleanup spills of those substances in any amount. It also will include notification to the Fort Hood Fire Department (254-287-3908) and Contracting Officer of any spills of five gallons or greater to the land and any amount into a water body such as a creek, pond, river or lake. The contractor will not report any spills to state or federal regulatory agencies. DPW Environmental will assess the spill and conduct regulatory reporting if necessary.

- k. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris and schedules for disposal.
- (1) Identify any subcontractors responsible for the transportation and disposal of solid waste. Submit licenses or permits for solid waste disposal sites that are not a commercial operating facility.
 - (2) Evidence of the disposal facility's acceptance of the solid waste must be attached to this plan during the construction. Attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. Submit the report for the previous month on the first working day after the first month that non-hazardous solid waste has been disposed and/or diverted).
 - (3) Indicate in the report the total amount of waste generated and total amount of waste diverted in cubic yards or tons along with the percent that was diverted.
 - (4) A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. Detail in the plan the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source. Address the implementation of the Department of the Army requirement for a 50 percent by weight minimum diversion of construction and demolition (C&D) non-hazardous solid waste from landfill disposal or incineration for promoting more efficient use of C&D materials during construction. Discuss in the plan recycling support facilities (i.e. installation recycling,

local vendors, reused through charitable organizations, or construction material for new project, etc.) applicable to the site and project. Record the type and weight of recycled or reused material. Segregate recyclable materials such as cardboard and paperboard, light metal, heavy metal or steel containers, paper, glass, and plastic containers. Contact the Installation for special instructions for recycling. Segregate inert material, such as clean fill, rock and concrete, asphalt pavement, sand, sod, and clean masonry and brick, as construction and demolition materials. Some materials may be applicable and reuseable as clean fill or base course material if they meet the product specifications and written approvals are obtained from the Contracting Officer. Reference Section 01 74 19 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT for additional information.

- l. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site. Identify air permits required for a new facility or modification of an existing facility which may emit air contaminants. Obtain permits in accordance with applicable Federal and state regulations for the user. (For Texas: reference Texas Commission on Environmental Quality (TCEQ) Rule 116.111 or exempt facility to 30 TAC Chapter 106.)
- m. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Safety Data Sheets (SDS) and the maximum quantity of each hazardous material to be onsite at any given time must be included in the contaminant prevention plan. Update the plan as new hazardous materials are brought onsite or removed from the site.

Provide a list of construction materials, products, and sources, and Safety Data Sheets (SDS) that will be brought to the job site. Submit the SDS for construction materials and products, such as floor tile, tile mastic, ceiling tile, roofing material, drywall, recycled/recovered materials, fertilizers, pesticides, storm water control structure using compost mulch, paint, joint sealant, grout, and fuel, through the Contracting Officer to the Installation's Environmental Office.

- n. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines. If a settling/retention pond is required, the plan must include the design of the pond including drawings, removal plan, and testing requirements for possible pollutants. If land application will be the method of disposal for the waste water, the plan must include a sketch showing the location for land application along with a description of the pretreatment methods to be implemented. If surface discharge will be the method of disposal, include a copy of the permit and associated documents as an attachment prior to discharging the waste water. If disposal is to a sanitary sewer, the plan must include documentation that the Waste Water Treatment Plant Operator has approved the flow

rate, volume, and type of discharge.

- o. A historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. Include in the plan methods to assure the protection of known or discovered resources, identifying lines of communication between Contractor personnel and the Contracting Officer.
- p. Include and update a pesticide treatment plan, as information becomes available. Include in the plan: sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (i.e. pounds of active ingredient applied), equipment used for application and calibration of equipment. Federal, State, Regional and Local pest management record keeping and reporting requirements as well as any additional Installation Project Office specific requirements are the Contractor's responsibility in conformance with DA AR 200-1 Chapter 5--Pest Management, Section 5-4 "Program requirements" for data required to be reported to the Installation.

1.7.3 Appendix

Attach to the Environmental Protection Plan, as an appendix, copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents.

1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer will make a joint condition survey. Immediately following the survey, the Contractor will prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report will be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor must protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the work under the contract.

1.9 SPECIAL ENVIRONMENTAL REQUIREMENTS

Comply with the special environmental requirements listed here and attached at the end of this section.

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations from the drawings, plans and specifications, requested by the

Contractor and which may have an environmental impact, will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.11 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. After receipt of such notice, the Contractor will inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions will be granted or equitable adjustments allowed for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

1.11.1 Demolition

The Contractor shall notify EPA (per 40 CRF 61 Subpart M) or the appropriate regulatory agency, or in Texas, the Texas Department of Health, in writing, at least 10 working days prior to commencement of demolition work. The Contractor shall prepare the "Demolition/Renovation Notification Form" and obtain signature of an authorized person from the building (to be demolished) owner's environmental office. The Contractor shall allow at least 10 working days for obtaining signature from the authorized person. The Contractor is responsible to mail the signed notification form by certified mail with return receipt requested. A copy of the signed notification and a copy of the return receipt shall be provided to the Contracting Officer Representative (COR) and the authorized person. In Texas, in compliance with the Texas Asbestos Hazard Protection Rules (TAHPA), Section 295.61, this notification process is necessary prior to demolition of building structures with or without Asbestos Containing Material. The notification form is available on <http://www.tdh.state.tx.us/beh/asbestos/default.HTM>, then click on Notification & Information Section/ Download Demolition/Renovation Forms.

1.12 HAZARDOUS, TOXIC AND RADIOACTIVE WASTE (HTRW) PERIMETER AIR MONITORING

For the protection of public health, monitor and control contaminant emissions to the air from HTRW remedial action area sources to minimize short term risks that might be posed to the community during implementation of the remedial alternative in accordance with the following.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

Obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and

regulations is the Contractor's responsibility.

3.2 LAND RESOURCES

Confine all activities to areas defined by the drawings and specifications. Identify any land resources to be preserved within the work area prior to the beginning of any construction. Do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval, except in areas indicated on the drawings or specified to be cleared. Ropes, cables, or guys will not be fastened to or attached to any trees for anchorage unless specifically authorized. Provide effective protection for land and vegetation resources at all times, as defined in the following subparagraphs. Remove stone, soil, or other materials displaced into uncleared areas.

3.2.1 Work Area Limits

Mark the areas that need not be disturbed under this contract prior to commencing construction activities. Mark or fence isolated areas within the general work area which are not to be disturbed. Protect monuments and markers before construction operations commence. Where construction operations are to be conducted during darkness, any markers must be visible in the dark. The Contractor's personnel must be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved must be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. Restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Erosion and Sediment Controls

Providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations is the Contractor's responsibility. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. Construct or install temporary and permanent erosion and sediment control best management practices (BMPs) as specified in Section 01 57 23 TEMPORARY STORM WATER POLLUTION CONTROL. BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. The Contractor's best management practices must also be in accordance with the National Pollutant Discharge, Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) which may be reviewed at the Environmental Office, and the existing TPDES Industrial Storm Water Permit. Remove any temporary measures after the area has been stabilized.

3.2.4 Contractor Facilities and Work Areas

Place field offices, staging areas, stockpile storage, and temporary buildings in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor

facilities will be made only when approved. Erosion and sediment controls must be provided for onsite borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas must be controlled to protect adjacent areas.

3.2.5 Storm Water Pollution Prevention Plan

The Contractor shall reference Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN for submittal requirements.

3.3 WATER RESOURCES

Monitor all water areas affected by construction activities to prevent pollution of surface and ground waters. Do not apply toxic or hazardous chemicals to soil or vegetation unless otherwise indicated. For construction activities immediately adjacent to impaired surface waters, the Contractor must be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

3.3.1 Cofferdams, Diversions, and Dewatering Operations

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure will be controlled at all times to maintain compliance with existing State water quality standards and designated uses of the surface water body. Comply with the State of Texas water quality standards and anti-degradation provisions Comply with Clean Water Act, Section 404, Nationwide Permit 14..

3.3.2 Stream Crossings

Stream crossings must allow movement of materials or equipment without violating water pollution control standards of the Federal, State, and local governments. Comply with Clean Water Act, Section 404, Nationwide Permit 14.

3.3.3 Wetlands

DO not enter, disturb, destroy, or allow discharge of contaminants into any wetlands.

3.4 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with all Federal and State air emission and performance laws and standards.

3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from asphaltic batch plants; must be controlled at all times, including weekends, holidays and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area.

Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with all State and local visibility regulations.

3.4.1.1 Dust Control

See Section 01 56 00.00 44 DUST CONTROL for additional requirements.

3.4.2 Odors

Odors from construction activities must be controlled at all times. The odors must be in compliance with State regulations and/or local ordinances and may not constitute a health hazard.

3.4.3 Sound Intrusions

Keep construction activities under surveillance and control to minimize environment damage by noise. Comply with the provisions of the State of Texas rules.

3.4.4 Burning

Burning is prohibited on the Government premises.

3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes will be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.5.1 Solid Wastes

Place solid wastes (excluding clearing debris) in containers which are emptied on a regular schedule. Handling, storage, and disposal must be conducted to prevent contamination. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with solid waste. Transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill will be the minimum acceptable offsite solid waste disposal option. Verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate.

3.5.2 Chemicals and Chemical Wastes

Dispense chemicals ensuring no spillage to the ground or water. Perform and document periodic inspections of dispensing areas to identify leakage and initiate corrective action. This documentation will be periodically reviewed by the Government. Collect chemical waste in corrosion resistant, compatible containers. Collection drums must be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes will be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.5.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in

49 CFR 171 - 178. At a minimum, manage and store hazardous waste in compliance with 40 CFR 262 (See Section 01 35 10.00 44 SPECIAL PROJECT PROCEDURES FOR FORT HOOD). Take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. Segregate hazardous waste from other materials and wastes, protect it from the weather by placing it in a safe covered location, and take precautionary measures such as berming or other appropriate measures against accidental spillage. Storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations is the Contractor's responsibility. Transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. Dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials must be immediately reported to the Contracting Officer and the Facility Environmental Office. Cleanup and cleanup costs due to spills are the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.5.4 Fuel and Lubricants

All above ground POL storage tanks installed shall be designed for aboveground storage of flammable and combustible liquids at atmospheric pressure and must comply with the latest edition of National Fire Protection Association NFPA 30 Flammable and Combustible Liquids Code. Tanks shall be of double wall construction and provide complete secondary containment of the primary storage tank's contents by an impervious outer wall. The double wall meets the EPA's secondary containment requirements and does not require an external berm. Thermal insulation that provides a minimum two-hour fire rating shall be installed at the factory within the interstitial space between the inner and outer wall. The tank's primary and secondary containment must be tested for tightness in the factory and in the field before commissioning. Inner and Outer Tank shall be manufactured in accordance with UL-142 Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids. Entire tank shall be labeled for Underwriters Laboratories UL 2085 Standard for Insulated Secondary Containment Aboveground Tank for Flammable Liquids. The tank design shall comply with UL 2085 "Protected" Tank standard and shall be tested for Ballistics, Impact, Hose Stream, and Pool Fire UL-2085 performance standards. Each tank shall be delivered as a complete UL-listed assembly with two factory supplied, welded-on saddles to keep tanks off the ground and to permit viewing underneath the tank. Tanks to be set level on a solid foundation. Tank exterior must be chalk white or white in color and protected with a non corrosive coating. Each tank shall be grounded and bonded as specified in NFPA 30. The exterior of all POL storage tanks must be clearly labeled with the contents of the tank and the NFPA 704 hazard identification label. For used product tanks the labels must use the term "Used" rather than "Waste". Lifting lugs shall be provided at balancing points to facilitate handling and installation where applicable. Tanks shall be installed according to manufacturer's recommendations. Tanks shall be supplied with all components necessary to operate and required by NFPA and EPA as listed below:

- . One 2" - Interstitial Monitoring Port
- . One 2" - Normal Working Vent, Primary Tank; top must be at least 12 feet above ground
- . One 4", 6", or 8" - Emergency Vent, Primary Tank
- . One 4", 6", or 8" - Emergency Vent, Secondary Tank

- . One 2", 4" or 6" - Product Fill with 7 gal. Spill/Overfill Container designed so liquids will automatically flow into fill port. Top of fill tube should be flush with bottom of spill container
- . One 2" or 4" - Product Pump or Supply
- . One 2" or 4" - Direct Read Liquid Level Gauge

A single walled tank will only be allowed temporarily for construction sites and must be equipped with secondary containment in accordance with provisions of 40 CFR 112, 302 and 30 TAC 334. Storage tanks must have a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation, usually 110% of the largest container. Basin materials must be compatible with the products stored in the tanks. Single walled tanks will not be allowed for permanent installation on Fort Hood.

3.5.5 Waste Water

Disposal of waste water will be as specified below.

- a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. will not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. Dispose of the construction related waste water off-Government property in accordance with all Federal, State, Regional and Local laws and regulations.
- b. For discharge of ground water, the Contractor will obtain a State or Federal permit specific for pumping and discharging ground water prior to surface discharging.
- c. Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing will be discharged into the sanitary sewer with prior approval and/or notification to the Waste Water Treatment Plant's Operator.

3.6 RECYCLING AND WASTE MINIMIZATION

Participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of the project. .

3.7 NON-HAZARDOUS SOLID WASTE DIVERSION REPORT

Maintain an inventory of non-hazardous solid waste diversion and disposal of construction and demolition debris. Submit a report to Installation's Solid Waste Program Office through the Contracting Officer on the first working day after each month, starting the first month that non-hazardous solid waste has been generated. Include the following in the report:

- a. Construction and Demolition (C&D) Debris Disposed = _____ in cubic yards or tons, as appropriate.
- b. Construction and Demolition (C&D) Debris Recycled = _____ in cubic yards or tons, as appropriate.
- c. Total C&D Debris Generated = _____ in cubic yards or tons, as appropriate.

- d. Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount) = _____ in cubic yards or tons, as appropriate.

3.8 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources will be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. Cease all activities that may result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

3.9 BIOLOGICAL RESOURCES

Minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The protection of threatened and endangered animal and plant species, including their habitat, is the Contractor's responsibility in accordance with Federal, State, Regional, and local laws and regulations.

3.10 INTEGRATED PEST MANAGEMENT

In order to minimize impacts to existing fauna and flora, the Contractor through the Contracting Officer, must coordinate with the Installation Pest Management Coordinator (IPMC) Project Pesticide Coordinator (PPC) at the earliest possible time prior to pesticide application. Discuss integrated pest management strategies with the IPMC and receive concurrence from the IPMC through the COR prior to the application of any pesticide associated with these specifications. Installation Project Office Pest Management personnel will be given the opportunity to be present at all meetings concerning treatment measures for pest or disease control and during application of the pesticide. The use and management of pesticides are regulated under 40 CFR 150 - 189.

3.10.1 Pesticide Delivery and Storage

Deliver pesticides to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Store pesticides according to manufacturer's instructions and under lock and key when unattended.

3.10.2 Qualifications

For the application of pesticides, use the services of a subcontractor whose principal business is pest control. The subcontractor must be licensed and certified in the state where the work is to be performed.

3.10.3 Pesticide Handling Requirements

Formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and use the clothing and personal protective equipment specified on the labeling for use during all phases of the application. Furnish Safety Data Sheets (SDS) for all pesticide products.

3.10.4 Application

Apply pesticides using a State Certified Pesticide Applicator in accordance with EPA label restrictions and recommendation. The Certified Applicator must wear clothing and personal protective equipment as specified on the pesticide label. The Contracting Officer will designate locations for water used in formulating. Do not allow the equipment to overflow. All equipment must be inspected for leaks, clogging, wear, or damage and repaired prior to application of pesticide.

3.11 PREVIOUSLY USED EQUIPMENT

Clean all previously used construction equipment prior to bringing it onto the project site. Ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. Consult with the USDA jurisdictional office for additional cleaning requirements.

3.12 MAINTENANCE OF POLLUTION FACILITIES

Maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.12.1 Storm Water Pollution Prevention Plan

For construction sites covered by a General Construction Permit for Storm Water Discharges, the Contractor's quality control organization shall inspect pollution control structures and activities in accordance with the applicable Storm Water Construction General Permit and Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN until final stabilization is achieved. A sample Inspection Report form is included in Section 01 57 25.00 44 SWPP PLAN INSPECTION AND MAINTENANCE REPORT FORM. An inspection report for each inspection shall be retained on site by the Contractor. In

addition, the Contractor shall furnish a copy of each report to the Contracting Officer.

3.13 MILITARY MUNITIONS

In the event military munitions, as defined in 40 CFR 260, are discovered or uncovered, the Contractor will immediately stop work in that area and immediately inform the Contracting Officer.

3.14 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel must be trained in all phases of environmental protection and pollution control. Conduct environmental protection/pollution control meetings for all personnel prior to commencing construction activities. Additional meetings must be conducted for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

3.15 POST CONSTRUCTION CLEANUP

The Contractor will clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". Unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area must be graded, filled and the entire area seeded unless otherwise indicated.

Excavation, filling, and plowing of roadways will be required to restore the area to near normal conditions and permit the growth of vegetation thereon. The disturbed areas shall be graded and filled. Sufficient topsoil shall be spread to provide a minimum depth of 4 inches of suitable soil for the growth of grass. Seed the entire area seeded, and provide a uniform perennial vegetative cover with a density of 70 percent established. Restoration to original contours is not required.

3.16 HAZARDOUS SUBSTANCE REPORTING

Comply with the requirements of Sections 301 through 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as Superfund Amendments and Reauthorization Act (SARA) Title III, as published in 40 CFR Part 355, and with all state regulations and procedures which result from EPCRA and the hazard communication program requirements of EM 385-1-1. The following planning and reporting requirements involve the Contractor's reporting requirements but are not all inclusive; i.e. transport regulations are not addressed. It is the Contractor's responsibility to comply with all Federal, state, and local emergency planning and reporting requirements.

3.16.1 Definitions and Acronyms

3.16.1.1 CERCLA Hazardous Substance (CHS)

A CERCLA Hazardous Substance (CHS) is any substance listed in Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act, also referred to as Superfund; the list of substances also appears in Table 302.4 of 40 CFR 302.

3.16.1.2 Contracting Officer (CO)

For purposes of the Emergency Planning and Community Right-to-Know Act (EPCRA), the Contracting Officer (CO) will be considered the site owner or operator's construction representative.

3.16.1.3 Extremely Hazardous Substance (EHS)

An Extremely Hazardous Substance (EHS) is any substance listed in Appendices A and B of 40 CFR 355.

3.16.1.4 Facility Emergency Coordinator (FEC)

Facility Emergency Coordinator (FEC) is the representative of the facility Owner or Operator. The Contractor shall identify the FEC and notify the FEC as described below each time the Contractor brings a hazardous substance onto the construction site.

3.16.1.5 Hazardous Chemical Substance (HCS)

A Hazardous Chemical Substance (HCS) is any substance defined as hazardous under 29 CFR 1910.1200, with exceptions as listed in 40 CFR 370.2; generally any substance with a Safety Data Sheet (SDS).

3.16.1.6 Reportable Quantity (RQ)

Reportable Quantity (RQ) is a specified minimum amount of a CHS or an EHS which, if released, must be reported immediately to the FEC. The RQ for a CHS is listed in Table 302.4 of 40 CFR 302; the RQ for an EHS is 0.45 kg (1 pound).

3.16.1.7 Threshold Planning Quantity (TPQ)

Threshold Planning Quantity (TPQ) is a specified minimum amount of an EHS which, if brought onto the construction site, must be reported within a stated time to the FEC. The TPQ for an EHS is listed in Appendices A and B of 40 CFR 355 or is the quantity published in state code, whichever is less.

3.16.1.8 Threshold Quantity (TQ)

Threshold Quantity (TQ) is the quantity listed as the Threshold Inventory Quantity for hazardous substances in Title 33 of the Louisiana Administrative Code, Part V, Subpart 2, Chapter 101.

3.16.2 Hazardous Substance Reporting

Whenever a HCS or an EHS substance is brought onto the construction site, the Contractor shall submit the attached reporting form to the FEC, the fire department with jurisdiction over the site, and the Contracting Officer as described below:

a. within 5 days for an EHS substance which (1) equals or exceeds its TPQ, or (2) is a solid or liquid weighing 225 kg (500 pounds) or more, whichever is less, or

b. within 10 days for a HCS substance which equals or exceeds 10,000 pounds for a solid or 55 gallons for a liquid .

3.16.3 Emergency Release Notification for Listed Hazardous Substances

The Contractor shall immediately notify the FEC and the Contracting Officer if there is a release of an EHS or a CHS substance whose quantity equals or exceeds its RQ.

Notification is also required if the following substances are released into the environment:

a. 5,000 pounds or more of any dry solid substance which is an HCS but not an EHS or a CHS,

b. 100 pounds or more of compressed inflammable gas or an inflammable liquid which is an HCS, or

c. 500 pounds or more of any other liquid which is an HCS but not an EHS or CHS.

3.16.3.1 Emergency Notification Information

Emergency notifications shall consist of the following information:

a. The Contractor's name, the name and telephone number of the person making the report, and the name and telephone number of the Contractor's contact person;

b. The chemical name and identification;

c. An estimate of the quantity released;

d. The location of the release;

e. The time and duration of the release;

f. The medium receiving the release (air, land, water);

g. Known acute or chronic health risks;

h. Medical advice when necessary; and

i. Recommended community precautions.

3.16.3.2 Follow-Up Notice

Within 5 days of the release, a written follow-up notice of the release shall be provided to the FEC and the Contracting Officer. The written notice shall update information provided in the initial report, provide detailed information on the response actions taken, and provide advice regarding medical attention necessary for exposed individuals.

3.16.3.3 State EPCRA Agency

The Contractor may call the following agency for information about EPCRA requirements:

Texas Department of Health
Hazard Communication Branch
West 49th Street
Austin, Texas 78756
Telephone Numbers: 1-800-452-2791 (inside Texas)
512-834-6603 (outside Texas)

3.17 FORMS

The EMERGENCY PLANNING COMMUNITY RIGHT TO KNOW NOTIFICATION form is attached to the end of this Section.

-- End of Section --

State of _____

EMERGENCY PLANNING COMMUNITY RIGHT TO KNOW NOTIFICATION FORM

Date _____

This is a notification that the facility named below stores or has stored a Hazardous Chemical Substance (HCS) or an Extremely Hazardous Substance (EHS) as listed in Section 302(c), Title III of SARA - Emergency Planning and Community Right-to-Know Act of 1986.

INSTRUCTIONS: Print or type all information, except signature.

Name of Construction Facility

Storage Location of HS/EHS

Address

Facility Emergency Coordinator

City State Zip Code

Telephone Number

Name and Company of Person
Completing Form

Signature of Person Completing Form

CHEMICAL DESCRIPTION

CHEMICAL CHARACTERISTICS

Product Name

Description Hazard

Chemical Name(s)

Pure Fire

CAS Number(s)

Mixture Pressure

Maximum Quantity On-Site

Solid Reactivity

Average Daily Quantity On Site

Liquid Acute

Gas Chronic

FOR EHS or CHS

TYPE OF HAZARDOUS SUBSTANCE

EHS CHS

Threshold Planning Quantity

Reportable Quantity

SECTION 01 57 23

TEMPORARY STORM WATER POLLUTION CONTROL

PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM D 4439	(2004) Geosynthetics
ASTM D 4491	(1999a; R 2009) Water Permeability of Geotextiles by Permittivity
ASTM D 4533	(2004) Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	(2008) Grab Breaking Load and Elongation of Geotextiles
ASTM D 4751	(2004) Determining Apparent Opening Size of a Geotextile
ASTM D 4873	(2002) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 832-R-92-005	(1992) Storm Water Management for Construction Activities Developing Pollution Preventions and Plans and Best Management Practices
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U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 122.26	Storm Water Discharges (Applicable to State NPDES Programs, see section 123.25)
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1.2 SYSTEM DESCRIPTION

The work consists of implementing the storm water pollution prevention measures to prevent sediment from entering streams or water bodies as specified in this Section in conformance with the requirements of Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION, Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN, and the requirements of the National Pollution Discharge Elimination System (NPDES) permit or applicable state Pollution Discharge Elimination System.

1.3 EROSION AND SEDIMENT CONTROLS

1.3.1 Stabilization Practices

The stabilization practices to be implemented include temporary seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, erosion control mats, protection of trees, preservation of mature vegetation, etc. On the daily CQC Report, record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, embankment, and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated.

1.3.1.1 Unsuitable Conditions

Where the initiation of stabilization measures by the fourteenth day after construction activity permanently ceases or is precluded by unsuitable conditions caused by the weather, initiate stabilization practices as soon as practicable after conditions become suitable.

1.3.1.2 Burnoff

Burnoff of the ground cover is not permitted.

1.3.1.3 Protection of Erodible Soils

Immediately finish the earthwork brought to a final grade, as indicated or specified, and protect the side slopes and back slopes upon completion of rough grading. Plan and conduct earthwork to minimize the duration of exposure of unprotected soils.

1.3.2 Erosion, Sediment and Stormwater Control

a. Storm Water Notice of Intent for Construction Activities

e. Submit a Storm Water Notice of Intent for NPDES coverage under the general permit for construction activities and a Storm Water Pollution Prevention Plan (SWPPP) for the project to the Contracting Officer prior to the commencement of work. The SWPPP shall meet the requirements of the State of Texas general permit for storm water discharges from construction sites. Submit the SWPPP along with any required Notice of Intent, Notice of Termination, and appropriate permit fees, via the Contracting Officer, to the appropriate Texas Commission of Environmental Quality (TCEQ) point of contact for approval, while meeting the required waiting periods for document submission and land disturbance commencement. Maintain an approved copy of the SWPPP at the construction on-site office, and continually update as regulations require, to reflect current site conditions. Include within the SWPPP:

- (1) Identify potential sources of pollution which may be reasonably expected to affect the quality of storm water discharge from the site.
- (2) Describe and ensure implementation of practices which will be used to reduce the pollutants in storm water discharge from the site.
- (3) Ensure compliance with terms of the State of Texas general

permit for storm water discharge.

(4) Select applicable best management practices from EPA 832-R-92-005.

(5) Include a completed copy of the Registration Statement, BMP Inspection Report Template and Notice of Termination except for the effective date.

(6) Storm Water Pollution Prevention Measures and Notice of Intent 40 CFR 122.26, EPA 832-R-92-005. Provide a "Storm Water Pollution Prevention Plan" (SWPPP) for the project. The SWPPP will meet the requirements of the State of Texas general permit for storm water discharges from construction sites. Submit the SWPPP along with any required Notice of Intent, Notice of Termination, and appropriate permit fees, via the Contracting Officer, to the TCEQ for approval, prior to the start of construction while adhering to the permit required waiting periods. A copy of the approved SWPPP will be kept at the construction on-site office, and continually updated as regulations require to reflect current site conditions.

1.3.3 Structural Practices

Implement structural practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Implement structural practices in a timely manner, during the construction process, to minimize erosion and sediment runoff. Include the following devices;

1.3.3.1 Silt Fences

Provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Properly install silt fences to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g. clearing and grubbing, excavation, embankment, and grading). Install silt fences in the locations and show on the SWPPP drawings. Final removal of silt fence barriers shall be after establishment of final stabilization. Obtain approval from the Contracting Officer prior to final removal of silt fence barriers.

1.3.3.2 Straw Logs or Waddles (Hay Bales are not acceptable)

Provide waddles/logs of straw as a temporary structural practice to minimize erosion and sediment runoff. If waddles/logs are used, properly place the waddles/logs to effectively retain sediment immediately after completing each phase of work (e.g., clearing and grubbing, excavation, embankment, and grading) in each independent runoff area (e.g., after clearing and grubbing in an area between a ridge and drain, place the waddles/logs as work progresses, remove/replace/relocate the waddles/logs as needed for work to progress in the drainage area). Show on the drawings areas where waddles/logs are to be used. The Contracting Officer will approve the final removal of straw barriers. Provide rows of waddles/logs of straw as follows:

- a. Along the downhill perimeter edge of all areas disturbed.
- b. Along the top of the slope or top bank of drainage ditches,

channels, swales, etc. that traverse disturbed areas.

c. Along the toe of all cut slopes and fill slopes of the construction areas.

d. Perpendicular to the flow in the bottom of existing drainage ditches, channels, swales, etc. that traverse disturbed areas or carry runoff from disturbed areas.

e. Perpendicular to the flow in the bottom of new drainage ditches, channels, and swales.

f. At the entrance to culverts that receive runoff from disturbed areas.

1.3.4 Sediment Basins

Trap sediment in temporary sediment basins. Select a basin size to accommodate the runoff of a local 10-year storm. Pump dry and remove the accumulated sediment, after each storm. Use a paved weir or vertical overflow pipe for overflow. Remove collected sediment from the site. Institute effluent quality monitoring programs. Install, inspect, and maintain best management practices (BMPs) as required by the general permit. Prepare BMP Inspection Reports as required by the general permit. If required by the permit, include those inspection reports.

1.3.5 Vegetation and Mulch

a. Provide temporary protection on sides and back slopes as soon as rough grading is completed or sufficient soil is exposed to require erosion protection. Protect slopes by accelerated growth of permanent vegetation, temporary vegetation, mulching, or netting. Stabilize slopes by hydroseeding, anchoring mulch in place, covering with anchored netting, sodding, or such combination of these and other methods necessary for effective erosion control.

b. Seeding: Provide new seeding where ground is disturbed. Include topsoil or nutriment during the seeding operation necessary to reestablish a suitable stand of grass.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Storm Water Pollution Prevention Plan
Storm Water Notice of Intent

Pollution prevention plan and Notice of intent for NPDES coverage under the general permit for construction activities

SD-06 Test Reports

Storm Water Inspection Reports for General Permit

Erosion and Sediment Controls

SD-07 Certificates

Mill Certificate or Affidavit

Certificate attesting that the Contractor has met all specified requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

Identify, store and handle filter fabric in accordance with ASTM D 4873.

PART 2 PRODUCTS

2.1 COMPONENTS FOR SILT FENCES

2.1.1 Filter Fabric

Provide geotextile that complies with the requirements of ASTM D 4439, and consists of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and contains stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. Provide synthetic filter fabric that contains ultraviolet ray inhibitors and stabilizers to assure a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F. The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE

PHYSICAL PROPERTY	TEST PROCEDURE	STRENGTH REQUIREMENT
Grab Tensile	ASTM D 4632	100 lbs. min.
Elongation (percent)		30 percent max.
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec-1
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

2.1.2 Silt Fence Stakes and Posts

Use steel posts for fence construction. Steel posts (standard "U" or "T" section) utilized for silt fence construction, shall have a minimum weight of 1.33 pounds/linear foot and a minimum length of 5 feet.

2.1.3 Mill Certificate or Affidavit

Provide a mill certificate or affidavit attesting that the fabric and factory seams meet chemical, physical, and manufacturing requirements specified above. Specify in the mill certificate or affidavit the actual Minimum Average Roll Values and identify the fabric supplied by roll identification numbers. Submit a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the filter fabric.

2.2 COMPONENTS FOR STRAW LOGS OR WADDLES

Use either wooden stakes or steel posts to secure the straw waddles/logs to the ground. Wooden stakes utilized for this purpose, shall have a minimum dimensions of 2 by 2 inches in cross section and have a minimum length of 2 feet. Steel posts (standard "U" or "T" section) shall have a minimum weight of 1.33 pounds/linear foot and a minimum length of 2 feet.

PART 3 EXECUTION

3.1 INSTALLATION OF SILT FENCES

Install silt fence as indicated on the Drawings.

3.2 INSTALLATION OF STRAW LOGS OR WADDLES

Place the straw waddles/logs in a single row, lengthwise on the contour, with endsoverlapping. Securely anchor each waddle/log by at least two stakes driven through the bale. Drive stakes or steel pickets a minimum 1 inches deep into the ground to securely anchor.

3.3 FIELD QUALITY CONTROL

Maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. Use the following procedures to maintain the protective measures.

3.3.1 Straw Logs or Waddle Maintenance

Inspect waddles/logs in accordance with paragraph, titled "Inspections". Pay close attention to the repair of damaged waddles/logs. Accomplish necessary repairs to barriers or replacement in a promptly manner. Remove sediment deposits when deposits reach one-half of the height of the barrier. At the each end of each row turn barrier uphill when used to retain sediment. Remove barrier when it is no longer required. The immediate area occupied by the barrier and any sediment deposits shall be shaped to an acceptable grade. Seed the areas disturbed by this shaping in accordance with UFGS Guide Specification 32 92 19 SEEDING.

3.3.2 Diversion Dike Maintenance

Inspect diversion dikes in accordance with paragraph, titled "Inspections," of this section. Pay close attention to the repair of damaged diversion dikes and accomplish necessary repairs promptly. When diversion dikes are no longer required, shape to an acceptable grade. Seed the areas disturbed by this shaping in accordance with UFGS Guide Specification 32 92 19 SEEDING.

3.4 INSPECTIONS

3.4.1 General

Inspect disturbed areas of the construction site, areas that have not been finally stabilized used for storage of materials exposed to precipitation, stabilization practices, structural practices, other controls, and area where vehicles exit the site.

3.4.2 Inspections Details

Inspect disturbed areas and areas used for material storage that are exposed to precipitation for evidence of, or the potential for, pollutants entering the drainage system. Observe erosion and sediment control measures to ensure that they are operating correctly. Inspect discharge locations or points to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Inspect locations where vehicles exit the site for evidence of offsite sediment tracking.

3.4.3 Inspection Reports

For each inspection conducted, prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, and all other requirements specified in the applicable Construction Storm Water General Permit. Furnish the report to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A copy of the inspection report shall be maintained on the job site. These reports shall be done weekly (every 7 days) or after ½" of rain or more and submitted to the Contracting Officer with the daily reports

3.4.4 Storm Water Pollution Prevention Plan (SWPPP) Revisions

In compliance with TPDES General Permit TXR 150000 and Section 01 57 24.01 44 STORM WATER POLLUTION PREVENTION PLAN, the Contractor is responsible to revise Storm Water Pollution Prevention Plan including the erosion control drawings. The current locations of storm control structures and types shall be depicted on the drawing portion of the on-site SWPPP for regulatory inspection and SWPPP revision record.

-- End of Section --

SECTION 01 57 24.01 44

STORM WATER POLLUTION PREVENTION PLAN (TEXAS)

PART 1 GENERAL

[FORT HOOD PROJECTS ONLY] : The SWPPP must be submitted to DPW-ENV for review at least 7 days (if not sooner) prior to land disturbing activities. In addition, all operators of the site must submit signed copies of the CSN (and NOI if greater than 5 acres is disturbed) to DPW-ENV at least 7 days (if not sooner) prior to land disturbing activities.

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.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 110	Protection of Environment: Subchapter D--WATER PROGRAMS, Discharge of Oil
40 CFR 112	Oil Pollution Prevention

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. When providing a resubmittal to address USACE review comments, the Contractor shall include annotated comment responses along with the resubmitted SWPPP (in its entirety). The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Storm Water Pollution Prevention Plan (SWPPP or SWP3); G

The construction Contractor site specific SWPPP shall prevent erosion, sediment loss from the construction site, and erosion down gradient of the developed property. To the maximum extent possible, the SWPPP shall (a) limit the area of disturbance to minimize soil loss and prevent the discharge of water quality impaired water from the construction site and (b) incorporate staged stabilization measures as work progresses throughout the duration of the project. The Contractor shall use the current forms (e.g., NOI, NOT, NOC, etc.) required by the TXR150000 Construction General Permit issued by the Texas Commission on Environmental Quality (TCEQ). Additionally, the Contractor shall maintain compliance with the Construction General Permit at all times (even when the Construction General Permit is revised by the

issuing agency).

The following summarizes some of the requirements that need to be implemented into the SWPPP as required by the TPDES TXR150000 Construction General Permit.

(1) The SWPPP shall comprise of three (3) major parts: (a) narrative, (b) drawings depicting structural and non-structural best management practices (BMPs), and (c) permit required documentation (attachments and worksheets) for record-keeping.

(2) The Contractor site specific SWPPP shall consider the phasing of project tasks with the timing of BMPs and construction activities. Additionally, the Contractor site specific SWPPP shall consider the diversion of storm water run-on onto the disturbed portions of the project site, including limiting the area of exposed soil, and retention of sediments from escaping the exposed portion of the site.

(3) The contract drawings depict recommended or suggested BMP types and locations. Any additional BMPs or modifications to the BMPs throughout the project need to be depicted on the drawings included in the SWPPP as well as the text within the SWPPP.

(4) During construction (after USACE approval of construction operation SWPPP), SWPPP or BMP revision is required when site conditions change and when situations arise that may cause potential permit non-compliance. The SWPPP or BMP revision shall be initiated when requested by the Area Office Contracting Officer (AOCO) or as deemed necessary following an inspection conducted by the Contractor designated inspector.

(5) The NOI (if required to be prepared per the applicable state Construction Storm Water General Permit) shall be separately submitted to all required parties by the construction Contractor and the USACE (if deemed applicable) as co-operators of the construction site.

(6) The Contractor shall sign the Certification of SWPPP, the delegation letter of signatory authorization, the NOI (if required to be prepared per the applicable state Construction Storm Water General Permit), and the Notice of Termination (NOT) as required by the applicable Construction Storm Water permit.

(7) The SWPPP must contain a list of regulated materials and construction materials and products, their location, and methods of containment for each product.

(8) The SWPPP must contain a list of wastes, their location, and method of containment.

(9) The SWPPP shall implement procedures that prevent post construction erosion from occurring. Some examples include the use of Scour Stop or equal as velocity dissipators or the placement of composite fiber turf reinforcement mats at down gradient channels.

(10) The following shall be depicted in the SWPPP drawings.

- (a) Location of fuel storage tank and/or fuel transfer points
- (b) Location of the concrete wash-out pit
- (c) Location of on-site or off-site approved construction support activities, including but not limited to Contractor laydown, storage, stockpile, borrow, spoil, parking areas and drainage features
- (d) Location of batch plant (if applicable) and drainage features
- (e) Location of the stabilized construction access

The following summarizes some of what is needed to be implemented into the SWPPP as required by the USACE.

- (1) The SWPPP drawings shall be prepared on site grading plans. The drawings shall include four phases or stages of Best Management Practices (BMP) structures layout: (a) initial BMP layout at site prior to clearing and grubbing, (b) interim BMP layout during grading activities, (c) temporary stabilization method and locations, and (d) final stabilization method and locations of application. Notes on timing controls and activities shall be described on the SWPPP drawings.
- (2) The SWPPP shall be prepared by a registered professional engineer, a Certified Professional in Erosion and Sediment Control (CPESC), or a licensed landscape architect who has experience with the applicable construction storm water permit as well as the use of sediment and erosion control best management practices (BMPs).
- (3) The Contractor designated inspector and any person responsible for maintaining SWPPP compliance with the applicable storm water permit and permit required activities shall attend training on storm water erosion and sediment control compliance/inspections provided by the EPA, state, or vendors (e.g., www.ieca.org, www.teex.org, www.stormwatercenter.org, etc.). The inspector shall provide training certificates from accredited vendors confirming course completion. Documented experience that deals with maintaining compliance with the applicable Construction Storm Water Permit may be substituted for the above mentioned training. Documented experience must be attached to the SWPPP.
- (4) The person responsible for maintaining the SWPPP shall provide briefing on the approved Construction Operation SWPPP to all on-site workers.
- (5) The SWPPP shall not be submitted to the USACE unless it has been verified to meet the requirements of the applicable state Construction Storm Water Permit. Prior to submitting the Notice of Intent (NOI) (if required per the applicable state Construction Storm Water permit) to all required parties, the construction operation SWPPP shall be approved by the USACE.
- (6) The SWPPP must contain the Safety Data Sheets (SDS) for each material on-site or provide a reference in the SWPPP on where the sheets can be found at the project site.

(7) The SWPPP must contain a list and identify the location and method of containment for each type of waste that is to be recycled during the project.

(8) The following shall be depicted on the SWPPP drawings.

(a) A statement that verifies an emergency spill clean-up kit and spill containment device is at fuel transfer points at all times.

(b) A statement that verifies fuel tanks or fueling trucks have overfill protection devices.

(c) Construction details for all BMPs used on the construction site (e.g., BMPs for the fuel storage areas, concrete wash-out pit, borrow area, batch plant, stabilized construction access, etc.)

(9) Include a copy of this Section.

SD-11 Closeout Submittal

Notice of Termination; G, PER-EE

If a NOI has been submitted, a copy of the original Notice of Termination (NOT) shall be submitted to the regulatory agency and to all required parties. Prior to submittal of the NOT, Contractor shall inspect the finished site with the Area Office Contracting Officer (AOCO) and obtain photographs to prove establishment of final soil stabilization and removal of BMP controls. A copy of NOT and photographs shall be provided to PER-EE (ATTN: Kathy Mitchell) through the AOCO. The construction Contractor shall retain all documents pertaining to Construction Storm Water Permit for at least three (3) years after NOT submittal.

1.3 SUMMARY

Copies of the general permit for storm water discharges associated with construction activity and instructions are available at the following web site:

http://www.tceq.state.tx.us/nav/permits/sw_permits.html
(PERMIT NO. TXR 150000 for large or small construction site)

The Contractor shall verify that the most current forms (e.g., NOI, NOC, NOT, etc.) are submitted with the SWPPP.

The Contractor shall not commence soil disturbance until approval of the site specific SWPPP is obtained from the USACE along with the USACE SWPPP certification, USACE Construction Site Notice, and USACE NOI (if applicable). Additionally, all required waiting periods as described in the TXR150000 Construction General Permit must also be met before soil disturbing activities may begin.

There is no separate payment for work required in this Section.

1.3.1 Site Operators, Responsibilities, and Shared SWPPP

Both the U.S. Army Corps of Engineers (USACE) and the construction Contractor meet the definitions as operators for the construction activities and operate under a shared SWPPP that addresses the requirements of the TXR150000 Construction General Permit.

The USACE employs other operators and has ability to approve or disapprove changes to plans and specifications. When site conditions change, and the approved SWPPP does not meet storm water permit stipulations, USACE will request the construction Contractor evaluate the BMP control structures or non-structural practices. The day-to-day operator shall install additional structural and non-structural BMP for compliance with storm water permit. The USACE operates under the TXR150000 Construction General Permit as a Secondary Operator.

The Contractor has operational control over construction plans and specifications, including the ability to make modifications to plans and specifications. In addition, the Contractor has day-to-day control of field activities ensuring compliance with storm water permit. The Contractor prepares the construction and operation specific SWPPP and is responsible to establish, inspect, maintain, and rectify the BMPs and perform SWPPP revisions, as well as document Storm Water permit implementation records for the duration of the contract. The Contractor operates under the TXR150000 Construction General Permit as a Primary Operator.

1.4 PROJECT IDENTIFICATION

PROJECT TITLE:Mission Training Center

LOCATION:Fort Hood, Texas

1.5 PROJECT DESCRIPTION

The scope of this project includes construction of new _____, storm sewer, sanitary sewer, _____, parking lots, access drives, sidewalks, lighting, security fence, communication system. The total project area of the new construction site is roughly 38 acres.

1.6 BID OPTIONS AND PROJECT PHASING

There are Bid Options for this project. They are:

Bid Option 1 - Intersection Signalization Plan

1.7 STANDARD INDUSTRIAL CLASSIFICATION (SIC)

1542 - General Contractors - Non-Residential Building, other than Industrial Buildings and Warehouses (i.e., administrative buildings)

1623 - Water, Sewer, Pipeline, and Communications and Power Line Construction

1771 - Concrete Work (includes asphalt; i.e., access drives and parking lots, culvert construction)

1794 - Excavation Work (include trenching and earth moving)

1.8 LOCATION

The new facility project site is within the city boundary of Fort Hood.

1.9 RECEIVING WATERS

The storm runoff from the new facility site flows northwest into an un-named storm drain, then flows north to Cowhouse Creek.

PART 2 SITE DESCRIPTION

2.1 EXISTING CONDITIONS

The site generally slopes from northwest.

2.2 FINAL CONDITIONS

NOTES: Describe site conditions and drainage upon completion of construction activities. Include estimates of future runoff coefficients. Describe features of the storm water system and storm water management (i.e., erosion control and velocity dissipation devices).

Completed facility site drainage will flow into bio retention basins, enhanced swales, extended detention basins and into an un-named creek.

2.3 CONSTRUCTION ACTIVITIES

The Contractor shall establish storm water BMP control structures prior to conducting site disturbing activities. The Contractor shall maintain temporary and permanent site stabilization at each portion of site.

The Contractor shall maintain a record of the START date of major construction site activities (i.e., clearing and grubbing, grading, trenching and excavation, dirt moving, etc.), the STOP date when construction activities cease on a portion of the site, and the START date of stabilization measures (such as sod, seeding with native seed, vegetative buffer strips, erosion control compost, turf reinforcement mat, SCOUR STOP, etc.). See SECTION 01 57 25.00 44 SWPP PLAN INSPECTION AND MAINTENANCE REPORT FORM for an example of a grading and stabilization log sheet.

2.4 SOILS DATA

The SWPPP narrative shall provide soils information of the proposed construction site. Possible sources of information are project soil reports, USDA soil survey data, and other published sources. Information can be found at <http://websoilsurvey.nrcs.usda.gov/>.

2.5 STORM WATER POLLUTION PREVENTION DRAWINGS

Each SWPPP drawing shall have a specific sheet number and title.

The following describes the items that need to be identified in the drawings of the SWPPP as required by the TPDES TXR150000 Construction General Permit.

(a) Existing site features and BMPs -- name of receiving waters (e.g., lake, stream, creek, river, unnamed tributary of named receiving stream,

etc.), project site storm water discharge locations, existing storm grates, outfall protection devices, and BMPs.

(b) Interim grading site drainage features and BMPs -- slopes with rough grading, limit of soil disturbance area, outline of areas not to be disturbed (e.g., vegetative buffer zones, cultural resources, wetlands, and areas of environmental concern), new storm grates, new drainage outfalls, and BMPs.

(c) Areas to receive temporary stabilization. Methods of stabilization shall be identified along with the applicable specification for the stabilization (e.g., native seed mix at a certain application rate in lbs/sq-ft, etc.).

(d) Areas to receive final stabilization. Methods of stabilization shall be identified along with the applicable specification for the stabilization (e.g., native seed mix at a certain application rate in lbs/sq-ft).

(e) On-site and off-site material borrow areas, clean dirt disposal areas, and BMPs. Stabilized access roads, construction support activities and laydown areas (equipment, staging, parking, and storage areas) along with the BMPs.

(f) Concrete or asphalt batch plant and BMP (if applicable).

The following describes the items that need to be identified in the drawings of the SWPPP as required by the USACE.

(a) BMP construction details for all erosion control and stabilization and sediment control BMPs (e.g., BMPs for the fuel storage areas, concrete wash-out pit, borrow area, batch plant, stabilized construction access, seeding type, silt fence, etc.)

(b) EROSION AND SEDIMENT CONTROL PLAN I (demolition site)

(c) EROSION AND SEDIMENT CONTROL PLAN II (existing site conditions depicting run-on flow diversion BMPs and run-off BMPs)

(d) EROSION AND SEDIMENT CONTROL PLAN III (interim site grading conditions depicting run-off BMP, swales BMP, storm grates BMP, and temporary stabilization areas & method specification)

(e) EROSION AND SEDIMENT CONTROL PLAN IV (complete site grading conditions depicting run-off BMPs, swales BMPs, storm grates BMPs, and final stabilization areas and method specification)

(f) Notes on timing of controls of activities

PART 3 BEST MANAGEMENT PRACTICES (BMPs)-EROSION AND SEDIMENT CONTROLS

3.1 TEMPORARY STABILIZATION

Stabilization measures shall be in conformance with Part III.F.2.b.iii of the TXR150000 Construction General Permit.

The Contractor shall provide all necessary labor, services, equipment, materials (e.g., fertilizer) to obtain, transport, apply, and maintain the temporary stabilized area until final stabilization is performed.

Some examples of acceptable methods for temporary stabilization include water sprinkling with environmental sustainable soil binders (e.g., products produced by Soilworks, LLC, DirtGlue Enterprises, SoilLok, or similar) or anchored straw mulching (typically applied at 2 tons per acre). The construction SWPPP may specify other forms of temporary stabilization methods that are industry accepted and are applicable for the project site conditions.

3.2 PERMANENT STABILIZATION

Stabilization measures shall be in conformance with Part III.F.2.b.iii and iv of the TXR150000 Construction General Permit.

The Contractor designated inspector shall inspect the site with the USACE AOCO to ensure final stabilization is established. Final stabilization is defined as described in Part I.B of the TXR150000 Construction General Permit. If final stabilization is unsatisfactory, additional measures shall be required by the USACE AOCO. If applicable, additional seeding shall be performed after temporary removal of the erosion control blankets and subsequent replacement of blankets after such activities are completed. If applicable, the Contractor's SWPPP shall specify the native seed mix species and application rate (lbs/sq-ft). Some examples of acceptable methods for permanent stabilization includes sodding, pavement, and rock blankets.

3.3 SEDIMENT BASIN

NOTE: Where attainable, the TPDES regulation requires a temporary sediment basin for sites where 10 acres or more are disturbed at one time. Requirements for a sediment basin are found on Part III.F.2(c) of the TXR150000 Construction General Permit.

The design-bid-build Contractor shall design the sediment pond in the design-bid build contract.

If the construction sediment pond will be re-graded for finished site storm water detention, the designer shall need to use TR-55 NRCS small watershed handbook or some other hydrograph routing based method. The rational method is only acceptable to size the construction sediment pond and it is not acceptable to size for finished site storm water management because it only provides peak flow rate.

The TPDES Storm Water Discharge General Permit requires a temporary sediment basin for sites where 10 acres or more are disturbed at one time. The disturbed site drains to a common location, a sediment pond or trap shall be constructed as initial grading activity. The pond shall be prepared by the site designer and it shall include layout and construction details. A series of smaller sediment basins are not attainable, therefore effective sediment controls (i.e. vegetative strips and silt fences) are established on all the down slope areas of the disturbed site perimeter to control sediment in runoff. Temporary sediment pond receives final grade as a permanent sediment pond to manage storm runoff at the finished site. The following elements are required if a sediment pond is constructed as an initial site activity: The slopes of sediment pond shall be stabilized with

an effective form of temporary/permanent stabilization (as applicable). The storm water shall be allowed to settle after each rainfall event before dewatering in accordance with the applicable Construction General Permit.

3.4 STRUCTURAL CONTROLS

See SECTION 01 57 23 TEMPORARY STORM WATER POLLUTION CONTROL.

3.5 NON-STRUCTURAL CONTROLS

The Contractor (and the subcontractors) shall be responsible for eliminating pollutants in storm runoff from the project site. The Contractor (and subcontractors) shall be responsible for utilizing non-structural BMPs to minimize storm water pollution. Some examples of non-structural BMP include:

- Construction Practices
- Material Management
- Waste Management
- Vehicle and Equipment Management
- Employee and Subcontractor Training
- Storm Water Pollution Prevention Plan Maintenance

3.5.1 Construction Practices

Dewatering Operations: The Contractor (and subcontractor) shall prevent discharge of sediment by methods of sediment control, containment, and disposal. In project areas suspected of potential toxic or petroleum products contamination, the water shall be tested to determine method of disposal.

Paving Operations: The Contractor (and subcontractor) shall avoid discharge of pollutants to storm drains by avoiding asphalt and concrete paving in wet weather or anticipation of such event, storing material in covered containers, covering and berming storage areas, establish control structures, cover on-site storm grates, and worker and subcontractor training.

Structure Construction and Painting: The Contractor (and subcontractor) shall prevent pollutants in storm runoff by covering, or berming material storage areas, keeping job site clean and orderly, using safer alternate products, stabilizing adjacent disturbed areas, storing material in secondary containment, protecting on-site storm drains, establish control structures, and perform worker and subcontractor training.

Solid Waste Materials: Trash and uncontaminated construction debris shall be placed in appropriate covered waste containers. Waste containers shall be emptied regularly and shall not be allowed to overflow. The disposal area of excavated material from project construction shall not be utilized for waste disposal. Routine janitorial service shall be provided for all construction buildings and surrounding grounds. No construction waste materials, including concrete, shall be buried or otherwise disposed of on-site. The Contractor shall brief all on site personnel on good house-keeping and waste minimization.

Stockpiles: Material shall have a storm water perimeter control devices established at a minimum distance of 10 feet from the toe of the stockpile. Materials excavated from utility trenching shall be protected from up gradient storm run-on.

3.5.2 Material Management

Material Delivery and Storage Practice: The Contractor (and subcontractor) shall prevent or reduce discharge of pollutants to storm water by minimizing the on-site storage of hazardous and toxic (HT) materials, storing HT in clearly labeled, corrosion-resistant containers with secondary containment at designated areas approved by the COR, conducting frequent inspection, keeping current inventory of construction materials on site and training of workers and subcontractor.

Material Use and Inventory: Common on-site materials are pesticides and herbicides, fertilizers, detergents, concrete material, petroleum-based products, fertilizers, tar, asphalt, steel reinforcing bars, other hazardous chemicals such as acid, lime, solvents, curing compounds, sealants, paints, glues, fertilizers, etc. The Contractor (and subcontractor) shall use less hazardous, alternate or environmental friendly material, if available. The Contractor shall have (1) a list of construction materials used on site, (2) a list of materials and associated potential pollutants, and (3) method of storage and containment in the Contractor operation specific SWPPP.

Spill Prevention and Control: The Contractor (and subcontractor) shall store HT material in covered containers and inside a fenced area, have the temporary fuel storage tank bermed or contained to meet applicable Fire Code, place readily accessible spill clean-up materials, have protocol for immediate work stoppage, notification, clean-up, labeling, storage and packaging, transportation, disposal, record-keeping, closure activities, and provide training to workers and subcontractor for response to spills.

3.5.3 Waste Management

Solid Waste: Solid waste materials (e.g., grout, mortar or uncontaminated debris) shall be placed in covered containers. Trees and shrubs from site clearing shall be shredded and used as mulching material [after] [for] site stabilization. Packaging materials such as wood, plastic, and paper shall be recycled to the maximum extent possible and not disposed of in a landfill. It is a requirement to perform recycling (see SECTION 01 74 19). The Contractor shall designate waste containers for segregating waste (municipal, metal, aluminum, plastic, wood pallet, packaging, glass, etc.) Dry paint cans shall be recycled. The Contractor shall designate waste disposal area, have a routine janitorial service for all structures and surrounding grounds, and have a routine schedule to service waste containers. The disposal area of excavated material from project construction shall not be utilized for solid or refuse waste disposal. Personnel on the job site shall be briefed on minimizing disposal to landfill by waste segregation and recycling.

Hazardous and Toxic Waste: All excess on-site material such as paints, solvents, petroleum products (e.g., fuel, oil, and grease, etc.), herbicides, pesticides, acids for cleaning masonry, concrete curing compounds, sealants, paint strippers, wastes from oil-based paint, and glues can become hazardous waste. Containers of excess material shall be labeled and managed according to the labels and as recommended by the product manufacturers. If there are no instruction provided, the Contractor shall turn in contained excess serviceable material to the installation DLADS or recycling program.

NOTE: DELETE IF REGULATED MATERIAL ABATEMENT IS NOT APPLICABLE TO

THE PROJECT.

Contaminated Soil: If suspicious of soil contamination during soil moving activities, the Contractor (and subcontractor) shall stop work, notify COR, and establish containment to prevent soil transport or runoff from that location. For removal of contaminated soil, a WORK PLAN shall be prepared for COR approval prior to handling and management of the material. The WORK PLAN shall at least include the following: containment, sampling & analyses, notification to regulatory agencies, transportation, worker safety, training & environmental monitoring, disposal, and documentation and record-keeping.

Construction and Concrete Waste: Construction waste or surplus materials, demolition building debris, scrap metal, rubber, plastic, glass, concrete, and masonry products shall be segregated and recycled to minimize landfill disposal. No construction waste shall be buried or disposed of on-site. Concrete waste shall be controlled and minimized by appropriate storage methods for dry and wet materials, and control the amount of concrete and cement mixed on site. Sweepings from exposed aggregate concrete shall be collected and returned to aggregate stockpile and they shall not be washed into streets or storm drains. Concrete wastewater from wash pit is not permitted to discharge as storm runoff. See SECTION 01 57 23 TEMPORARY STORM WATER POLLUTION CONTROL for additional concrete wash-out requirements. After project completion, the Contractor shall contain wastewater, clean the basin, test and dispose of wastewater and sediment in accordance with applicable regulations and to the satisfaction of the USACE AOCO. The Contractor is responsible for all fees, levies, and disposal cost and shall provide a treatment facility signed delivery ticket.

Sanitary/Septic Waste: On-site sanitary facilities shall be established at a convenient location. Facility location, design, maintenance, and waste collection practices shall be approved by COR and are in accordance with local regulations. The Contractor (and subcontractor) shall have a routine schedule for waste pump out by a licensed hauler. Septic waste treatment system shall have a pre-construction permit from the local health regulating agency and have contract service with a licensed company. Temporary sanitary facilities discharging to sanitary sewer system shall be approved by the operator of the system and properly connected to avoid illicit discharges. Wastewater from water-based paint shall not be discharged as sanitary waste.

Building Exterior Cleaning or High-pressure Wash: Storm drains shall be protected by approved storm water control device. Wash onto dirt area, spade in, settle solids in pit, collect (mop up) and discharge to sanitary sewer (with approval from sewer operator). If the exterior paint contains lead exceeding the levels stated in the Consumer Safety Standard, mercury or mildewcide, the wash water shall be collected and disposed of as regulated material that will require sampling data for disposal to permitted facility.

Street/Pavement Cleaning: Water used for this activity shall be minimized and sediment basin shall be used to contain wastewater. At completion of construction, the silt shall be removed and disposed of in accordance with applicable regulations, and water from the basin shall be pumped to a sanitary sewer with written approval from the COR.

Dechlorination of Wastewater from Disinfection of New Drinking Water System: Reference SECTION 33 11 00 WATER DISTRIBUTION.

Care of Storm Water from Excavated Areas: Storm water trapped in excavated areas shall be lifted or pumped into a temporary bermed sediment basin or equal measure(s) for sediments removal. The filtered water shall runoff as sheet flow from the sediment removal area. The sediment removal area shall have the maximum separation distance possible from the site drainage outfall.

3.5.4 Dust Control

See SECTION 01 56 00.00 44 DUST CONTROL.

3.5.5 Vehicle and Equipment Management

Off-site Vehicle Tracking: The Contractor is required to keep vehicles from tracking soils from the project, borrow, and disposal sites. Temporary parking area(s) to be used 30 calendar days or more for the Contractor's equipment or personal vehicles shall be paved with temporary asphalt. The temporary parking areas shall be removed by the Contractor upon project completion and restored to the satisfaction of the COR.

Vehicle and Equipment Cleaning: Washing shall be performed off site at a commercial washing facility that has an oil/water separator as pre-treatment before connection to municipal sewer system. No vehicle washing is allowed on site, unless washing involves the rinsing of a concrete truck and wastewater is trapped in a washout pit with secondary containment.

Vehicle and Equipment Fueling: Fueling shall be off-site unless a written approval is obtained. If fueling on-site is approved, it shall be at least 150 feet from drainage courses. The Contractor shall provide a construction detail to depict best management practices for fuel storage and fuel transfer/dispensing areas. Fueling operations shall avoid topping of fuel tank, and avoid mobile fueling of mobile construction equipment. Fueling locations shall use impervious secondary containment (i.e., a liquid-tight berm and an impermeable liner). The containment capacity of the bermed area shall provide at least 110 percent (%) of the stored fluid.

It is necessary to have a clean-up kit and containment bloom (or absorbent material) available at all times for immediate clean-up during fueling. No petroleum fuel, oil or lubricants or products tanks are allowed on-site unless is pre-approved in writing. Emergency cut-off valve and or overflow protection device is required on fuel transfer equipment. The temporary fuel containers placed on-site shall meet the industrial standard, labeled and stored in accordance with applicable Federal, state, and local Fire codes.

In case of spill of hazardous, toxic, and radiological waste (HTRW), the Contractor shall stop work, contain spill, notify the AOCO and Safety Office, and execute spill control per the SPILL CONTROL PLAN as required in specification SECTION

[01 57 20.00 10] [01 57 20.15 10] [01 57 20.16 10] [01 57 20.17 10] [01 57 20.19 10] ENVIRONMENTAL PROTECTION. Spill control, response, notification, clean-up, restoration, reporting, record-keeping, etc. shall be in accordance with 40 CFR 110 and 40 CFR 112, other applicable Federal, state, and local regulations, and to the satisfaction of the AOCO.

Vehicle and Equipment Maintenance: Outdoor vehicle or equipment maintenance is a significant potential source of storm water pollution. Activities often include engine repair, changing fluids, etc. Such

activities shall be prohibited at the job site. The construction Contractor shall verify proofs on routine maintenance of construction equipment and vehicles before bringing them to the job site.

Vehicle and Equipment Parking: Vehicle or equipment shall be regularly inspected for leaks and schedule routine maintenance to reduce the potential for leaks. If leaks are observed at the job site, such vehicle or equipment shall be repaired immediately or removed from the site.

3.5.6 Employee and Subcontractor Training

The Contractor is responsible for providing training for all workers (including the subcontractor) on the job site. The objectives in training are to provide a clear concept of activities or problems that generate pollutants to storm water, identify solutions (BMPs), promote ownership of the problems and solutions, and integrate feedback into training and BMP implementation. A certificate to verify completion of training shall be signed by all trained personnel and retained in the SWPPP.

3.5.7 Storm Water Pollution Prevention Plan Maintenance

The USACE approved SWPPP shall be readily available to inspector either from the USACE or regulatory agency. The USACE approved BMPs and SWPPP shall be revised at no cost by the construction Contractor when there are changes in site conditions, sequence of construction and operation, when sediments escape from the job site, or as dictated by the results of inspections. The BMPs and SWPPP shall be updated by the construction Contractor upon request of the USACE AOCO.

PART 4 STORM WATER MANAGEMENT AND PERMANENT CONTROLS

NOTE: The number and headings of these subsections will vary significantly from project to project. Use as many subsections as necessary to adequately describe erosion and sediment controls for the completed project site. While designing the site layout and grading plans, the design engineer should include features that will limit erosion and control sedimentation once project construction has been completed. Permanent structures may include curbs and gutters, storm drains, drainage ditches, culverts, pavement slopes, etc. Indicate storm frequencies and durations used for design purposes. Subsections may include, but are not limited to: RUNOFF COMPUTATIONS, STORM DRAINAGE SYSTEM, VEGETATIVE BUFFER STRIPS, DRAINAGE SWALES AND DITCHES, DRAINAGE CULVERTS and all measures discussed in SECTION 01 57 23 STORM WATER POLLUTION PREVENTION MEASURES. All sites for new construction and demolition shall be separately addressed. Units of measure used shall match the construction project.

The SWPPP designer shall determine if there are concerns associated with the discharges from sources other than storm water. The SWPPP designer shall consult with the construction Contractor to determine concrete washout pit capacity at the job site to provide total containment of concrete detention and the designed storm event.

4.1 RUNOFF COMPUTATIONS

The storm drainage design is based on a 25-year storm frequency.

4.2 SURFACE DISCHARGE QUALITY

The wastewater from concrete washing activity is prohibited from discharging as surface runoff. See Part 3.6.5 of SECTION [01 57 20.00 10] [01 57 20.15 10] [01 57 20.16 10] [01 57 20.17 10] [01 57 20.19 10] ENVIRONMENTAL PROTECTION.

4.3 PERMANENT EROSION CONTROL STRUCTURES AND STORM WATER TREATMENT UNIT

Permanent drainage structures, including concrete curbs and gutters, storm drainage system, concrete pavement, asphalt pavement, drainage swale, drainage ditch, turfing, vegetative strip, concrete culvert, pipe culvert, will provide erosion control at the project site.

Storm water treatment unit shall have a stainless steel expanded screen opening of at least 4700 microns (4.7 mm or 0.185 inches) to remove sediment.

4.4 OUTLET PROTECTION OR OUTFALL VELOCITY DISSIPATION DEVICES

NOTE: Identify velocity dissipation or outlet protection device to provide non-erosive flow conditions at the point of surface drainage discharge. New construction and demolition sites shall be addressed separately.

The outlet protection or outfall dissipation device shall provide non-erosive flow conditions at the point of surface water discharge to the ditch or swale and downstream of the outfall or channel. The proposed storm drain shall be discharged into flow channel. The drainage channels are protected by rip rap and seeding on prepared soil surface.

PART 5 TIMING OF CONTROLS AND ACTIVITIES

NOTE: Discuss the sequence of major construction activities and how the related pollution prevention measures will be implemented. Identify situations which are critical to successful construction and pollution prevention, but will not limit the Contractor's ability to determine construction phasing schedule. NOTES of Timing of Controls and Activities specific for each project shall be depicted on SWPPP drawings.

The general Contractor shall discuss timing (sequence) of controls and construction activities to minimize soil loss from exposed areas in the construction operation SWPPP.

The following list provides a general example of the Timing of Controls and Activities.

- Minimize area of disturbance,
- Preserve existing vegetation at the downgradient portion of the site, do not disturb ground cover until it is necessary to proceed with field work,
- Install stabilized construction access,
- Install BMPs at contractor staging, stockpiles, storage, parking,

borrow areas, and stockpiles (on-site and off-site locations), concrete washout pit, fuel storage/transfer area, etc.,

- Install BMP at existing storm grates (e.g., curb inlets surface inlets, manholes, catch basins, etc.),
- Install flow diversion dike and stabilize. Construct sediment trap at the downgradient end of the dike,
- Track weather and protect exposed areas with erosion control measures before anticipated storms arrive.
- Construct outfall, install BMPs at initial impact location, and stabilize flow channel prior to clearing upper watershed,
- Stage construction to the maximum extent possible by disturbing, protecting, and then stabilizing one side of river bank before disturbing the opposite side,
- Stabilize flow channel,
- Clear site for sediment pond (if applicable) and utilize sediment pond skimmer to control overflow,
- Stabilize pond slopes,
- Develop run-on BMP devices and protect loose soil areas,
- Start grading up gradient of site and stabilize disturbed areas,
- Avoid disturbing down slope areas of site until up-gradient disturbed areas are stabilized,
- Delay construction of infiltration measures until the end of project when drainage areas are stabilized,
- Install BMP protections at new storm grates (e.g., curb inlets surface inlets, manholes, catch basins, etc.),
- Protect excavated materials by installing BMP perimeter controls to protect materials from run-on and run-off
- Stabilize stockpiles and install BMPs at least 10 feet from the toe of the material,
- Backfill utility trenches in a timely manner to minimize erosion and soil loss,
- Monitor weather reports to schedule paving (asphalt or concrete), concrete saw cutting, foundation work, dust control, seeding or any activities that will impact run-off,
- Inspect and maintain BMP control structures,
- Evaluate BMP and revise BMP when site conditions or activities change. Assess non-storm water discharges. Maintain Construction General Permit and USACE required field records and training logs,
- Monitor discharge from concrete batch plant (if applicable),

- Maintain stabilized areas until final project acceptance (i.e., watering, fertilize, mow, additional seeding, etc.),
- Verify final stabilization of disturbed areas with AOCO representative. See definition in PART 2.3,
- Remove sediment and BMP control structures once disturbed areas are permanently stabilized and accepted by AOCO. Obtain photographs of site to prove establishment of stabilization and removal of all BMP controls,
- File the Contractor NOT. Provide a copy of NOT through AOCO to PER-EE.

PART 6 COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

NOTE: Army Regulation 200-1 requires that all Department of Defense installations and Contractors to comply with Federal environmental protection statutes, which includes a provision to observe State, and local environmental regulations.

The SWP3 shall identify the document prepared for compliance with the National Environmental Policy Act (NEPA) of 1969, as amended. It shall discuss impact on endangered and threatened species and their (critical) habitats, archeological, cultural and historical resources and properties, wetlands, floodplains, environmental contamination and compliance issue, water resources, ecological resource, land use, noise, air quality. The installation environmental office is responsible to prepare the NEPA document at the project pre-design stage. The Contractor shall request name NEPA compliance document (Record of Environmental Consideration, Environmental Impact Statement, Environmental Assessment), date of signature for findings (Record of Decision or Findings of No Significant Impact), and include information to PART 7.

In compliance with the Clean Water Act, Section 402, a construction site of 0.4 hectare (1 acre) in size, or larger, is required to obtain a National Pollutant Discharge Elimination System (NPDES) from EPA TPDES General Permit for Storm Water Discharges from Construction Activities.

Section 404 of the Clean Water Act (CWA) stipulates discharge of dredge and fill material with jurisdictional Waters of the United States. The civil engineer and environmental planner shall evaluate the proposed site compliance with CWA Section 404. For The proposed site shall be reviewed if it crosses drainage water ways or watersheds (dry creeks and streams could be Waters of U.S.) that are contributing to the Waters of United States. The review process sometimes involved wetland delineation to identify existing national permit coverage or issuance of a Clean Water Act Section 404 Permit. The permit or a permit coverage verification memorandum could require compensatory mitigation. The compensatory mitigation shall become the initial part of construction activity. The construction Contractor shall not start soil disturbing activities until the required compensatory mitigation is implemented or the soil disturbing activities are covered under existing national permit.

The civil engineer and environmental planner shall evaluate the proposed site compliance with Clean Water Act, Section 10, the Rivers & Harbor Act of 1899.

Section 401 of the Clean Water Act stipulates the on-site sewerage discharge. If an on-site sewerage system is required, the Contractor shall prepare drawings and mark-up specifications, obtain a pre-construction permit from the state, regional Environmental Quality Office, or County Health Department. The Contractor shall contact installation Environmental Office for application of on-site sewerage system pre-construction permit.

The Contractor shall resolve all permit compliance issues prior to disturbing soil.

The Contractor (including the subcontractor) shall comply with the Government approved Contractor's operation specific Storm Water Pollution Prevention Plan, BMP, and contract requirements as stated in this section. The Contractor (and the subcontractor) shall comply with all applicable Federal, state, and local hazardous, toxic, radiological (HTR) waste, municipal waste, sanitary and septic waste disposal regulations.

PART 7 MAINTENANCE AND INSPECTION PROCEDURES AND QUALIFICATION OF DESIGNATED INSPECTOR

The Contractor shall designate an inspector on site to ensure Storm Water Permit compliance and perform SWPPP quality control. All BMPs and control structures shall be inspected according to the requirements of Part III.F.7 of the TXR150000 Construction General Permit. The inspector shall inspect adjacent areas daily for direct clean-up of waste materials, debris, and fugitive sediment that are blown or washed off-site.

All protective measures used and identified in the SWPPP must have maintenance performed in conformance with Part III.F.6 of the TXR150000 Construction General Permit.

The designated SWPPP inspector is responsible for maintaining the SWPPP throughout the term of permit coverage in accordance with the TXR150000 Construction General Permit (i.e., Part III.7(d) and (e)). All deficiencies shall be corrected and recorded. An example of a form to record this information can be found in SECTION 01 57 25.00 44 SWPP PLAN INSPECTION AND MAINTENANCE REPORT FORM. A copy of each inspection report form shall also be provided to the AOCO.

PART 8 PROHIBITION ON NON-STORM WATER DISCHARGES

In accordance with the Part II.A.3 of the TXR150000 Construction General Permit, non-storm water discharges are prohibited during construction of the project, except for the non-storm water discharges listed below. The following list of non-storm water discharges from active construction sites are allowed and is developed based on the above guideline.

- (a) discharges from fire fighting activities
- (b) uncontaminated fire hydrant flushings
- (c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been

removed; and if local, state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust

(d) uncontaminated water used for dust control

(e) potable water sources including waterline flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharge are not expected to adversely affect aquatic life)

(f) uncontaminated air conditioning condensate

(g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents

(h) lawn watering and similar irrigation

The Contractor designated Storm Water Inspector shall perform routine inspection to ensure only allowable non-storm water discharges are occurring.

PART 9 CONTRACTOR COMPLIANCE AND CERTIFICATION

The construction Contractor shall use this Section as guidance on how to prepare a construction SWPPP that includes narrative, drawings (see PART 2.5 in this Section), and required worksheets. Prior to submitting the NOI (if required to be prepared per the applicable state Construction Storm Water General Permit) to the regulatory agency and all other required parties, the Contractor shall submit the operation and field specific SWPPP with a prepared and signed NOI attached for USACE review and approval. Additionally, a prepared Primary Operator Construction Site Notice shall also be prepared and submitted along with the SWPPP.

The construction Contractor and sub-contractor shall each prepare a SWPPP CERTIFICATION. The SWPPP CERTIFICATION assures responsibility and compliance with the permitted discharges of storm water during construction. As such, the SWPPP submitted for USACE review and approval shall have a SWPPP CERTIFICATION prepared and signed by the appropriate approval authority. The USACE sharing the approved SWPPP shall prepare a SWPPP CERTIFICATION and a Secondary Operator Construction Site Notice. All SWPPP certifications and site notices shall be included and retained in the SWPPP.

9.1 CONSTRUCTION SWPPP GUIDELINES

An adequate construction SWPPP includes a narrative, drawings, and required worksheets.

The narrative is a written statement to explain and justify the pollution prevention decisions made for a particular project. The narrative shall contain concise information about existing site conditions, construction phasing, BMP practices, construction schedule, and the performance the BMPs are expected to achieve, and actions to be taken if the performance goals are not achieved, and other pertinent items that may not be contained on the drawings.

The narrative shall identify all operators (see PART 1.3 in this Section).

The site grading plans provide a baseline to assist in the preparation of the SWPPP drawings. The drawings shall layout various BMP types, locations, and methods of stabilization in accordance with Part III.F.1(g) of the TXR150000 Construction General Permit and Part 2.5 of this Section.

The SWPPP shall also address the following.

- Describe the location, size, and characteristics of any wetlands, streams, or lakes that are adjacent or in close proximity to the site, and/or will receive discharges from disturbed areas of the project. Also delineate areas with high erosion potential including steep slopes. List Threatened and Endangered Species and Critical Habitats. List Cultural and Historical Resources.
- Clean Water Act Section 404 Memo or Permit Stipulations
- Septic System Permit
- Water well Permit
- Identify if concrete/asphalt plant is at site
(A batch plant may require coverage of an industrial operation permit)
- Spill Prevention and Control Measures per state or EPA and local requirements
- Spill Response

The general construction Contractor shall file a NOI as the primary operator of the construction site. Submitting by electronic means is the most efficient process for filing an NOI, and therefore recommended. However, the physical address for NOI submission and payment can be found on the NOI form.

9.1.1 On-Site Construction Document, Signage, And Record-Keeping

A copy of each of the following shall be maintained in the USACE approved SWPPP in accordance with the TXR150000 Construction General Permit.

- TPDES TXR 150000 general construction storm water permit,
- Primary Operator (Contractor) Construction Site Notice,
- Contractor NOI,
- Contractor Certification of SWPPP,
- Contractor Signatory Delegation Letter,
- Contractor BMP Inspection and Maintenance Report,
- Qualification documents (e.g., training certificates) for Contractor personnel that maintain any part of the SWPPP,
- Contractor log for recording Major Construction Activities and Subsequent Stabilization Practices,
- Contractor log for describing construction materials stored on-site, their potential pollutants, and method of containment,
- Contractor log for describing waste materials stored on-site and method of storage,

- Contractor's anticipated construction timeline schedule (that includes anticipated dates for soil disturbance),
- Contractor SWPPP training log (if batch plant operation is being conducted),
- Contractor NOT (once the project is complete and the NOT is submitted),
- Contractor Concrete or Asphalt Batch Plant sampling records (if batch plant operation is being conducted),
- USACE Certification of SWPPP,
- USACE NOI (if applicable),
- Secondary Operator (USACE) Construction Site Notice,
- Contractor and the USACE (if applicable) storm water discharge permits after receipt from the regulatory agency.

A copy of each of the following shall be maintained in accordance with USACE requirements.

- Contractor NOT (append a blank form in the SWPPP to be completed once project is finished and approved by the USACE AOCO),
- Contractor SWPPP Revision Log,
- The SWPPP shall contain label tabs or similar to clearly identify each item/section of the SWPPP,
- The SWPPP shall be retained at the project site at all times,
- A spill response action guide (i.e., TCEQ issued RG-285 and installation guide),
- Contractor SWPPP/BMP training log,
- Certification or Notification for a Drinking Water Well and/or Septic Sanitary Sewer System (if applicable).

The Contractor shall post the following near the main entrance of each construction access point.

- Primary Operator (Contractor) Construction Site Notice,
- Secondary Operator (USACE) Construction Site Notice,
- NOI (Contractor),
- NOI (USACE, if applicable),
- Contractor Storm Water Permit authorization letter,
- USACE Storm Water Permit authorization letter (if applicable).

All records pertaining to the Storm Water Permit for discharging water associated with construction site activities shall be maintained, by the construction Contractor, for a minimum of three (3) years from the date that a Notice of Termination (NOT) is submitted to the regulatory agency. See Part VI of the TXR150000 Construction General Permit.

9.1.2 Storm Water Discharge General Permit Fees And Fines For Non-Compliance

The Contractor shall be responsible for the initial Contractor storm water discharge permit NOI fee and any subsequent annual permit fees during construction (if required per the applicable state Construction Storm Water General Permit). In addition, if a batch plant is on-site, the Contractor is responsible to obtain samples of surface water discharged at the batch plant. A water sample for water quality analysis shall be analyzed by a state accredited laboratory and data shall be submitted to the regulatory agency for the batch plant operation as required by applicable permit regulations.

Any fines levied by regulatory agency regarding non-compliance with TPDES TXR150000 Construction General Permit shall be the Contractor's responsibility.

9.1.3 Regulatory Inspector Visits

If the regulatory agency inspector visits the job site, the workers shall notify the Contractor Designated Storm Water Inspector immediately. The Contractor's Designated Inspector shall contact the USACE AOCO immediately and both of them shall accompany the regulatory agency inspector to walk the construction site. The Contractor's Designated Inspector shall brief workers daily on the BMP and the SWPPP, logistics of a regulatory agency inspector site visit, and avoid having an unattended regulatory agency inspector on the job site. The Designated Inspector shall assign a responsible person in his/her absence to oversight the logistic of regulatory agency inspector site visit.

9.2 NOTICE OF TERMINATION (NOT)/COMPLETION REPORT

Notice of Termination (NOT) is applicable for construction activities that submit an NOI. If applicable, the regulatory agency will automatically send the annual storm water permit payment notice if a NOT is not received in the data base before a set date each year. The Contractor is responsible to pay any annual fee on a construction storm water discharge permit.

At establishment of final stabilization, the Contractor shall have USACE AOCO approve the project's final stabilization as well as remove sediment and BMP sediment controls, obtain pictures of the permanently stabilized site and removal of BMP controls, and written approval from USACE AOCO. The Contractor shall prepare a NOT and submit his/her own NOT to the appropriate regulatory agency and any other applicable contacts (i.e., MS4s, cities identified in the SWPPP, etc.). The Contractor shall provide two (2) copies of the filed NOT and site photos to the USACE AOCO. The AOCO shall retain a copy of the NOT as project closure documentation and forward the other copy of NOT and photos to CESWF-PER-EE.

For all other construction activities (i.e., ones that do not require a filing of an NOT), the Contractor shall file the proper documentation to the regulatory agency and any other applicable contact (i.e., MS4s, cities identified in the SWPPP, etc.) as described in the TXR150000 Construction General Permit. A copy of this document submittal shall be provided to the USACE AOCO. The AOCO shall retain a copy of the documents sent to the regulatory agency and other applicable contacts as project closure documentation and forward a copy of all the documents and photos to CESWF-PER-EE.

The Contractor is responsible for fines due to non-compliance with closure

documentation for the construction activity storm water discharge permit.

9.3 NOTIFICATION TO MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

NOTE: Modify this paragraph to fit the project's location. Include the appropriate MS4 contact information and delete the ones that do not apply.

A copy of NOI (for large construction site), a copy of the Notice of Change (NOC; if changes occurred after initial NOI is sent to the regulatory agency), and NOT shall be sent by the Contractor to all MS4s and any other applicable contacts (i.e., cities referred to in the SWPPP, etc.).

For small construction activities, the Contractor shall notify the MS4s and any other applicable contacts (i.e., cities referred to in the SWPPP, etc.) in the project area by submitting of a copy of the Small Construction Site Notice.

[**NOTES: Determine the MS4 notification requirement with user's environmental office. Delete if not applicable to the project site.**

The MS4 person of contact (POC), mailing address, and phone for this project is [_____].]

[**NOTES: MS4 notification for construction activities located at Fort Hood. Delete if it is not applicable to the project site.**

III Corps & Fort Hood
Attn: AFZF-PW-ENV (Riki Young)
Fort Hood, TX 76544-5028
254-287-6499]

-- End of Section --

NPDES Industrial Storm Water Worksheet (Construction)

National Database Information				General	
Inspection Type				Inspector Name	
NPDES ID Number				Telephone	
Inspection Date				Entry Time	
Inspector Type <i>(circle one)</i>	EPA	State	EPA Oversight	Exit Time	
Facility Type <i>(circle one)</i>	Commercial /Industrial	Residential	Municipal	Signature	

Facility Location Information					
Name/Location/ Mailing Address					
GPS Coordinates	Latitude		Longitude		
Receiving Water(s)					
Disturbed Area		Start Date		Stop Date	

Contact Information		
	Name(s)	Telephone
Name(s) and Role(s) of All Parties Meeting the Definition of Operator		
Facility Contact		
Authorized Official(s)		

Site Information: <i>(circle all that apply)</i>							
Nature of Project	Residential	Commercial/Industrial	Roadway	Private	Federal	State/Municipal	Other
Construction Stage	Clearing/Grubbing	Rough Grading	Infrastructure	Building Const.	Final Grading	Final Stabilization	

Basic Permit Information		
Permit Coverage <i>ESO Element 3 & 4</i>	Y	N
Permit Type	General	Individual
Permit notice/sign visibly posted including: copy of NOI, contact name & phone number, location of SWPPP <i>ESO Element 41</i>	Y	N
NOI Date		
If applicable, is waiver certification & approval on file?	Y	N

Basic SWPPP Information		
SWPPP Prepared & Available <i>ESO Element 5 & 30</i>	Y	N
SWPPP Contents Satisfactory <i>ESO Elements 5 - 31</i>	Y	N
SWPPP Implementation Satisfactory <i>ESO Elements 32 - 48</i>	Y	N
SWPPP Date		
<i>Intentionally left blank</i>		

NPDES Industrial Storm Water Worksheet (Construction)

SWPPP Review <i>(can be completed in office)</i>			
<u>General</u>	Notes:		
Is there a SWPPP? <i>ESO Element 5</i>	Y	N	
SWPPP completed prior to NOI submission? <i>ESO Element 6</i>	Y	N	
Copy of permit language? <i>ESO Element 25</i>	Y	N	
Is SWPPP consistent with state/tribal/local regulations and permits? <i>ESO Element 26</i>	Y	N	
SWPPP updated to incorporate changes to State, Tribal, Local erosion plans? <i>ESO Element 27</i>	Y	N	
Have copies of inspection reports/all other documentation been retained as part of the SWPPP for 3 years from date permit coverage expires? <i>ESO Element 28</i>	Y	N	
Is a copy of the SWPPP on site or made available? <i>ESO Element 30</i>	Y	N	
Did all "operators" sign/certify the SWPPP? <i>ESO Element 31</i>	Y	N	
<u>Site Description</u>	Notes:		
SWPPP identifies potential sources of pollution? <i>ESO Element 7</i>	Y	N	
SWPPP identifies all operators and their areas of control? <i>ESO Element 8</i>	Y	N	
Is there a site description? <i>ESO Element 9</i>	Y	N	
Nature/sequence of construction activity? <i>ESO Element 9A - 9B</i>	Y	N	
Total area of site and total area to be disturbed? <i>ESO Element 9C</i>	Y	N	
Is there a general location map? <i>ESO Element 9D</i>	Y	N	
Is there a site map? <i>ESO Element 9E</i>	Y	N	

NPDES Industrial Storm Water Worksheet (Construction)

Site Description (cont'd)			Notes:
Drainage patterns/outfalls on site map? <i>ESO Element 9F</i>	Y	N	
Area of soil disturbance on site map? <i>ESO Element 9F</i>	Y	N	
Location of major structural controls on site map? <i>ESO Element 9F</i>	Y	N	
Location of storm water discharges to a surface water on site map? <i>ESO Element 9F</i>	Y	N	
Location of materials or equipment storage on site map (on-site or off-site)? <i>ESO Element 9F</i>	Y	N	
Location/description industrial activities? <i>ESO Element 9G</i>	Y	N	
Name of Receiving water(s) or MS4 listed?	Y	N	<i>Note: Indicate whether receiving water is 303(d) listed.</i>
Does the SWPPP include dates of major grading activities, temporary/permanent construction cessation, and initiation of stabilization practices? <i>ESO Element 14</i>	Y	N	
Endangered Species Documentation? <i>ESO Element 23</i>	Y	N	
Controls to Reduce Pollutants			Notes:
Does the SWPPP include a description of all pollution control measures (BMPs) that will be implemented to control pollutants in storm water discharges, including sequence and which operator responsible for implementation? <i>ESO Element 10 A - C</i>	Y	N	
Does the SWPPP include a description of interim and permanent <i>stabilization practices</i> (e.g., seeding, mulching, riprap for the site)? <i>ESO Element 11; 12</i>	Y	N	

NPDES Industrial Storm Water Worksheet (Construction)

Controls to Reduce Pollutants (cont'd)			Notes:
Does the SWPPP identify the contractor(s) and timing by which <i>stabilization practices</i> will be implemented? <i>ESO Element 13</i>	Y	N	
Does the SWPPP include a description of <i>structural practices</i> (e.g., vehicle track-out, silt fences, sediment traps, storm drain inlet protection) for the site? <i>ESO Element 15</i>	Y	N	
Does the SWPPP identify the contractor(s) and timing by which <i>structural practices</i> will be implemented? <i>ESO Element 10B - 10C</i>	Y	N	
Does the SWPPP identify storm water management measures to address storm water runoff once the construction is completed (e.g., retention ponds, velocity dissipation controls)? <i>ESO Element 16</i>	Y	N	
Does SWPPP describe measures to prevent discharge of dredge/fill materials to waters of the U.S.? Does site have 404 permit? <i>ESO Element 17</i>	Y	N	
Does SWPPP describe measures to minimize off-site vehicle tracking and generation of dust? <i>ESO Element 18</i>	Y	N	
Does SWPPP describe controls for pollutants from storage of construction or waste materials? <i>ESO Element 19</i>	Y	N	
Does the SWPPP describe controls for pollutants from non-construction activities? <i>ESO Element 20</i>	Y	N	
Does SWPPP identify allowable non-storm water discharges? <i>ESO Element 21</i>	Y	N	
Does SWPPP ensure implementation of pollution prevention measures for non-storm water discharges? <i>ESO Element 22</i>	Y	N	
Is SWPPP revised when BMPs added/modified within 7 days after inspection reveals problems? <i>ESO Element 29</i>	Y	N	

NPDES Industrial Storm Water Worksheet (Construction)

Inspections	Notes:		
Inspections performed once every 7 days, or every 14 days within 24 hours of a rain event greater 0.5"? <i>ESO Element 32</i>	Y	N	
Inspections performed by qualified personnel? <i>ESO Element 33</i>	Y	N	
All disturbed areas and/or used for storage and exposed to rain inspected? <i>ESO Element 34</i>	Y	N	
All pollution control measures inspected to ensure proper operation? <i>ESO Element 35</i>	Y	N	
All discharge locations inspected if accessible, or if not accessible, are nearby downstream locations inspected? <i>ESO Element 36; 37</i>	Y	N	
Entrance/exit inspected for off-site tracking? <i>ESO Element 38</i>	Y	N	
Inspection report contain all required items and certified? <i>ESO Element 39; 40</i>	Y	N	

<u>Notes on SWPPP Review</u>

Site Description:

NPDES Industrial Storm Water Worksheet (Construction)

SWPPP Implementation *(complete in field)*

Stabilization Practices

**List and describe
stabilization
practices**
ESO Element 43, 48

(e.g., seeding, mulching, geotextiles, sod stabilization)

**Are stabilization
measures initiated
no more than 14
days after temporary
or permanent
construction
cessation?**
ESO Element 46

(e.g., indicate "yes" or "no"; if "yes", how long without stabilization measures?)

NPDES Industrial Storm Water Worksheet (Construction)

Structural Practices

List and describe structural controls

ESO Element 42, 43, 47

(e.g., silt fences, hay bales, storm drain inlet protection, sedimentation pond, rip rap, check dam, diversion structure, off-site vehicle track-out)

Non-Structural Practices

Street Cleaning
ESO Element 44

(e.g., describe measures taken to remove offsite accumulation of sediment)

Good Housekeeping & Waste Disposal Practices
ESO Element 45

(e.g., describe measures taken to prevent litter and debris from becoming a pollutant source)

NPDES Industrial Storm Water Worksheet (Construction)

Non-Structural Practices (cont'd)	
<p>Equipment Wash/ Maintenance Area <i>ESO Elements 43</i></p>	<p><i>(provide brief description)</i></p>
<p>Concrete Washout Areas <i>ESO Elements 43</i></p>	<p><i>(provide brief description)</i></p>
Miscellaneous	
<p>Evidence of Sediment Deposition to Surface Waters <i>*ESO Eligibility - if "yes," site not eligible for ESO</i></p>	<p><i>(e.g., significant turbidity observed in a receiving water body)</i></p>
<p>Pollution prevention measures for non- storm water discharges? <i>*ESO Eligibility - If evidence of non-allowable non-storm water discharges, site not eligible for ESO</i></p>	<p><i>(provide brief description and determine whether/if non-storm water discharges allowable)</i></p>

NPDES Industrial Storm Water Worksheet (Construction)

Miscellaneous (cont'd)

**Has implementation
of
additional/modified
BMPs been
completed before
next anticipated
storm event?**
ESO Element 43.C.1

(provide brief description)

Notes on SWPPP Implementation

NPDES Industrial Storm Water Worksheet (Construction)

Photograph Log

1.

*Insert additional rows as needed

Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

CONSTRUCTION CCI FOR LARGE SITES

Reg Ent Name : _____

Date : _____

Add ID _____

Investigator Name _____

Item No.	Description	Answer	Citations	Notes
1	Is the SWP3 readily available or available on-site? CGP Part II, Section D(3)(a)		281.25(a)(4)	
2	Was the SWP3 (for entire site or portions of site represented by the operator) completed and implemented prior to beginning construction? CGP Part II, Section D(3)(f)		281.25(a)(4)	
3	Was a NOI submitted prior to TCEQ at least 2 days prior to starting construction? CGP Part II, Section D(3)(b)		281.25(a)(4)	
4	Is the NOI posted at a location that is readily available and maintained until construction is completed? CGP Part II, Section D(3)(c)		281.25(a)(4)	
5	Was a signed copy of the NOI submitted to the operator of any MS4 receiving the discharge 2 days prior to construction? CGP Part II, Section D(3)(e)		281.25(a)(4)	
	SHARED SWP3			
1	Is there a shared SWP3? CGP Part III, Section A(1)			
2	Are there permit authorization numbers or the NOI dates if authorization numbers not received? CGP Part III, Section A(1)		281.25(a)(4)	
3	Are responsibilities for each of the operators clearly described? CGP Part III, Section A(2)		281.25(a)(4)	
	PLAN REVIEW AND MAKING PLANS AVAILABLE			
1	Is the SWP3 retained on site? If inactive or no storage location, does the notice describe SWP3 location? CGP Part III, Section D(1)		281.25(a)(4)	
2	If large construction, is a notice posted near the main entrance? If linear construction, is the notice posted where it is accessible to the public near where construction is actively underway? CGP Part III, Section D(2)		281.25(a)(4)	
3	Does the notice contain the following: TPDES general permit number or copy of NOI, name and phone number for an operator representative, description of the project, and SWP3 location? CGP Part III, Section D(2)		281.25(a)(4)	
	KEEPING PLANS CURRENT			
1	Was the SWP3 revised due to a change in: design, construction, operation or maintenance that had a significant effect on discharge of pollutants? CGP Part III, Section E(1)		281.25(a)(4)	
2	Was the SWP3 revised as a result of inspection or investigation results by authorized personnel that determined that it was ineffective in minimizing discharged pollutants? CGP Part III, Section E(2)		281.25(a)(4)	

CHECKLIST WORKSHEET

CONSTRUCTION CCI FOR SMALL SITES

Reg Ent Name : _____

Date : _____

Add ID _____

Investigator Name _____

Item No.	Description	Answer	Citations	Notes
	SMALL CONSTRUCTION ACTIVITIES DESCRIBED in PART II, SECTION D(1)			
1	Does construction activity occur in a county listed in Appendix A? CGP Part II, Section D(1)(a) If yes, proceed to the following questions...			
2	Is the construction activity initiated and completed (including either final or temporary stabilization of all disturbed areas) within the time frame identified in Appendix A? CGP Part II, Section D(1)(b)		281.25(a)(4)	
3	Is all temporary stabilization maintained to effectively reduce/prohibit erosion and final stabilization completed no later than 30 days after the end date designated in Appendix A? CGP Part II, Section D(1)(c)		281.25(a)(4)	
4	Did the permittee sign a completed construction site notice with certification statement? CGP Part II, Section D(1)(d)		281.25(a)(4)	
5	Is a signed copy of the construction site notice posted at the construction site? CGP Part II, Section D(1)(e)		281.25(a)(4)	
6	Was a signed and certified construction site notice submitted to the operator of any MS4 receiving the discharge 2 days prior to construction? CGP Part II, Section D(1)(f)		281.25(a)(4)	
7	Are supporting concrete/asphalt batch plants authorized for storm water or non-storm water discharges under an individual TPDES permit, another TPDES general permit, or an individual TCEQ permit where these discharges are disposed of by evaporation or irrigation? CGP Part II, Section D(1)(g)		281.25(a)(4)	
	SMALL CONSTRUCTION ACITIVITES NOT DESCRIBED in PART II, SECTION D(1)			
1	Is the SWP3 readily available or available on-site? CGP Part II, Section D(2)(a)		281.25(a)(4)	
2	Is the construction site notice signed and posted? CGP Part II, Section D(2)(b,c)		281.25(a)(4)	
3	Was a signed and certified construction site notice submitted to the operator of any MS4 receiving the discharge 2 days prior to construction? CGP Part II, Section D(2)(d)		281.25(a)(4)	
	SMALL CONSTRUCTION ACTIVITIES (1-5 ACRES) DESCRIBED IN CGP PART II, SECTION F			
1	Is the calculated rainfall erosivity R factor for the entire period of construction <5? CGP Part II, Section F(1)(a) If yes, proceed to the following...			
2	Did the operator submit a signed waiver certification form to the TCEQ at least 2 days before construction begins certifying that the construction will commence and be completed within a period when the R factor is <5? CGP Part II, Section F(b,c)		281.25(a)(4)	

CHECKLIST WORKSHEET

CONSTRUCTION CCI FOR SMALL SITES (Cont)

3	Did the construction activity extend beyond the approved waiver period? If yes, proceed to the following question...			
4	Was the R factor (<5) recalculated according to the additional time of the construction activity and was a new waiver submitted, or was authorization obtained under the general permit? (at least 2 days before the end of the original waiver period) CGP Part II, Sections F(3)(a-b)		281.25(a)(4)	

CHECKLIST WORKSHEET

CONSTRUCTION SWP3 CHECKLIST

Reg Ent Name : _____

Date : _____

Add ID _____

Investigator Name _____

Item No.	Description	Answer	Citations	Notes
	SITE DESCRIPTION			
1	Does the SWP3 include a description of the nature of the construction activity? CGP Part III, Section F(1)(a)		281.25(a)(4)	
2	Does the SWP3 identify any potential pollutants and sources? CGP Part III, Section F(1)(a)		281.25(a)(4)	
3	Does the SWP3 include a description of the intended schedule/sequence of construction activities? CGP Part III, Section F(1)(b)		281.25(a)(4)	
4	Does the SWP3 include the total number of acres of the entire property and total acres where construction activity will occur? (including off-site material storage areas, overburden and stockpiles of dirt, borrow areas)? CGP part III, Section F(1)(c)		281.25(a)(4)	
5	Does the SWP3 include data describing the soil or quality of any discharge from the site? CGP Part III, Section F(1)(d)		281.25(a)(4)	
6	Does the SWP3 include a map showing the general location of the site (city/county map)? CGP Part III, Section F(1)(e)		281.25(a)(4)	
7	Does the SWP3 include a site map? CGP Part III, Section F(1)(f)		281.25(a)(4)	
8	Does the site map include: drainage patterns and approximate slopes anticipated after major grading? areas of soil disturbance? locations of all major structural controls either planned or in place? location of planned stabilization practices? locations of off-site material, waste, borrow, fill, or equipment storage areas? surface waters adjacent to or in close proximity to the site? locations of storm water discharges from the site directly to a surface water body? CGP Part III, Section F(1)-(h)		281.25(a)(4)	
9	Does the SWP3 include the location and description of on-site support asphalt/concrete plants? CGP Part III, Section F(1)(g)		281.25(a)(4)	
10	Does the SWP3 include the name of the receiving waters? CGP Part III, Section F(1)(h)		281.25(a)(4)	
11	Does the SWP3 include a copy of the general construction permit? CGP Part III, Section F(1)(i)		281.25(a)(4)	
	EROSION AND SEDIMENT CONTROLS			
1	Are erosion and sediment controls designed to retain sediment on-site? CGP Part III, Section F(2)(a)(i)		281.25(a)(4)	
2	Are control measures properly selected, installed, and maintained according to the manufacturer's or designer's specifications? Was a control replaced or modified if deemed as damaged, performing inadequately, or used incorrectly? CGP Part III, Section F(2)(a)(ii)		281.25(a)(4)	

CHECKLIST WORKSHEET

CONSTRUCTION SWP3 CHECKLIST (Cont)

3	Is sediment removed from sediment traps/sedimentation ponds before design capacity is reduced by 50%? CGP Part III, Section F(2)(a)(iii)		281.25(a)(4)	
4	Are accumulations of sediment (if escaping the site) removed at a frequency to minimize further negative effects and prior to the next rain event (when feasible)? CGP Part III, Section F(2)(a)(iv)		281.25(a)(4)	
5	Are controls developed to limit offsite transport of litter, construction debris, and construction materials? CGP Part III, Section F(2)(a)(v)		281.25(a)(4)	
	STABILIZATION PRACTICES			
1	Does the SWP3 include a description of the interim and permanent stabilization practices, to include a schedule of implementation. GCP Part III, Section F(2)(b)		281.25(a)(4)	
2	Are the following records maintained or referenced in the SWP3: dates of major grading activities? dates when construction activities temporarily or permanently cease on a portion of the site? dates when stabilization measures are initiated? CGP Part III, Section F(2)(b)(ii)(a-c)		281.25(a)(4)	
3	Are stabilization measures initiated no more than 14 days in portions of the site where construction has temporarily or permanently ceased (excluding situations listed in CGP Part II, Section F(2)(b)(iii)(a-c)? CGP Part III, Section F(2)(b)(iii)		281.25(a)(4)	
	STRUCTURAL CONTROL PRACTICES			
1	Does the SWP3 include a description of structural controls used to divert flows away from exposed soils, limit contact with disturbed areas and lessen off-site transport of eroded soils? CGP Part III, Section F(3)		281.25(a)(4)	
2	For disturbed areas of 10 acres or more, were sedimentation basin(s) constructed to contain a 2-year, 24-hour storm event or provide 3,600 cubic feet of storage per acre drained? If sedimentations were not feasible, were equivalent measures implemented for down slope boundaries? CGP Part III, Section F(3)(a)		281.25(a)(4)	
3	Were adequate control measures implemented for disturbed areas less than 10 acres (may include sediment basins, silt fences, vegetation buffer strips, etc.) for down slope boundaries. CGP Part III, Section F(3)(b)		281.25(a)(4)	
	PERMANENT STORM WATER CONTROLS			
1	Does the SWP3 include a description of permanent pollution control measures for post construction storm water discharges? CGP Part III, Section F(4)		281.25(a)(4)	
	OTHER CONTROLS			
1	Are offsite vehicle tracking of sediments and dust generation minimized? CGP Part III, Section F(5)(a)		281.25(a)(4)	
2	Does the SWP3 include a description of construction and waste materials to be stored on site and controls for reducing pollutants from these materials? CGP Part III, Section F(5)(b)		281.25(a)(4)	

CHECKLIST WORKSHEET

CONSTRUCTION SWP3 CHECKLIST (Cont)

3	Does the SWP3 include a description of pollution sources from non-construction areas such as asphalt and concrete plants, with control measures to minimized pollutant discharges? CGP Part III, Section F(5)(c)		281.25(a)(4)	
4	Are velocity dissipation devices located at discharge locations and along the length of any outfall channel? CGP Part III, Section F(5)(d)		281.25(a)(4)	
	APPROVED STATE AND LOCAL PLANS			
1	Is the SWP3 consistent with federal, state, or local requirements for sediment/erosion site plans and site permits or storm water management site plans and site permits? CGP Part III, Section F(6)(a)		281.25(a)(4)	
2	Has the SWP3 been updated to remain consistent with changes in sediment erosion site plans, etc. by state or local officials, when given written notice? CGP Part III, Section F96)(b)		281.25(a)(4)	
	MAINTENANCE			
1	Are identified BMPs maintained in an effective operating condition according to CGP Part III, Section F(7)? CGP Part III, Section F(7)		281.25(a)(4)	
	INSPECTION OF CONTROLS			
1	Are inspections conducted at least once every 14 days and within 24 hours of the end of a storm event of 0.5 inches or greater or once every 7 days in the following areas: disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural controls, sediment and erosion controls, and locations where vehicles enter or exit the site? CGP Part III, Section F(8)(a)		281.25(a)(4)	
2	Are representative inspections conducted at least once every 14 days and within 24 hours of the end of a storm event of 0.5 inches or greater or every 7 days for utility line installation, pipeline construction, and other long, narrow, linear construction? CGP Part III, Section F(8)(b)		281.25(a)(4)	
3	Is the SWP3 revised as a result of inspection findings which indicate the need for maintenance or addition of bmps within 7 days following the inspections (including a bmp implementation schedule prior to the next storm event or as soon as practical)? CGP Part III, Section F(8)(c)		281.25(a)(4)	
4	Does the inspection report include: the scope of the inspection? name(s) and qualifications of personnel conducting the inspection? dates of the inspections? description of corrective actions taken as a result of inspections? identify instances of non-compliance? certification of report if no instances of non-compliance are found? meet signatory requirements? CGP Part III, Section F(8)(d)		281.25(a)(4)	
	NON-STORM WATER DISCHARGES			
1	Does the SWP3 identify all authorized non-storm water discharges? CGP Part III, Section F(9)		281.25(a)(4)	
2	Are appropriate pollution prevention measures implemented for eligible non-storm water components of the discharge? CGP Part III, Section F(9)		281.25(a)(4)	
	CONCRETE BATCH PLANTS NUMERIC EFFLUENT LIMITATIONS			

CHECKLIST WORKSHEET

CONSTRUCTION SWP3 CHECKLIST (Cont)

1	Are numeric effluent limitations monitored once/year for TSS, oil and grease, and pH? CGP Part IV, Section A		281.25(a)(4)	
2	Are the monitoring results in compliance with the numeric effluent limitations?		281.25(a)(4)	
3	Is the monitoring conducted and results recorded on a DMR for within the appropriate time frames? CGP Part IV, Section A		281.25(a)(4)	
	RECORDS			
1	Are records retained a minimum of 3 years from the date of the NOT? For activities not required to submit a NOT, are recording retained 3 years from the date final stabilization has been achieved on all portions of the site that is the responsibility of the permittee or another permitted operator has assumed control according to overall areas of the site that have not been finally stabilized? CGP Part V		281.25(a)(4)	

CHECKLIST WORKSHEET

CONSTRUCTION SWP3 CHECKLIST

SECTION 01 57 25.00 44

SWPP PLAN INSPECTION AND MAINTENANCE REPORT FORM

PART 1 GENERAL

The form identified below provides a baseline for an inspection report form that can be used while conducting SWPP Plan site inspections. Inspection reports must be prepared and documented in accordance with the applicable Construction Storm Water Permit (i.e., Part III.F.7 of the Texas TXR150000 Construction General Permit, Part IV.D.4 of the Louisiana LAR100000 Construction General Permit, Part III.D of the Louisiana LAR200000 Construction General Permit, and Part 4 of the NPDES General Permit for Storm Discharges from Construction Activities). The form provided below may not be applicable to all states and therefore needs to be verified by the Contractor that it is in compliance with the applicable construction general permit.

1.1 SWPP PLAN INSPECTION REPORT FORM

The following inspection is being performed in compliance with the applicable state's General Permit or the EPA NPDES permit, whichever is applicable, relating to discharges from construction activities (for the State of Texas it is Section F.8 of the TCEQ General Permit No. TXR150000; for the State of Louisiana it is LPDES Permit # LAR 100000 (LARGE construction activity) or LPDES Permit # 200000 (SMALL construction activity)).

STORM WATER PERMIT #: _____
PROJECT NAME: _____
PURPOSE OF INSPECTION: _____
INSPECTOR: _____ DATE: _____
_____ DAYS SINCE LAST RAINFALL ON: _____
AMOUNT OF LAST RAINFALL: _____ INCHES
() ONSITE RAIN GAGE () METEOROLOGICAL TOWER AT: _____
IS A CONSTRUCTION SITE NOTICE POSTED: _____
IF YES, LOCATION: _____
IS PERMIT ATTACHED TO PLAN: _____
IS PLAN CERTIFIED IN ACCORDANCE WITH REGULATIONS: _____

STABILIZATION CONTROL SECTION

For each area of the construction project, use this chart to track the dates of soil disturbing activity, identify stabilization measures, and monitor their effectiveness. Discharge locations should be inspected to check the effectiveness of these erosion control measures.

AREA	DATE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED (Y/N/TEMP)	STABILIZED WITH	CONDITION, COMMENTS
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS / STABILIZATION REQUIRED (if appropriate): _____

STRUCTURAL CONTROLS SECTION

Use this table to document the effectiveness of each structural control, such as silt fences, berms, riprap, etc. Copy this sheet as required. Discharge locations should be inspected to check the effectiveness of these erosion control measures. See the Installation's Storm Water/Surface Water Pollution Prevention Best Management Practices Guidance Document for correct installation/maintenance methods.

TYPE	LOCATION	INSTALLED CORRECTLY?	EVIDENCE OF EROSION?	MAINTENANCE REQUIRED
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

COMMENTS: _____

MATERIAL STORAGE AREAS

EVIDENCE OR POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM: _____

OTHER COMMENTS: _____

NON STORM WATER AND NON STRUCTURAL BMP CONTROLS

The following non-storm water discharges from active construction sites are allowed.

- discharges from fire fighting activities,
- uncontaminated fire hydrants flushing,
- water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local, state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust,
- uncontaminated water used for dust control,
- potable water sources including waterline flushings (excluding discharges of hypochlorinated water, unless the water is first dechlorinated and discharge are not expected to adversely affect aquatic life),
- uncontaminated air conditioning condensate,
- uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents,
- and lawn watering and similar irrigation

PROHIBIT DISCHARGING NEW WATER LINE DISINFECTION WASTEWATER AND CONCRETE WASHOUT PIT WASTEWATER. NEUTRALIZE CHLORINE RESIDUAL IN DISINFECTION WASTEWATER TO 4 PPM PER AWWA C651 AND METERED TO SANITARY SEWER OR DISCHARGE TO SEDIMENT POND. EVAPORATE WASHOUT PIT AND RECYCLE CONCRETE.

LOCATIONS WHERE VEHICLES ENTER OR EXIT SITE

EVIDENCE OF OFFSITE SEDIMENT TRACKING: _____

METHOD TO CORRECT _____

DATE COMPLETE _____

OFFSITE DISCHARGES

EVIDENCE OF SEDIMENT OR OTHER POLLUTANTS LEAVING SITE: () YES () NO

IF YES, LOCATION: _____

METHOD TO CORRECT _____

DATE COMPLETE _____

STORM WATER POLLUTION PREVENTION PLAN REVISION

If this inspection has revealed any issues that require an update to the SWPP Plan, include them here.

CHANGES REQUIRED TO THE SWPP PLAN (if appropriate): _____

REASONS FOR CHANGES (if appropriate): _____

LIST ANY ADDITIONAL LOCATIONS WHERE BMPs ARE NEEDED: _____

LIST ANY INCIDENTS OF NONCOMPLIANCE WITH SWPP PLAN AND NECESSARY MODIFICATIONS TO SWPP PLAN: _____

IS FACILITY IN COMPLIANCE WITH SWPP PLAN AND PERMIT? _____

If yes, this inspection must be properly signed and certified that the facility is in compliance.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name	Signature	Title	Date
------	-----------	-------	------

-- End of Section --

SECTION 01 58 00

PROJECT IDENTIFICATION

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EP 310-1-6a (2006) Sign Standards Manual, VOL 1

EP 310-1-6b (2006) Sign Standards Manual, VOL 2,
Appendices

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

preliminary drawing indicating layout and text content; G

1.3 PROJECT SIGN

1.3.1 Construction Project Signs (USACE)

Furnish the construction project sign package, maintain the signs during construction, and remove the signs from the job site upon completion of the project. The construction project sign package consists of two signs: one for project identification and the other to show the on-the-job safety performance of the contractor. The package shall conform to the requirements of EP 310-1-6a and EP 310-1-6b, specifically Section 16.

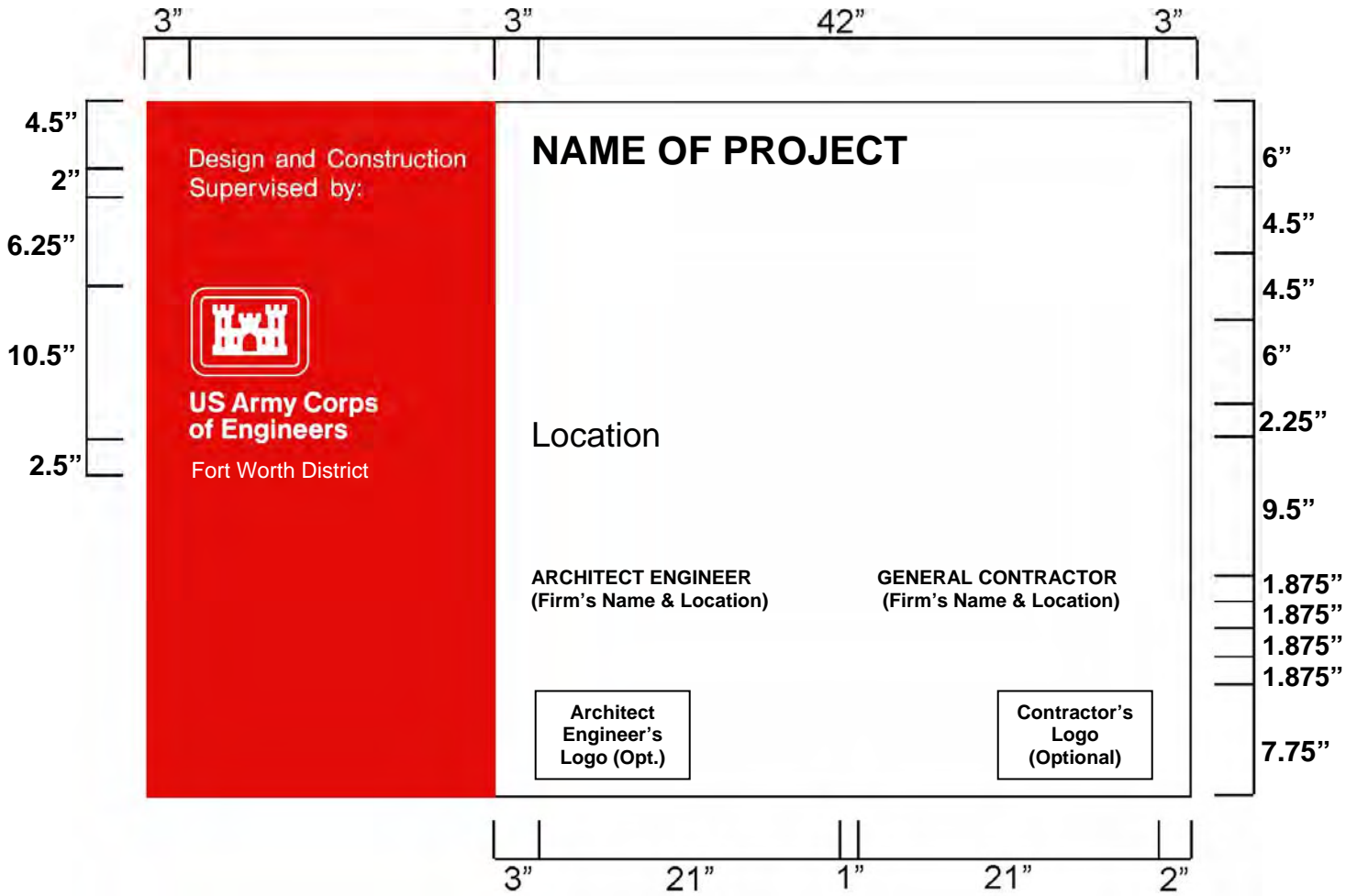
PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --



CONSTRUCTION SIGN SCHEDULE

Legend Group 1: One- to two-line description of Corps relationship to project. Color: White Typeface: 1.25" Helvetica Regular Maximum line length: 19"

Legend Group 2: Division or District Name (optional). Placed below 10.5" reverse Signature (6" Castle). Color: White Typeface: 1.25" Helvetica Regular

Legend Group 2a: One- to three-line identification of Military or Civil Works sponsor (optional). Place below Corps Signature to cross-align with Group 5a-b. Color: White Typeface: 1.25" Helvetica Regular Maximum line length: 19"

Legend Group 3: One- to three-line project title legend describes the work being done under this contract. Color: Black Typeface: 3" Helvetica Bold Maximum line length: 42"

Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military). Color: Black Typeface: 1.5" Helvetica Regular Maximum line length: 42"
Cross-align the first line of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Groups 5a-b: One- to five-line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional. Color: Black Typeface: 1.25" Helvetica Regular Maximum line length: 21"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.

Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-01	Various	4'x6'	4"x4"	HDO-3	48"	WH-RD/Bk

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the Construction Project Identification sign specified on page 16-2.

The graphic format, color, size and typeface used on the sign are to be reproduced exactly as specified below. The

title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

Safety record numbers are mounted on individual metal plates and are screw-

mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with 8" (outside diameter) Safety Green first aid logo.
Color: To match Pantone system 347
Typeface: 3" Helvetica Bold
Color: Black

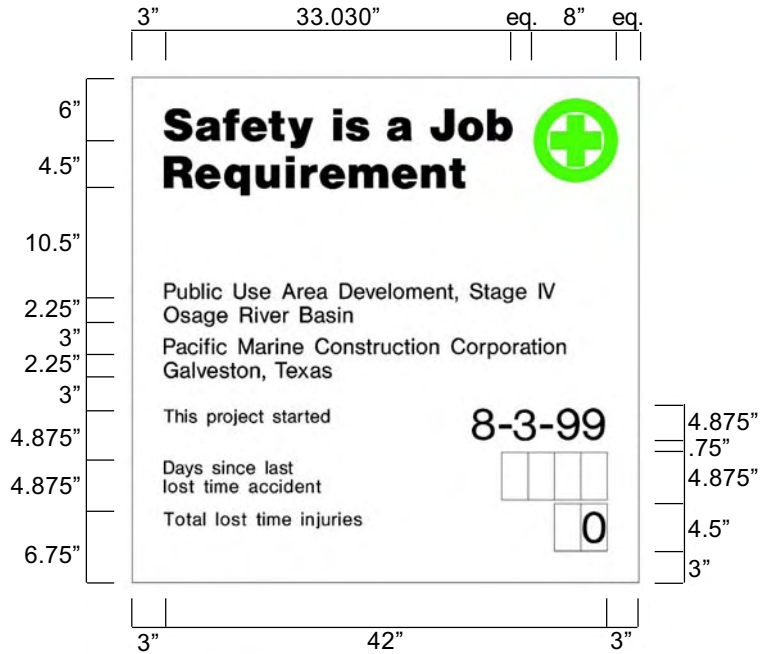
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Legend Group 3: One- to two-line identification: name of prime contractor and city, state address. Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

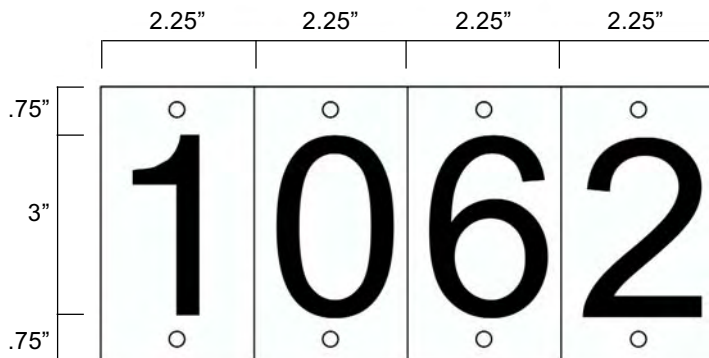
Legend Group 4: Standard safety record captions as shown.
Color: Black
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.
Color: Black
Typeface: 3" Helvetica Regular
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4'x4'	4"x4"	HDO-3	48"	WH/BK-SG



All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer representative and shall conform to the size, format, and typographic standards shown on pages 16-2 and 16-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

For additional information on the proper method to prepare sign panel graphics, contact the district Sign Program Manager.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white nonreflective vinyl film with positionable adhesive backing.

All graphics except for the Communication Red background with Corps Signature on the project sign are to be die-cut or computer-cut nonreflective vinyl, prespaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16-2 and 16-3.

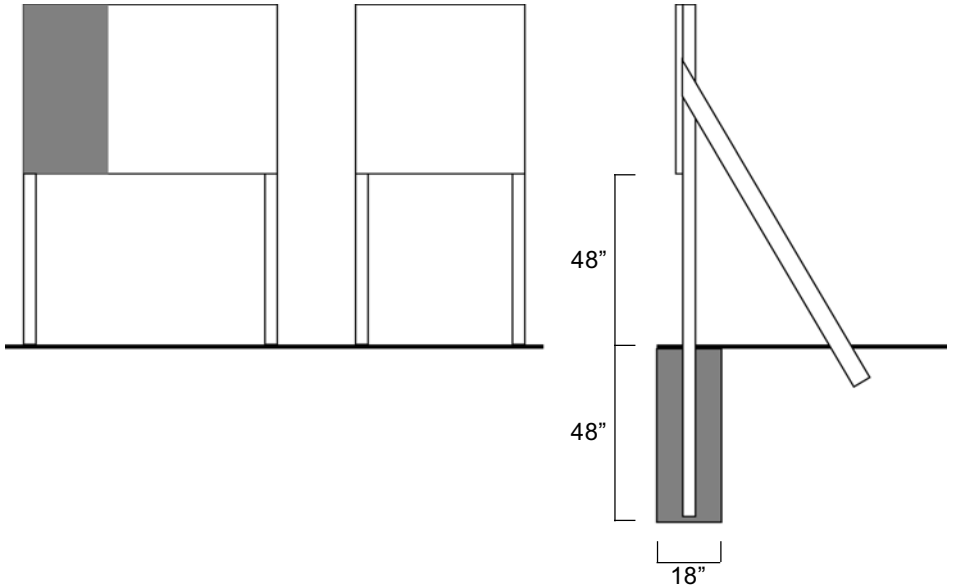
The 2'x 4' Communication Red panel (to match Pantone system 032) with full Corps Signature (reverse version) is to be screen-printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards.

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.



Construction Project Identification Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 2a: Military/Civil Works Sponsor

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Safety Performance Sign

Legend Group 2: Project Title

1. _____
2. _____

Legend Group 3: Contractor/A&E

1. _____
2. _____

SECTION 01 62 35

RECYCLED / RECOVERED MATERIALS

PART 1 GENERAL

1.1 REFERENCES

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

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 247

Comprehensive Procurement Guideline for
Products Containing Recovered Materials

1.2 OBJECTIVES

Government procurement policy is to acquire, in a cost effective manner, items containing the highest percentage of recycled and recovered materials practicable consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials. The Environmental Protection Agency (EPA) has designated certain items which must contain a specified percent range of recovered or recycled materials. EPA designated products specified in this contract comply with the stated policy and with the EPA guidelines. The Contractor shall make all reasonable efforts to use recycled and recovered materials in providing the EPA designated products and in otherwise utilizing recycled and recovered materials in the execution of the work.

A listing of EPA's comprehensive procurement guidelines (CPG) for designated and proposed products containing recovered materials can be viewed at the Internet web pages <http://www.epa.gov/epawaste/consERVE/tools/cpg/index.htm> for designated items and proposed items.

1.3 EPA DESIGNATED ITEMS INCORPORATED IN THE WORK

Various sections of the specifications contain requirements for materials that have been designated by EPA as being products which are or can be made with recovered or recycled materials. These items, when incorporated into the work under this contract, shall contain at least the specified percentage of recycled or recovered materials unless adequate justification (non-availability) for non-use is provided. When a designated item is specified as an option to a non-designated item, the designated item requirements apply only if the designated item is used in the work.

1.4 EPA PROPOSED ITEMS INCORPORATED IN THE WORK

Products other than those designated by EPA are still being researched and are being considered for future Comprehensive Procurement Guideline (CPG) designation. It is recommended that these items, when incorporated in the

work under this contract, contain the highest practicable percentage of recycled or recovered materials, provided specified requirements are also met.

1.5 EPA LISTED ITEMS USED IN CONDUCT OF THE WORK BUT NOT INCORPORATED IN THE WORK

There are many products listed in 40 CFR 247 which have been designated or proposed by EPA to include recycled or recovered materials that may be used by the Contractor in performing the work but will not be incorporated into the work. These products include office products, temporary traffic control products, and pallets. It is recommended that these non-construction products, when used in the conduct of the work, contain the highest practicable percentage of recycled or recovered materials and that these products be recycled when no longer needed.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-11 Closeout Submittals

List of Recycled/Recovered Materials; G.

Furnish a list and percentage of recycled/recovered materials applicable to the work in this Contract.

PART 2 PRODUCTS (Not Used)

Not Used

PART 3 EXECUTION

3.1 LIST OF RECYCLED/RECOVERED MATERIALS

In compliance with 40 CFR 247 and Contract Clauses 52.223-4 Recovered Material Certification and 52.223-9 Estimate of Percentage of Recovered Material Content for EPA-Designated Products, furnish a list of recycled/recovered materials used in contract performance of this Contract. Review the specifications and drawings and identify the designated and proposed construction products, including those items used in conduct of the work but not incorporated in the work, that will be included in the Contract. The list shall include an estimate of the percentage of total materials utilized for the performance of the Contract which is recovered materials.

-- End of Section --

SECTION 01 64 00.00 44

GOVERNMENT FURNISHED PROPERTY

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

Reference the Contract Clauses at FAR 52.245-2 and FAR 52.245-4. The Government will furnish the property identified in the task order, by quantity, item and description, to be incorporated or installed into the work or used in performing the task order. The property will be furnished from storage at unless otherwise indicated at the Preconstruction Conference, and the Contractor will be required to load and transport the property to the job site at its own expense. If the property will be furnished f.o.b. railroad cars at the place specified in task order or f.o.b. truck at the project site, the Contractor shall accept delivery, pay any demurrage or detention charges, and unload and transport the property to the job site at its own expense. The Contractor shall acknowledge in writing receipt of the quantity and condition of Government furnished property within 24 hours of delivery. All such property shall be installed or incorporated into the work at the expense of the Contractor, unless otherwise indicated in the task order.

<u>Quantity</u>	:	<u>Item</u>	:	<u>Description</u>
See Task Order				

1.2 IDENTIFICATION OF GOVERNMENT-FURNISHED PROPERTY (APR 1984) (FAR 52.245-3)

(a) The Government will furnish to the Contractor the property identified in the Schedule to be incorporated or installed into the work or used in performing the contract. The listed property will be furnished f.o.b. railroad cars at the place specified in contract Schedule or f.o.b. truck at the project site. The Contractor is required to accept delivery, pay any demurrage or detention charges, and unload and transport the property to the job site at its own expense. When the property is delivered, the Contractor shall verify its quantity and condition and acknowledge receipt in writing to the Contracting Officer. The Contractor shall also report in writing to the Contracting Officer within 24 hours of delivery any damage to or shortage of the property as received. All such property shall be installed or incorporated into the work at the expense of the Contractor, unless otherwise indicated in this contract.

(b) Each item of property to be furnished under this clause shall be identified in the Schedule by quantity, item, and description.

Quantity	:	Item	:	Description
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1.3 POINT OF DELIVERY FOR GOVERNMENT-FURNISHED PROPERTY

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION 01 71 23.00 44

SURVEY, LAYOUT, AND OTHER DATA

PART 1 GENERAL (NOT USED)

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Survey Data; G, AO

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 CONTRACTOR VERIFICATION OF CONTRACT SURVEY DATA

During initial site layout and before existing conditions are disturbed the Contractor shall verify, in writing, the basic survey data provided on the contract drawings. Verification shall be initiated from the point shown on the contract drawings or from the contract drawing reference point designated by the Contracting Officer's Authorized Representative and shall include, as a minimum, benchmark elevations, horizontal control points, and sufficient spot checks of critical elevations to ensure that the survey data adequately reflects existing conditions. The Contractor shall not proceed with construction until survey verification is provided to the Contracting Officer's Authorized Representative. Before an existing benchmark referenced on the contract drawings is disturbed the Contractor shall establish a new benchmark which has been approved by the Contracting Officer's Authorized Representative. Benchmarks which are destroyed without authorization from the Contracting Officer's Authorized Representative must be replaced at the Contractor's expense as prescribed in MATOC Section 00 72 00 Contract Clause, "Layout of Work." The Contractor shall refer to Contract Clauses, "Differing Site Conditions" and "Site Investigation and Conditions Affecting the Work," for additional requirements.

-- End of Section --

SECTION 01 72 00.00 44

ALTERATIONS TO EXISTING FACILITIES

PART 1 GENERAL

1.1 SUMMARY

This section covers alterations to existing facilities, complete.

PART 2 PRODUCTS

2.1 GENERAL

Materials and equipment required for repair or alterations of, or additions to, existing facilities are specified in the applicable task order specifications.

PART 3 EXECUTION

3.1 GENERAL

The task order documents indicate the extent and requirements of the alterations and additions to the existing facilities. If any departures from the drawings or specifications are deemed necessary by the Contractor, details of such departures and the reasons therefor shall be submitted as soon as possible to the Contracting Officer for action. No such departures shall be made without prior written approval of the Contracting Officer.

3.1.1 Roads and Public Areas

Roads and other public areas within the work areas shall be kept clean of construction debris at all times.

3.1.2 Protection

During nonworking hours and periods of inclement weather, the Contractor shall cover and secure all exposed openings. Buildings shall not be left overnight without sufficient protection against the elements.

3.1.3 Roofing Work

When work is required on a roof, the Contractor shall protect the existing roof surfaces, including flashings, from damage resulting from roof traffic and work operations. The Contractor shall maintain the roof in a waterproof condition. Where wheeled or foot traffic over the roof is unavoidable, provide and use adequate plank, plywood, or other protection for the roof. Wheeled vehicles shall be mounted on pneumatic-tired wheels, and shall be designed and maintained to operate without damaging the roofing membrane or the insulation or deck underneath. Roof traffic on metal roofs shall be in accordance with the recommendations of the metal roof manufacturer. Do not roll wheeled vehicles over or step on the standing seams of metal roofs.

3.2 REMOVAL

Unless otherwise specified and insofar as is practicable, items and materials shall be removed in a manner inverse to that used in the placing of the items and materials in the structure(s). Care shall be taken during removal operations to prevent any unnecessary damage to the building. Any unnecessary damage to the building(s) resulting from the Contractor's operations shall be repaired at the expense of the Contractor and to the satisfaction of the Contracting Officer. Equipment to be reinstalled shall be reinstalled after work called for under other sections of these specifications has been completed. All items which are to be removed and then reinstalled shall be carefully removed and protected until reinstalled.

3.3 PAINTING AND FINISHING

Existing surfaces where items and materials were removed shall be repaired and painted to match the adjoining surfaces. Surfaces remodeled shall be painted to match the adjoining surfaces. All new surfaces where specified or required to be painted shall be painted. Existing painted surfaces which are damaged by work under this contract shall be repaired to original condition and then repainted with one coat of paint to match adjacent surfaces. Where an existing painted wall or ceiling has been repaired or patched with new materials, the entire wall or ceiling containing the repaired portion shall be repainted as follows: The repaired portion shall be painted to effect complete hiding and to blend with the adjacent surfaces, and then the entire wall or ceiling given one coat of paint. The finished surfaces shall be free from runs, drops, ridges, waves, laps, brush marks, and variations of color, texture, and finish. Painting shall conform to the requirements of Section 09 90 00 PAINTS AND COATINGS.

3.4 ALTERATIONS

Alterations to the structure(s) shall be in accordance with the arrangement indicated on the contract documents and as approved by the Contracting Officer. All alterations shall be performed by workmen skilled in the work and in accordance with the best standard practices of the trades involved. All work shall be performed in accordance with the requirements for new work as specified under the applicable sections of these specifications.

3.5 DISPOSAL

Rubbish and debris shall be removed from Government property daily, unless otherwise directed, to avoid accumulation at the site. Materials that cannot be removed daily shall be stored in areas specified by the Contracting Officer. Concrete, masonry, and other noncombustible material, and combustible material, shall be disposed of off the site unless otherwise specified. Remove and transport debris in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply. Title to and disposal of salvage and scrap shall be as specified in Section 00 73 00 SPECIAL CONTRACT REQUIREMENTS.*

3.6 CLEAN UP

Upon completion of the work all staging, scaffolding, and containers shall be removed from the site or destroyed as approved. Paint spots, oil or stains upon surfaces shall be removed and the entire job left clean and acceptable to the Contracting Officer. See Section 01 78 00 CLOSEOUT SUBMITTALS for additional requirements.

-- End of Section --

SECTION 01 74 19

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM E 1609 (2001) Development and Implementation of a Pollution Prevention Program

U.S. GREEN BUILDING COUNCIL (USGBC)

LEED (2009) LEED NC Reference Guide for Green Building Design and Construction

1.2 GOVERNMENT POLICY

Government policy is to apply sound environmental principles in the design, construction and use of facilities. As part of the implementation of that policy the Contractor shall: (1) practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction and demolition waste from landfills and incinerators and to facilitate their recycling or reuse. A minimum of 60 percent by weight of total project solid waste shall be diverted from the landfill.

1.3 MANAGEMENT

Develop and implement a waste management program in accordance with ASTM E 1609 and as specified. Take a pro-active, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. Construction and demolition waste includes products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process but not incorporated into the work. In the management of waste consideration shall be given to the availability of viable markets, the condition of the material, the ability to provide the material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates. The Contractor is responsible for implementation of any special programs involving rebates or similar incentives related to recycling of waste. Revenues or other savings obtained for salvage, or recycling accrue to the Contractor. Appropriately permit firms and facilities used for recycling, reuse, and disposal for the intended use to the extent required by federal, state, and local regulations. Also, provide on-site instruction of appropriate separation, handling, recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Waste Management Plan; G; (LEED)

SD-11 Closeout Submittals

Records; (LEED)

1.5 MEETINGS

Conduct Construction Waste Management meetings. After award of the Contract and prior to commencement of work, schedule and conduct a meeting with the Contracting Officer to discuss the proposed Waste Management Plan and to develop a mutual understanding relative to the details of waste management. The requirements for this meeting may be fulfilled during the coordination and mutual understanding meeting outlined in Section 01 45 00.00 2001 45 00.00 10 QUALITY CONTROL. At a minimum, environmental and waste management goals and issues shall be discussed at the following additional meetings:

- a. Pre-bid meeting.
- b. Preconstruction meeting.
- c. Regular QC meetings.
- d. Work safety meetings.

1.6 WASTE MANAGEMENT PLAN

A waste management plan shall be submitted within 15 days after notice to proceed and not less than 10 days before the preconstruction meeting. The plan shall demonstrate how the project waste diversion goal shall be met and shall include the following:

- a. Name of individuals on the Contractor's staff responsible for waste prevention and management.
- b. Actions that will be taken to reduce solid waste generation, including coordination with subcontractors to ensure awareness and participation.
- c. Description of the regular meetings to be held to address waste management.
- d. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas on site and equipment to be used for processing, sorting, and temporary storage of wastes.
- e. Characterization, including estimated types and quantities, of the

waste to be generated.

f. Name of landfill and/or incinerator to be used and the estimated costs for use, assuming that there would be no salvage or recycling on the project.

g. Identification of local and regional reuse programs, including non-profit organizations such as schools, local housing agencies, and organizations that accept used materials such as materials exchange networks and Habitat for Humanity. Include the name, location, and phone number for each reuse facility to be used, and provide a copy of the permit or license for each facility.

h. List of specific waste materials that will be salvaged for resale, salvaged and reused on the current project, salvaged and stored for reuse on a future project, or recycled. Recycling facilities that will be used shall be identified by name, location, and phone number, including a copy of the permit or license for each facility.

i. Identification of materials that cannot be recycled/reused with an explanation or justification, to be approved by the Contracting Officer.

j. Description of the means by which any waste materials identified in item (h) above will be protected from contamination.

k. Description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site).

l. Anticipated net cost savings determined by subtracting Contractor program management costs and the cost of disposal from the revenue generated by sale of the materials and the incineration and/or landfill cost avoidance.

m. Please submit a copy of the waste management plan to the DPW landfill engineer for review. It can be sent to: IMWE-HOD-PWF, Attn: Kevin Scholz, 4612 Engineer Dr., Fort Hood, TX 76544.

Revise and resubmit Plan as required by the Contracting Officer. Approval of Contractor's Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting project cumulative waste diversion requirement. Distribute copies of the Waste Management Plan to each subcontractor, the Quality Control Manager, and the Contracting Officer.

1.7 RECORDS

Records shall be maintained to document the quantity of waste generated; the quantity of waste diverted through sale, reuse, or recycling; and the quantity of waste disposed by landfill or incineration. The records shall be made available to the Contracting Officer during construction, and a copy of the records shall be delivered to the Contracting Officer and the Solid Waste Management Office of the facility owner upon completion of the construction.

1.8 COLLECTION

Separate, store, protect, and handle at the site identified recyclable and

salvageable waste products in a manner that maximizes recyclability and salvagability of identified materials. Provide the necessary containers, bins and storage areas to facilitate effective waste management and clearly and appropriately identify them. Provide materials for barriers and enclosures around recyclable material storage areas which are nonhazardous and recyclable or reusable. Locate out of the way of construction traffic. Provide adequate space for pick-up and delivery and convenience to subcontractors. Recycling and waste bin areas are to be kept neat and clean, and recyclable materials shall be handled to prevent contamination of materials from incompatible products and materials. Clean contaminated materials prior to placing in collection containers. Use cleaning materials that are nonhazardous and biodegradable. Handle hazardous waste and hazardous materials in accordance with applicable regulations and coordinate with Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION. Separate materials by one of the following methods:

1.8.1 Source Separated Method.

Waste products and materials that are recyclable shall be separated from trash and sorted as described below into appropriately marked separate containers and then transported to the respective recycling facility for further processing. Deliver materials in accordance with recycling or reuse facility requirements (e.g., free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process). Separate materials into the following category types as appropriate to the project waste and to the available recycling and reuse programs in the project area:

- a. Land clearing debris.
- b. Asphalt.
- c. Concrete and masonry.
- d. Metal (e.g. banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized, stainless steel, aluminum, copper, zinc, lead brass, bronze).
 - (1) Ferrous.
 - (2) Non-ferrous.
- e. Wood (nails and staples allowed).
- f. Debris.
- g. Glass (colored glass allowed).
- h. Paper.
 - (1) Bond.
 - (2) Newsprint.
 - (3) Cardboard and paper packaging materials.
- i. Plastic.
 - (1) Type 1: Polyethylene Terephthalate (PET, PETE).

- (2) Type 2: High Density Polyethylene (HDPE).
- (3) Type 3: Vinyl (Polyvinyl Chloride or PVC).
- (4) Type 4: Low Density Polyethylene (LDPE).
- (5) Type 5: Polypropylene (PP).
- (6) Type 6: Polystyrene (PS).
- (7) Type 7: Other. Use of this code indicates that the package in question is made with a resin other than the six listed above, or is made of more than one resin listed above, and used in a multi-layer combination.

- j. Gypsum.
- k. Non-hazardous paint and paint cans.
- l. Carpet.
- m. Ceiling tiles.
- n. Insulation.
- o. Beverage containers.

1.8.2 Co-Mingled Method.

Waste products and recyclable materials shall be placed into a single container and then transported to a recycling facility where the recyclable materials are sorted and processed.

1.8.3 Other Methods.

Other methods proposed by the Contractor may be used when approved by the Contracting Officer.

1.9 DISPOSAL

Control accumulation of waste materials and trash. Recycle or dispose of collected materials off-site at intervals approved by the Contracting Officer and in compliance with waste management procedures. Except as otherwise specified in other sections of the specifications, disposal shall be in accordance with the following:

1.9.1 Reuse.

First consideration shall be given to salvage for reuse since little or no re-processing is necessary for this method, and less pollution is created when items are reused in their original form. Coordinate reuse with the Contracting Officer. Sale or donation of waste suitable for reuse shall be considered.

1.9.2 Recycle.

Waste materials not suitable for reuse, but having value as being recyclable, shall be made available for recycling. All fluorescent lamps,

HID lamps, and mercury-containing thermostats removed from the site shall be recycled. Arrange for timely pickups from the site or deliveries to recycling facilities in order to prevent contamination of recyclable materials.

1.9.3 Waste.

Materials with no practical use or economic benefit shall be disposed at a landfill or incinerator.

1.9.4 Return

Set aside and protect misdelivered and substandard products and materials and return to supplier for credit.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used. -- End of Section --

SECTION 01 78 00

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 REFERENCES

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

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 1-300-08

(2009, with Change 1) Criteria for
Transfer and Acceptance of DoD Real
Property

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

As-Built Record of Equipment and Materials
Warranty Management Plan

Three sets of the construction warranty management plan containing information relevant to the warranty of materials and equipment incorporated into the construction project, including the starting date of warranty of construction. The Contractor shall furnish with each warranty the name, address, and telephone number of each of the guarantor's representatives nearest to the project location.

Warranty Tags
Performance Bond During Warranty;
Warranty Point of Contact;
Warranty Report;

Final Cleaning
Spare Parts Data

SD-08 Manufacturer's Instructions

Preventative Maintenance
Condition Monitoring (Predictive Testing)
Inspection
Posted Instructions

SD-10 Operation and Maintenance Data

Operation and Maintenance Manuals

SD-11 Closeout Submittals

LEED Review Meetings;
Red Zone Meeting
Video;

Record Drawings

Preliminary Record Drawings;
Final Record Drawings;
Drawings showing final as-built conditions of the project.
Sustainable Design Documentation
Final Approved Shop Drawings
Construction Contract Specifications
Real Property Equipment
Certification of EPA Designated Items; G
Interim Form DD1354; G
Checklist for Form DD1354; G
Inventory Of Contractor Furnished And Installed Equipment;
Real Property Record

1.3 GENERAL

1.3.1 Payment

Contract closeout activities such as, but not limited to, operation and maintenance manuals, record drawings, warranty requirements, equipment warranty identification tags, and inventories, real property maintenance records, payrolls, shop drawing submittals, and final cleanup are subsidiary activities of the contract work ; separate payment will not be made for any activity unless otherwise specified. Final contract payment will not be made until completion and approval of all contract closeout activities.

1.3.2 HVAC Testing

The HVAC Testing that the Contractor schedules after substantial completion pursuant to paragraph entitled "Testing of Heating and Air-Conditioning Systems" of Section 01 00 00.00 44 DESIGN AND CONSTRUCTION SCHEDULE has a value to the Government of 10 percent of the value of the equipment to be tested. The Contractor shall reserve that amount to be paid on any equipment that will require testing after substantial completion pursuant to the above referenced specification paragraph.

1.4 PROJECT RECORD DOCUMENTS

1.4.1 Record Drawings

Drawings showing final as-built conditions of the project. This paragraph covers record drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working record drawings" and "final record drawings" refer to contract drawings which are revised to be used for final record drawings showing as-built conditions. The final CADD record drawings must consist of one set of electronic CADD drawing files in the specified format, 2 sets of black-line prints, and one set of the approved working Record drawings.

1.4.1.1 Definition

Project Record documents are a record of the construction as installed and completed by the Contractor. They are a record of all deviations, modifications, or changes from contract set of drawings (the accepted 100% design drawings) and other documents, however minor, which were incorporated in the work. They include all the information shown on the contract set of drawings, any Contractor-original drawings, all additional work not appearing on the contract drawings, and all changes which are made after final inspection of the contract work.

1.4.1.2 Contractor-Original Record Drawings

Contractor-original record drawings are those drawings drawn by the Contractor to further explain the Contract documents such as subcontractor submittals for fire protection/detection, communication, and other systems, and approved Contractor's solutions to problems. Submit these drawings as full-size reproducible sheets and CADD files. CADD files shall conform to the Working CADD file requirements specified in paragraph "Final Record Drawings."

1.4.1.3 Preliminary Record Drawings

The Contractor shall mark up both a reproducible set and a set of prints to show as-built conditions. These two sets, hereafter called preliminary record drawings, or singly, reproducibles or prints, shall be kept current and available on the jobsite at all times, except as noted below. For drawings contained within the Specifications, the Contractor shall mark up copies of these drawings to show as-built conditions; these copies will be considered the preliminary record drawings and shall be kept current and available on the jobsite at all times, except as noted below. Assign a member of the Contractor's Quality Control Organization to be responsible for the maintenance and currency of the preliminary record drawings. This assignment and any reassignment of duties concerning the maintenance of the record drawings shall be promptly reported to the Contracting Officer's representative for approval. All changes from the contract drawings which are made in the work or additional information which might be uncovered in the course of construction, including uncharted utilities, shall be accurately and neatly recorded as they occur by means of details and notes. Clearly identify all changes and/or required additions to the preliminary record drawings in a contrasting color and which is compatible with reproduction of the preliminary record drawings. Update preliminary record drawings by Friday of each week. During periods when the reproducibles are being copied and are therefore not available at the jobsite, continue posting all required data to the prints. Minimize the time that the reproducibles are away from the jobsite and update them with all as-built data immediately upon their return. The preliminary record drawings will be jointly inspected for accuracy and completeness by the Contracting Officer's representative and the assigned representative of the Contractor's Quality Control Organization prior to submission of each monthly pay estimate. See paragraph, "Withholding for Preliminary Record Drawings." The record drawings shall show the following information, but not be limited thereto:

a. The location and description of utility lines or other installation of any kind or description known to or found to exist within the construction area. The location of exterior utilities includes actual measured horizontal distances from utilities to permanent facilities/features. These measurements shall be within an accuracy range of 6 inches

and shall be shown at sufficient points to permit easy location of utilities for future maintenance purposes. Show measurements for all change of direction points and all surface or underground components such as valves, manholes, drop inlets, cleanouts, meter, etc. Indicate the general depth range of each underground utility line (i.e., 3 to 4 feet in depth). The description of exterior utilities includes the actual quantity, size, and material of utility lines.

b. The location and size of all uncharted existing utilities encountered.

c. The location and dimensions of any changes within the building or structure.

d. Correct grade or alinement of roads, structures or utilities if any changes were made from contract drawings.

e. Correct elevations if changes were made in site grading.

f. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

g. The topography and grades of all drainage installed or affected as a part of the project construction.

h. Options

Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the record drawings.

i. Blue Line or Black Line Prints

Blue-line or black-line prints shall be full size. All blue or black line prints shall exhibit good readable print with clear, sharp, dark lines, and shall not be smeared, faded, double imaged, or have torn or ragged edges.

j. Prefinal Inspection For Each Item of Work

As part of the prefinal inspection for each item of work, the current updated preliminary marked-up record drawings and as-built CADD drawing files will be reviewed. They shall comply with this specification prior to scheduling the final inspection, and/or prior to substantial completion of the item of work.

k. Preliminary Record Drawing Final Submittal

Prior to scheduling the red zone meeting and the final acceptance inspection of the last or only bid schedule item of work, the updated preliminary marked-up record drawings and the updated as-built CADD drawing files shall be completed and delivered to the Contracting Officer's Representative for review and approval. If upon review, the drawings and files are found to contain errors and/or omissions, they will be returned to the Contractor for corrections. Failure of the Contractor to make timely delivery of the preliminary record drawings and files on any or all items of work will be cause for the Government to delay substantial completion and to withhold the amount indicated in paragraph "Withholding

for Preliminary Record Drawings," in accordance with the terms and conditions of the contract.

1. Withholding for Preliminary Record Drawings

Failure by the Contractor to maintain current and satisfactory preliminary record drawings in accordance with these requirements will result in withholding from progress payments 10 percent of the progress payment amount until such time as the record drawings are brought into compliance. This withheld amount will be indicated on monthly payment estimates until the Contractor has fulfilled these contract requirements.

m. Final Inspection

For each interim item of work, furnish a copy of the preliminary record drawings for that item, which the Contractor has reproduced from the approved preliminary record drawing reproducibles, to the Contracting Officer's representative at the time of final inspection for that item. At the time of final inspection on the last or only item of work, the Contractor shall deliver a copy of the complete set of the approved preliminary record drawings to the Contracting Officer's Representative.

1.4.1.4 Final Record Drawings

For contracts that do not require the drawings' CADD files to be updated, the preliminary record drawings, including fire protection/detection shop drawings and other special drawings, upon approval, will be considered the final record drawings and both sets will be retained by the Contracting Officer.

1.4.1.5 Post-Record Drawing Work

In event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the record drawings, the Contractor shall furnish revised and/or additional drawings (hard copy and electronic (CADD and .pdf) files), as required to depict as-built conditions. Incorporate revised and additional files into the completed sets of contract record electronic (CADD and .pdf) files. The requirements for these additional drawings and files, will be the same as for the record drawings included in the original submission.

1.4.1.6 Payment for Final Record Drawings

If there is no separate contract line item (CLIN) for as-built drawings, the Government will withhold the amount of \$35,000, or 1% of the present construction value, whichever is the greater, until the final as-built drawing submittal has been approved by the Government.

1.4.2 As-Built Record of Equipment and Materials

Furnish one copy of preliminary record of equipment and materials used on the project 15 days prior to final inspection. This preliminary submittal will be reviewed and returned 2 days after final inspection with Government comments. Submit Two sets of final record of equipment and materials 10 days after final inspection. Key the designations to the related area depicted on the contract drawings. List the following data:

RECORD OF DESIGNATED EQUIPMENT AND MATERIALS DATA

Description	Specification Section	Manufacturer and Catalog, Model, and Serial Number	Composition and Size	Where Used
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1.4.3 Final Approved Shop Drawings

Furnish final approved project shop drawings 30 days after transfer of the completed facility.

1.4.4 Construction Contract Specifications

Furnish final record (as-built) construction contract specifications, including modifications thereto, 30 days after transfer of the completed facility.

1.4.5 Real Property Equipment

Furnish a list of installed equipment furnished under this contract. Include all information usually listed on manufacturer's name plate. In the "EQUIPMENT-IN-PLACE LIST" include, as applicable, the following for each piece of equipment installed: description of item, location (by room number), model number, serial number, capacity, name and address of manufacturer, name and address of equipment supplier, condition, spare parts list, manufacturer's catalog, and warranty. Furnish a draft list at time of transfer. Furnish the final list 30 days after transfer of the completed facility.

1.5 SPARE PARTS DATA

Submit two copies of the Spare Parts Data list.

- a. Indicate manufacturer's name, part number, nomenclature, and stock level required for maintenance and repair. List those items that may be standard to the normal maintenance of the system.
- b. Supply items of each part for spare parts inventory. Provision of spare parts does not relieve the Contractor of responsibilities listed under the contract guarantee provisions.

1.6 PREVENTATIVE MAINTENANCE

Submit Preventative Maintenance, Condition Monitoring (Predictive Testing) and Inspection schedules with instructions that state when systems should be retested.

- a. Define the anticipated length of each test, test apparatus, number of personnel identified by responsibility, and a testing validation procedure permitting the record operation capability requirements within the schedule. Provide a signoff blank for the Contractor and Contracting Officer for each test feature; e.g., gpm, rpm, psi. Include a remarks column for the testing validation procedure referencing operating limits of time, pressure, temperature, volume, voltage, current, acceleration, velocity, alignment, calibration, adjustments, cleaning, or special system notes. Delineate procedures for preventative maintenance, inspection, adjustment, lubrication and

cleaning necessary to minimize corrective maintenance and repair.

- b. Repair requirements must inform operators how to check out, troubleshoot, repair, and replace components of the system. Include electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting of the system after acceptance.

1.7 CERTIFICATION OF EPA DESIGNATED ITEMS

Submit the Certification of EPA Designated Items as required by FAR 52.223-9, "Certification and Estimate of Percentage of Recovered Material Content for EPA Designated Items". Include on the certification form the following information: project name, project number, Contractor name, license number, Contractor address, and certification. The certification will read as follows and be signed and dated by the Contractor. "I hereby certify the information provided herein is accurate and that the requisition/procurement of all materials listed on this form comply with current EPA standards for recycled/recovered materials content. The following exemptions may apply to the non-procurement of recycled/recovered content materials: 1) The product does not meet appropriate performance standards; 2) The product is not available within a reasonable time frame; 3) The product is not available competitively (from two or more sources); 4) The product is only available at an unreasonable price (compared with a comparable non-recycled content product)." Record each product used in the project that has a requirement or option of containing recycled or biobased content in accordance with Section 01 62 35 RECYCLED/RECOVERED MATERIALS, noting total price, total value of post-industrial recycled content, total value of post-consumer recycled content, total value of biobased content, exemptions (1, 2, 3, or 4, as indicated), and comments. Recycled and biobased content values may be determined by weight or volume percent, but must be consistent throughout.

1.8 INVENTORY OF CONTRACTOR FURNISHED AND INSTALLED EQUIPMENT

The Contractor shall develop and maintain an up-to-date list of all equipment installed under this contract. The list shall include but not be limited to equipment that require electrical power or fuel, or may require removal or replacement such as AHUs, fans, air conditioners, compressors, condensers, boiler, thermal exchangers, pumps, cooling towers, tanks, fire hydrants, sinks, water closets, lavatories, urinals, shower stalls, and any other large plumbing fixtures, light fixtures, etc. The list shall be reviewed periodically by the Government to insure completeness and accuracy. Partial payment will be withheld for equipment not incorporated in the list. Final list shall be turned over to the Authorized Representative of the Contracting Officer at the time of contractor's quality control completion inspection.

1.8.1 Equipment Identification Number

There are two separate Equipment ID numbering systems. One is for Real Property installed equipment. The other is for Equipment in Place. Only spaces filled with significant digits will be used. Do not add zeros or blanks to fill extra spaces.

- a. Real Property Installed Equipment (RFIE)

The equipment ID Number, for use with RPIE, is made of 4 parts. These parts represent the building number, the equipment type suffix, the floor

the equipment is located on, and the sequence number of that type of equipment on that floor in the building.

(1) The first part is the building number.

(2) The second part, the equipment type suffix, is a 1 digit alpha-character based on IFS-M. Acceptable codes are:

(a) A - Air Conditioning Plant: Includes chillers, condensing units, etc., excludes air conditioning plants that directly support user end item equipment, such as a separate package unit to chill a computer room equipment space. Excludes window air conditioning units.

(b) B - Compressed Air/Vacuum: Note, only those that are part of the building systems such as pneumatic controls for Energy Management and Control Systems (EMCS). Does not include compressed air and vacuum systems that directly support user end items.

(c) C - Evaporative cooling and mechanical equipment.

(d) D - Dehumidification Equipment: Applies to equipment whose sole purpose is dehumidification of facilities. Excludes dehumidification that directly support user and item equipment.

(e) E - Electrical Generating Plants: Includes permanently installed generators and switch gear associated with prime power and emergency generator plants. Excludes uninterruptable power systems (UPS) equipment.

(f) F - Transformers: Does not include transformers that directly support user end items or equipment.

(g) G - Other Heating Support: Includes air handlers, circulating pumps, etc., associated with heating systems. Also includes dual (heating/cooling) air handlers, etc. Includes specialized central energy management systems EMCS, exclusive of CPU's and peripherals.

(h) H - Heating Plants: Limited to direct fired, fuel burning heating plants. Does not apply to electrical fired heaters, heat pumps, or associated equipment. See Suffixes A, G, or M.

(i) I - Substation and Switching Station: Associates with stepdown from incoming primary voltage to secondary voltage or lower voltage primary voltage.

(j) J - Sewage Pumping Plants: Includes grinder pump type sewage lift systems as well as conventional sewage lift stations, associated controls and equipment.

(k) M - Miscellaneous Utilities: Includes gas generators, cooling towers and other facility systems not otherwise identified. Excludes systems associates with and in support of user end items.

(l) N - Liquid Fuel Dispensing: Includes pumps, controls.

(m) P - Cold Storage and Refrigeration Plants: Excludes portable and prefabricated refrigeration systems which can be removed from the facility.

(n) R - Fire Extinguishing Systems: Includes standpipe and sprinkler systems, as well as fixed gas and/or chemical extinguishing systems intended for protection of the facility. Excludes portable extinguishing systems and fixed gas and/or chemical extinguishing systems intended for protection of user and item equipment. Includes specialized systems such as Engineer Smoke Control systems (ESCS) other than CPU's and associated peripherals of such systems.

(o) S - Water Pumping Plants: Applies to potable and nonpotable water pumping systems only. Excludes storm waste pumping systems which should be included under Equipment Suffix M.

(p) T - Fire and other Alarm Systems: Excludes security alarm systems and alarm systems associated with user and item equipment such as medical refrigerators and commissary display cases. Does not include 'pumpout' and 'overflow' alarms associated with water and sewage lift stations and other similar facilities.

(q) W - Water Sources: Includes potable and non-potable well equipment and storage tanks.

(r) X - Water Treatment and Filtration Plants: Includes water softeners and deionization equipment in support of facility systems, as well as systems for processing raw water to potability standards. Excludes systems that directly support user and item equipment.

(s) Y - Industrial Waste and Sewage Treatment Plants: Includes grease, oil, and other waste separators.

(t) Z - Special Purpose: Assigned by installation a case by case basis.

(3) The third part, the floor, is a 1 to 2 alphanumeric character. The system for defining floor number is:

(a) Floors, above and including the ground floor, are numbered in ascending order with the ground floor being equal to 1.

(b) Interstitial floors and spaces are identified by the letter 'I' and the number of the occupied floor below the interstitial space. For example, the interstitial space above the third floor of a building would be identified as: I3. Attic spaces are numbered as interstitial space.

(c) Crawl space, below the first floor, is identified as: CS.

(d) Basements and lower level floors are numbered, in descending order, with a 2 character identified. The first character is the letter 'L' and the second character is the number of the floor with the floor immediately under the ground floor being: L1.

(e) Where equipment, associated with a facility is mounted on the ground outside the physical perimeter of the facility, such as a condensing unit, the floor is identified as: G.

(4) The fourth part, the sequence number, is a 2 to 4 digit character. The first digit shall always be a slash (/). The second through fourth character is the sequential numbering (1 thru 999) of items of equipment with identical first 3 parts of the equipment ID number. For

existing facilities, this will normally be given to the activity installing the equipment by the O&M Division. For new facilities, this is assigned by the activity installing the equipment.

b. For "Equipment In Place" Equipment

The equipment ID number, for use with equipment in place (i.e., end item equipment which is not an integral part of the building but which is installed in the building under this contract,) is made of 2 parts. These parts represent the Department of Defense Activity Code (DODAC) of the unit or equipment in the activity.

(1) The first part, the DODAC, is a 6 digit alpha-numeric character representing the primary user or responsible organization. It will be provided to the contractor upon request from the Contracting Officer.

(2) The second part, the sequence number, is a 1 to 4 digit character. It is the sequential numbering (1 thru 9999), of equipment in that building, belonging to the DODAC. Questions, with respect to sequence numbers, should be addressed to the O&M Division.

1.8.2 Equipment Data

List shall include on each item as applicable: Description, Manufacturer, Model or Catalog No., Serial No., Input (power voltage, BTU, etc.), Output (power, voltage, BTU, tons, etc.). Size or Capacity (tanks), and net inventory costs; any other data necessary to describe item and shall list all warrantors and warranty periods for each item of equipment.

1.9 INVENTORY OF CONTRACTOR FURNISHED AND INSTALLED EQUIPMENT

A list of equipment or units of equipment that require electrical power or fuel, or may require removal or replacement such as AHUs, fans, air conditioners, compressors, condensers, boiler, thermal exchangers, pumps, cooling towers, tanks, fire hydrants, sinks, water closets, lavatories, urinals, shower stalls, and any other large plumbing fixtures, light fixtures, etc., shall be made and kept up to date as installed. The list shall be reviewed periodically by the Government to insure completeness and accuracy. Partial payment will be withheld for equipment not incorporated in the list. List shall include on each item as applicable: Description, Manufacturer, Model or Catalog No., Serial No., Input (power, voltage, BTU, etc.), Output (power, voltage, BTU, tons, etc.), Size or Capacity (tanks), and net inventory costs; any other data necessary to describe item and shall list all warrantors and warranty periods for each item of equipment. Final list shall be turned over to the Authorized Representative of the Contracting Officer at the time of the Contractor's quality control completion inspection.

1.10 WARRANTY MANAGEMENT

1.10.1 Warranty Management Plan

Develop a warranty management plan which contains information relevant to the clause Warranty of Construction in Section 00 72 00 CONTRACT CLAUSES. At least 30 days before the planned pre-warranty conference, submit one set of the warranty management plan. Include within the warranty management plan all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan must be in

narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below must include due date and whether item has been submitted or was accomplished. Warranty information made available during the construction phase must be submitted to the Contracting Officer for approval prior to each monthly pay estimate. Assemble approved information in a binder and turn over to the Government upon acceptance of the work. The construction warranty period will begin on the date of project acceptance and continue for the full product warranty period. A 4-month, 9-month, and Final (12th month) Warranty Conference will be conducted with the Contractor and Government to Review the progress and outstanding Warranty Items. The Contractor provide the status of outstanding Warranty Items at the meeting.

Include within the warranty management plan , but not limited to, the following:

- a. Roles and responsibilities of all personnel associated with the warranty process, including points of contact and telephone numbers within the organizations of the Contractors, subContractors, manufacturers or suppliers involved.
- b. Furnish with each warranty the name, address, and telephone number of each of the guarantor's representatives nearest to the project location.
- c. Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.
- d. A list for each warranted equipment, item, feature of construction or system indicating:
 - (1) Name of item.
 - (2) Model and serial numbers.
 - (3) Location where installed.
 - (4) Name and phone numbers of manufacturers or suppliers.
 - (5) Names, addresses and telephone numbers of sources of spare parts.
 - (6) Warranties and terms of warranty. Include one-year overall warranty of construction, including the starting date of warranty of construction. Items which have extended warranties must be indicated with separate warranty expiration dates.
 - (7) Cross-reference to warranty certificates as applicable.
 - (8) Starting point and duration of warranty period.
 - (9) Summary of maintenance procedures required to continue the warranty in force.
 - (10) Cross-reference to specific pertinent Operation and Maintenance manuals.
 - (11) Organization, names and phone numbers of persons to call for warranty service.
 - (12) Typical response time and repair time expected for various warranted equipment.
- e. The Contractor's plans for attendance at the 4 and 9 month post-construction warranty inspections conducted by the Government.
- f. Procedure and status of tagging of all equipment covered by extended

warranties.

- g. Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty and/or safety reasons.

1.10.2 Performance Bond

The Contractor's Performance Bond must remain effective throughout the construction period .

- a. In the event the Contractor fails to commence and diligently pursue any construction warranty work required, the Contracting Officer will have the work performed by others, and after completion of the work, will charge the remaining construction warranty funds of expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.
- b. In the event sufficient funds are not available to cover the construction warranty work performed by the Government at the Contractor's expense, the Contracting Officer will have the right to recoup expenses from the bonding company.
- c. Following oral or written notification of required construction warranty repair work, respond in a timely manner. Written verification will follow oral instructions. Failure of the Contractor to respond will be cause for the Contracting Officer to proceed against the Contractor.

1.10.3 Pre-Warranty Conference

Prior to contract completion, and at a time designated by the Contracting Officer, meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this section. Communication procedures for Contractor notification of construction warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty will be established/reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue construction warranty work action on behalf of the Contractor. This warranty point of contact will be located within the local service area of the warranted construction, be continuously available, and be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of its responsibilities in connection with other portions of this provision.

1.10.4 Contractor's Response to Construction Warranty Service Requirements

Following oral or written notification by the Contracting Officer, respond to construction warranty service requirements in accordance with the "Construction Warranty Service Priority List" and the three categories of priorities listed below. Submit a warranty report on any warranty item that has been repaired during the warranty period. Include within the report the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframes specified, the Government may perform the work and, if so, backcharge the Contractor for the cost of such

repairs. Such backcharges shall be accomplished under the Changes Clause of the Contract through a credit modification. These modifications will include a Government administration fee per occurrence.

- a. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.
- b. Second Priority Code 2. Perform onsite inspection to evaluate situation, and determine course of action within 8 hours, initiate work within 24 hours and work continuously to completion or relief.
- c. Third Priority Code 3. All other work to be initiated within 3 work days and work continuously to completion or relief.
- d. The "Construction Warranty Service Priority List" is as follows:

Code 1-Life Safety Systems

- (1) Fire suppression systems.
- (2) Fire alarm system(s) in place in the building.

Code 1-Air Conditioning Systems

- (1) Recreational support.
- (2) Air conditioning leak in part of building, if causing damage.
- (3) Air conditioning system not cooling properly.

Code 1-Doors

- (1) Overhead doors not operational, causing a security, fire, or safety problem.
- (2) Interior, exterior personnel doors or hardware, not functioning properly, causing a security, fire, or safety problem.

Code 3-Doors

- (1) Overhead doors not operational.
- (2) Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical

- (1) Power failure (entire area or any building operational after 1600 hours).
- (2) Security lights
- (3) Smoke detectors

Code 2-Electrical

- (1) Power failure (no power to a room or part of building).
- (2) Receptacle and lights (in a room or part of building).

Code 3-Electrical

Street lights.

Code 1-Gas

- (1) Leaks and breaks.
- (2) No gas to family housing unit or cantonment area.

Code 1-Heat

- (1) Area power failure affecting heat.
- (2) Heater in unit not working.

Code 2-Kitchen Equipment

- (1) Dishwasher not operating properly.
- (2) All other equipment hampering preparation of a meal.

Code 1-Plumbing

- (1) Hot water heater failure.
- (2) Leaking water supply pipes.

Code 2-Plumbing

- (1) Flush valves not operating properly.
- (2) Fixture drain, supply line to commode, or any water pipe leaking.
- (3) Commode leaking at base.

Code 3 -Plumbing

Leaky faucets.

Code 3-Interior

- (1) Floors damaged.
- (2) Paint chipping or peeling.
- (3) Casework.

Code 1-Roof Leaks

Temporary repairs will be made where major damage to property is occurring.

Code 2-Roof Leaks

Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 2-Water (Exterior)

No water to facility.

Code 2-Water (Hot)

No hot water in portion of building listed.

Code 3-All other work not listed above.

Code 1-Building Automation and Control Systems

- (1) Systems and equipment not working properly
- (1) Equipment or software malfunction

1.10.5 Contractor's Response to Construction Warranty Service Requirements

The following warranty service requirements are applicable to contracts for Fort Hood and will supplement requirements listed in Paragraph: Warranty of Construction. Following notification by the Contracting Officer or the Contracting Officer's Representative the Contractor shall respond to a warranty service requirement identified by the Contracting Officer's Representative in accordance with the "Warranty Service Priority List" of this program. This list prioritizes warranty work into the categories. The Contractor shall submit a warranty report on any warranty item that has been repaired during the warranty period. The report shall include the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframes specified, the Government may elect to acquire warranty repairs through other sources and, if so, shall backcharge the Contractor for the cost of such repairs. Such backcharges shall be accomplished under the Changes Clause of the Contract through a credit modification. Such modifications shall include a Government administration fee per occurrence.:

First Priority 1A Perform on site inspection to evaluate situation, determine course of action, initiate work within 24 hours and work continuously to completion or relief.

Second Priority 1B Perform on site inspection to evaluate situation, determine course of action, initiate work within 48 hours and work continuously to completion or relief.

Third Priority All other work to be initiated within 5 work days and work continuously to completion or relief.

The "Warranty Service Priority List" is as follows:

- 1A Air Traffic Control and Air Navigation Systems and Equipment.
- 1A Air Conditioning System
 - a. Hospital.
 - b. Buildings with computer equipment.
 - c. Commissary and Main PX.
 - d. Clubs.
 - e. Barracks, mess halls, BOQ/BEQ (entire building down).
 - f. Troop medical and dental.
- 1B Air Conditioning Systems
 - a. Recreational support.
 - b. Air conditioning leak in part of building, if causing damage.
 - c. Admin buildings with ADP equipment not on priority list.
- 1A Doors
 - a. Overhead doors not operational.
- 1A Electrical
 - a. Power failure (entire area or any building operational after 1600 hours).
 - b. Traffic control devices.
 - c. Security lights.
- 1B Electrical
 - a. Power failure (no power to a room or part of building).
 - b. Receptacle and lights.
 - c. Fire alarm systems.
- 1A Gas
 - a. Leaks and breaks.
 - b. No gas to family housing unit or cantonment area.
- 1A Heat
 - a. Hospital/Medical facilities.
 - b. Commissary and Main PX.
 - c. Clubs.
 - d. Area power failure affecting heat.
- 1B Heat
 - a. Medical storage.
 - b. Barracks.
- 1A Intrusion Detection Systems

Finance, PX and Commissary, and high security areas.

- 1B Intrusion Detection Systems
 - Systems other than priority 1A.
- 1A Kitchen Equipment
 - a. Dishwasher.
 - b. All other equipment hampering preparation of a meal.
- 1B Kitchen Equipment
 - All other equipment not in priority 1A.
- 1B Plumbing
 - a. Flush valves.
 - b. Fixture drain, supply line commode, or water pipe leaking.
 - c. Commode leaking at base.
- 1A Refrigeration
 - a. Commissary.
 - b. Mess hall.
 - c. Cold storage.
 - d. Hospital.
 - e. Medical storage.
- 1B Refrigeration
 - Mess hall - other than walk-in refrigerators and freezers.
- 1A Roof Leaks
 - Temporary repairs will be made where major damage to property is occurring.
- 1B Roof Leaks
 - Check for location of leak during rain to be repaired on priority 2 (major damage to property is not occurring).
- 1A Swimming Pools
 - Chlorine leaks or broken pumps.
- 1A Tank Wash Racks (Bird Baths)
 - All systems which prevent tank wash.
- 1A Water (Exterior)
 - Normal operation of water pump station.
- 1B Water (Exterior)
 - No water to facility.
- 1A Water, Hot (and Steam)
 - a. Hospitals.
 - b. Mess halls.
 - c. BOQ, BEQ, barracks (entire building).
 - d. Medical and dental.
- 1B Water, Hot
 - No hot water in portion of building listed in priority 1A (items a through c).
- 1A Sprinkler System
 - All sprinkler systems, valves, manholes, deluge systems,

and air systems to sprinklers.

Code 1-Building Automation and Control Systems

- (1) Systems and equipment not working properly
- (1) Equipment or software malfunction

Should parts be required to complete the work and the parts are not immediately available the Contractor shall have a maximum of 12 hours after arrival at the job site to provide the Contracting Officer's Representative with firm written proposals for emergency alternatives and temporary repairs for Government participation with the Contractor to provide emergency relief until the required parts are available on site for the Contractor to perform permanent warranty repair. The Contractors proposals shall include a firm date and time that the required parts shall be available on site to complete the permanent warranty repair. The Contracting Officer's Representative will evaluate the proposed alternatives and negotiate the alternative considered to be in the best interest of the Government to reduce the impact of the emergency condition. Alternatives considered by the Contracting Officer's Representative will include the alternative for the Contractor to "Do Nothing" while waiting until the required parts are available to perform permanent warranty repair. Negotiating a proposal which will require Government participation and the expenditure of Government funds shall constitute a separate procurement action by the using service.

1.10.6 Warranty Tags

At the time of installation, tag each warranted item with a durable, oil and water resistant tag approved by the Contracting Officer. Attach each tag with a copper wire and spray with a silicone waterproof coating. Also, submit two record copies of the warranty tags showing the layout and design. The date of acceptance and the QC signature must remain blank until the project is accepted for beneficial occupancy. Show the following information on the tag.

- a. Type of product/material_____.
- b. Model number_____.
- c. Serial number_____.
- d. Contract number_____.
- e. Warranty period_____from_____to_____.
- f. Inspector's signature_____.
- g. Construction Contractor_____.
- Address_____.
- Telephone number_____.
- h. Warranty contact_____.
- Address_____.
- Telephone number_____.

i. Warranty response time priority code_____.

j. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.

1.10.6.1 Duplicate Information

If the manufacturer's name (MFG), model number, and serial number are on the manufacturer's equipment data plate and this data plate is easily found and fully legible, this information need not be duplicated on the equipment warranty tag.

1.10.6.2 Execution

Complete the required information on each tag and install these tags on the equipment by the time of and as a condition of final acceptance of the equipment. Schedule this activity in the Contractor progress reporting system. Schedule the final acceptance inspection based upon notice from the Contractor, thus if the Contractor is at fault in this inspection being delayed, the Contractor will, at the Contractor's own expense, update the in-service and warranty expiration dates on these tags.

1.10.6.3 Updating Equipment Warranty Tags

Repairing or replacing warranted equipment: include an updated warranty identification tag on the repaired or replaced equipment. Using a fine point permanent marker pen, update the tag by checking whether the equipment was repaired or replaced, then indicate the date the work was completed. If the equipment was replaced, furnish a new tag identical to the original tag except indicate or update the manufacturer, MODEL NO., SERIAL NO., and Date Equip Placed In Service. Also, indicate whether the equipment has been replaced and the date of replacement.

1.11 OPERATION AND MAINTENANCE MANUALS

The Contractor shall be responsible for the preparation, coordination, execution and submittal of all Equipment Operating, Maintenance, and Repair manuals (O & M Manuals), including spare parts lists (**with the names and PHONE NUMBERS of local suppliers**), special tools, inventories of equipment manuals, and maintenance instructions, and shall conduct all training for operating and service personnel. Operation and maintenance manuals shall cover all system installations provided in this Contract and shall be in sufficient detail to facilitate normal maintenance and troubleshooting by persons with minimum experience with the installed equipment.

1.11.1 Submittal Requirements

All of the above listed items required in the technical specifications shall be fully developed and submitted to the Contracting Officer not less than 30 calendar days prior to the scheduled final acceptance inspection date and prior to scheduling training for operating and service personnel. The Contractor shall coordinate the content of each instruction period required in the technical specifications with the Contracting Officer's Representative prior to the actual start of the training period.

1.11.1.1 Field Training

Field Training is a requirement for substantial completion. The Contractor shall conduct a training course for the operating staff for each particular system. The training is to be conducted during hours of normal working time and shall start after the system is functionally complete. The field instructions shall cover all of the items contained in the Equipment Operating, Maintenance and Repair Manuals. The training will include both classroom and "hands-on" training. The Contractor shall submit a lesson plan outlining the information to be discussed during training periods. This lesson plan will be submitted 90 days before contract completion and approved before the field training occurs. Training shall be recorded on video tape (VHS FORMAT) or DVD and shall be furnished to the Government within ten (10) days following training. The taping shall include the entire session(s). The original video tape(s) or DVD's shall be labeled and turned over to the Contracting Officer. The video cameras, tapes, and DVD's utilized by the Contractor shall be of a quality to enable clear and understandable playbacks of the recorded events. Training shall be documented by the Contractor and a list of attendees shall be furnished to the Government.

1.11.1.2 Draft O & M Manuals

On those systems where complete and comprehensive operation and maintenance manuals cannot be fully developed until the system(s) is (are) checked, tested, and/or balanced, and the checking, testing, and/or balancing has not been done when submittals are required, a proposed draft of those system manual(s) shall be submitted. The covers of draft O & M Manuals shall be labeled "DRAFT" in large (not less than font size 24), legible, printed letters. Submit fully developed O & M Manuals for approval after the systems have been checked, tested, and/or balanced but prior to the scheduled final acceptance inspection date.

1.11.1.3 Commencement of Warranty of Construction

Failure to submit all specified O & M manuals, spare parts listings, spare parts, special tools, inventories of installed property, and training video tapes in a timely manner will be considered as delaying substantial completion of the work. Commencement of warranty under the Contract Clause WARRANTY OF CONSTRUCTION will not occur until all these items are delivered and approved by the Contracting Officer, but not earlier than the date of final acceptance of the work by the Government. When the O & M Manuals with drafts are approved they will not constitute a reason for delaying the start of the warranty period.

1.11.2 Government Possession of Work

The Government may take possession of any completed or partially completed work as provided for under Contract Clause entitled "USE AND POSSESSION PRIOR TO COMPLETION." If the installed equipment and/or systems thereto, have not been accepted by the Government due to the Contractor's failure to submit the above specified items, the Contractor shall operate and maintain such plant or system at no additional cost to the Government until such time that the specified items have been received, approved and any subsequent testing, check-out and/or training has been completed.

1.11.3 Payment

If there is no separate CLIN for O&M Manuals, the Government will withhold

an amount representing \$20,000, as non-progressed work, until submittal and approval of all O&M manuals are complete.

1.11.4 Preparation And Submission Of Operation And Maintenance Manuals

This paragraph establishes general requirements for the preparation and submission of equipment operating, maintenance, and repair manuals as called for in the various sections of the specifications. Specific instruction(s) relating to a particular system or piece of equipment shall be incorporated into the manuals in accordance with the applicable technical specification.

1.11.4.1 General Requirements

Furnish permanent electronic copies of the final Equipment Operating, Maintenance, and Repair Manuals on CD-ROM disk along with the number specified in the the technical sections. Provide 2 hard copies and 4 disc copies of the final O&M manuals unless the specified number is higher. Documents on the CD-ROM disk drive shall be in portable document format (.pdf); all printed and graphic documents, drawings, and illustrations shall be legible and bookmarked.

1.11.4.2 Equipment Operating, Maintenance, and Repair Manuals

a. General

Provide separate manuals for each utility system as defined hereinafter. Provide the number of copies of the manuals specified specified above or in the applicable technical section. Include in the manuals, in separate sections, the following information for each item of equipment. These requirements may be supplemented by additional requirements specified in the technical sections:

(1) Performance sheets and graphs showing capacity data, efficiencies, electrical characteristics, pressure drops, and flow rates. Marked-up catalogs or catalog pages do not satisfy this requirement. Performance information shall be presented as concisely as possible and contain only data pertaining to equipment actually installed.

(2) Catalog cuts showing application information.

(3) Installation information showing minimum acceptable requirements.

(4) Operation and maintenance requirements. Include adequate illustrative material to identify and locate operating controls, indicating devices and locations of areas or items requiring maintenance.

(a) Describe, in detail, starting and stopping procedures for components, adjustments required to obtain optimum equipment performance, and corrective actions for malfunctions.

(b) Describe in the maintenance instructions the nature and frequency of routine maintenance and procedures to be followed. Indicate any special tools, materials, and test equipment that may be required.

(5) Repair information including diagrams and schematics, guidance for diagnosing problems, and detailed instructions for making repairs. Provide troubleshooting information that includes a statement of

the indication or symptom of trouble and the sequential instructions necessary. Include test hookups to determine the cause, special tools and test equipment, and methods for returning the equipment to operating conditions. Information may be in chart form or in tabular format with appropriate headings.

(6) Parts lists with names and addresses of closest parts supply agencies, the current unit prices, and the sources of supply. Include spare parts data for each different item of materials and equipment specified.

(7) Names and addresses of local manufacturers representatives.

b. Facility Heating Systems

Provide information for the following equipment: Boilers, water treatment, chemical feed pumps and tanks, converters, heat exchangers, pumps, unit heaters, fin-tube radiation, air handling units (both heating only and heating and cooling), and valves (associated with heating systems).

c. Air-Conditioning Systems

Provide information on chillers, packaged air-conditioning equipment, towers, water treatment, chemical feed pumps and tanks, air-cooled condensers, pumps, compressors, air handling units, and valves (associated with air-conditioning systems).

d. Temperature Control and HVAC Distribution Systems

(1) Provide the information described for the following equipment:

Valves, fans, air handling units, pumps, boilers, converters, and heat exchangers, chillers, water cooled condensers, cooling towers, and fin-tube radiation.

(2) Provide all information described for the following equipment:

Control air compressors, control components (sensors, controllers, adapters, and actuators), and flow measuring equipment.

e. Central Heating Plants

Provide the information described for the following equipment: Boilers, converters, heat exchangers, pumps, fans, steam traps, pollution control equipment, chemical feed equipment, control systems, fuel handling equipment, de-aerators, tanks (flash, expansion, return water, etc.), water softeners, and valves.

f. District Heating Distribution Systems

Provide the information described for the following equipment: Valves, fans, pumps, converters and heat exchangers, steam traps, tanks (expansion, flash, etc.) and piping systems.

g. Exterior Electrical Systems

Information shall be provided on the following equipment: Power transformers, relays, reclosers, breakers, and capacitor bank controls.

h. Interior Electrical Systems

Information shall be provided on the following equipment: Relays, motor control centers, switchgear, solid state circuit breakers, motor controller, and EPS lighting systems, control systems (wire diagrams and troubleshooting flow chart), and special grounding systems.

i. Energy Management and Control System

The maintenance manual shall include descriptions of maintenance for all equipment, including inspection, periodic preventative maintenance, fault diagnosis, and repair or replacement of defective components.

j. Domestic Water Systems

The identified information shall be provided on the following equipment: Tanks, unit process equipment, pumps, motors, control and monitoring instrumentation, laboratory test equipment, chemical feeders, valves, switching gear, and automatic controls.

k. Wastewater Treatment Systems

The identified information shall be provided on the following equipment: Tanks, unit process equipment, pumps, motors, control and monitoring instrumentation, laboratory test equipment, chemical feeders, valves, scrapers, skimmers, comminutors, blowers, switching gear, and automatic controls.

l. Fire Protection Systems

Information shall be provided on the following equipment: Alarm valves, manual valves, regulators, foam and gas storage tanks, piping materials, sprinkler heads, nozzles, pumps, and pump drivers.

m. Fire Detection Systems

The maintenance manual shall include description of maintenance for all equipment, including inspection, periodic preventive maintenance, fault diagnosis, and repair or replacement of defective components.

n. Plumbing Systems

Information shall be provided on the following equipment: Water heaters, valves, pressure regulators, backflow preventors, piping materials, and plumbing fixtures.

o. Liquid Fuels Systems

Information shall be provided on the following equipment: Tanks, automatic valves, manual valves, filter separators, pumps, mechanical loading arms, nozzles, meters, electronic controls, electrical switch gear, and fluidic controls.

p. Cathodic Protection Systems

Information shall be provided on the following material and equipment: Rectifiers, meters, anodes, anode backfill, anode lead wire, insulation material and wire size, automatic controls (if any), rheostats, switches, fuses and circuit breakers, type and size of rectifying elements, type of

oil in oil-immersed rectifiers, and rating of shunts.

q. Generator Installations

Information shall be provided on the following equipment: Generator sets, automatic transfer panels, governors, exciters, regulators, starting systems, switchgear, and protective devices.

r. Miscellaneous Systems

Information shall be provided on the following: Communication and ADP systems, security and intrusion alarm, elevators, material handling, active solar, photovoltaic, and other similar type special systems not otherwise specified.

1.11.5 RED ZONE MEETING

Approximately 60 days before the anticipated Beneficial Occupancy Date (BOD) but prior to the final acceptance inspection of the last or only bid schedule item of work, the Contractor's Supervisor and Quality Control Manager and the Government's project delivery team will conduct what is known as the Red Zone Meeting to discuss the close-out process, to schedule the events and review responsibilities for actions necessary to produce a timely physical, as well as fiscal, project close-out. The Red Zone meeting derives its name from the football term used to describe the team effort to move the ball the last 20 yards into the end zone. The close-out of a construction project sometimes can be equally as hard and most definitely requires the whole team's efforts. The ACO will chair the meeting. Exhibit One is a generic meeting checklist.

1.12 CLEANUP

Leave premises "broom clean." Clean interior and exterior glass surfaces exposed to view; remove temporary labels, stains and foreign substances; polish transparent and glossy surfaces; vacuum carpeted and soft surfaces. Clean equipment and fixtures to a sanitary condition. Replace filters of operating equipment. Clean debris from roofs, gutters, downspouts and drainage systems. Sweep paved areas and rake clean landscaped areas. Remove waste and surplus materials, rubbish and construction facilities from the site.

1.13 REAL PROPERTY RECORD

DD Form 1354, TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY, is the formal document that the Corps of Engineers uses to transfer project ownership to the installation. The Installation uses the document to update their real property maintenance records. Upon award of a construction contract, the Ft. Worth District Cost Engineering & Specifications Section (CESWF-EC-AC) will enter the project data and contract costs available at the time of award into the Government's Resident Managers System (RMS) database. This data is captured on an Excel spreadsheet and electronically uploaded into RMS, from which the actual DD Form 1354 can then be printed.

After award of the construction contract, the Contractor shall assist the Corps of Engineers construction field office by updating the Excel

spreadsheet data that will be provided at the Preconstruction Meeting. The Government will provide to the Contractor a copy of the Excel file used to record the construction changes and provide instructions for updating the data through the life of the project.

The data - when required - consists of:

1. A description of the item
2. The applicable Category Code
3. The item's contract cost to the Government
4. The quantity and unit of measure

This assistance will be required when a construction modification is issued. When a construction modification occurs that impacts quantities and/or costs, such as installing 150 LF of new 10" water main, the DD Form 1354 data will require changes to existing line items and/or additional line items of data due to the construction modification. The Contractor shall assist by providing the new construction data (quantities/costs) broken down by applicable Category Codes necessary for the Government to use in updating the DD Form 1354 data in RMS. The updated Excel spreadsheet shall be provided at the Red Zone meeting or no later than 60 days prior to anticipated BOD or project completion. Data shall be provided to the Contracting Officer Representative.

Refer to UFC 1-300-08 for instruction on completing the DD Form 1354. For information purposes, a blank DD Form 1354 (fill-able) in ADOBE (PDF) may be obtained at the following web site:

<http://www.dtic.mil/whs/directives/infomgt/forms/eforms/dd1354.pdf>

Submit the completed Checklist for Form DD1354 of Installed Building Equipment items. Attach this list to the updated DD Form 1354.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 EXHIBIT 1

SAMPLE

Red Zone Meeting Checklist

Date: _____

Contract No.: _____

Description / Location: _____

Contractor: _____

Contracting Officer: _____

Action

Completion

Milestone

Inspections _____

Fire _____

Safety _____

SAMPLE

Red Zone Meeting Checklist

Date: _____

Contract No.: _____

Description / Location: _____

Contractor: _____

Contracting Officer: _____

Action	Completion	Milestone
Pre-final		
Mechanical Test & Balance		
Commissioning		
Landscaping Complete		
Beneficial Occupancy Date (BOD)		
Furniture Installation		
Comm Installation		
As-Built Contract Drawings		
Provide all O&M manuals, tools, shop drawings, spare parts, etc. provided to customer		
Provide Warranty documents to Customer		
Contract completion		
Final Inspection		
User move-in		
DD Form 1354, Transfer of Real Property completed & signed		
Ribbon cutting		
DD Form 2626 - Construction Contractor Performance Evaluation		
DD Form 2631 - A-E Performance Rated after Construction		
Final Payment Completed		
Release of Claims (see Exhibit 2)		
Return of Unobligated Funds		
Move Project from CIP to General Ledger		
Financial completion		

3.2 EXHIBIT 2

FINAL PAYMENT RELEASE

The undersigned as the Contractor under Contract No. W9126G-__-_-____ dated _____ between the United States of America and said Contractor, for _____ located at _____ in accordance with paragraph (____) of Contract Clause _____, PAYMENTS TO CONTRACTOR, of said Contract, hereby releases the United States, its officers, agents, and employees from any and all claims relating to or arising by virtue of said Contract, or any modification or change thereto, except with respect to those claims, if any, listed below:

(Identify claim or if none, write in "none.")

Executed this ____ day of _____ 20__

(Contractor's name in CAPS)

By _____

Title _____

-- End of Section --

SECTION 01 78 23

OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM E 1971 (2005; R 2011) Stewardship for the Cleaning of Commercial and Institutional Buildings

1.2 SUBMISSION OF OPERATION AND MAINTENANCE DATA

Submit Operation and Maintenance (O&M) Data specifically applicable to this contract and a complete and concise depiction of the provided equipment, product, or system, stressing and enhancing the importance of system interactions, troubleshooting, and long-term preventative maintenance and operation. The subcontractors shall compile and prepare data and deliver to the Contractor prior to the training of Government personnel. The Contractor shall compile and prepare aggregate O&M data including clarifying and updating the original sequences of operation to as-built conditions. Organize and present information in sufficient detail to clearly explain O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with this section and Section 01 33 00 SUBMITTAL PROCEDURES.

1.2.1 Package Quality

Documents must be fully legible. Poor quality copies and material with hole punches obliterating the text or drawings will not be accepted.

1.2.2 Package Content

Data package content shall be as shown in the paragraph titled "Schedule of Operation and Maintenance Data Packages." Comply with the data package requirements specified in the individual technical sections, including the content of the packages and addressing each product, component, and system designated for data package submission, except as follows. Commissioned items without a specified data package requirement in the individual technical sections shall use Data Package 3, 4, or 5, in accordance with the Package Usage Definitions in paragraph SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES. Commissioned items with a Data Package 1 or 2 requirement shall use instead Data Package 3.

1.2.3 Changes to Submittals

Manufacturer-originated changes or revisions to submitted data shall be furnished by the Contractor if a component of an item is so affected subsequent to acceptance of the O&M Data. Changes, additions, or revisions required by the Contracting Officer for final acceptance of submitted data,

shall be submitted by the Contractor within 30 calendar days of the notification of this change requirement.

1.2.4 Review and Approval

The Contractor's Commissioning Authority (CA) shall review the commissioned systems and equipment submittals for completeness and applicability. The CA shall verify that the systems and equipment provided meet the requirements of the Contract documents and design intent, particularly as they relate to functionality, energy performance, water performance, maintainability, sustainability, system cost, indoor environmental quality, and local environmental impacts. The CA shall communicate deficiencies to the Contracting Officer. Upon a successful review of the corrections, the CA shall recommend approval and acceptance of these O&M manuals to the Contracting Officer. This work shall be in addition to the normal review procedures for O&M data.

1.2.5 O&M Database

Develop a database from the O&M manuals that contains the information required to start a preventative maintenance program.

1.3 TYPES OF INFORMATION REQUIRED IN O&M DATA PACKAGES

1.3.1 Operating Instructions

Include specific instructions, procedures, and illustrations for the following phases of operation for the installed model and features of each system:

1.3.1.1 Safety Precautions

List personnel hazards and equipment or product safety precautions for all operating conditions.

1.3.1.2 Operator Prestart

Include procedures required to install, set up, and prepare each system for use.

1.3.1.3 Startup, Shutdown, and Post-Shutdown Procedures

Provide narrative description for Startup, Shutdown and Post-shutdown operating procedures including the control sequence for each procedure.

1.3.1.4 Normal Operations

Provide narrative description of Normal Operating Procedures. Include Control Diagrams with data to explain operation and control of systems and specific equipment.

1.3.1.5 Emergency Operations

Include Emergency Procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Include Emergency Shutdown Instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance and procedures for emergency operation of all utility systems including required valve positions, valve locations and

zones or portions of systems controlled.

1.3.1.6 Operator Service Requirements

Include instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and recording gage readings.

1.3.1.7 Environmental Conditions

Include a list of Environmental Conditions (temperature, humidity, and other relevant data) that are best suited for the operation of each product, component or system. Describe conditions under which the item equipment should not be allowed to run.

1.3.2 Preventive Maintenance

Include the following information for preventive and scheduled maintenance to minimize corrective maintenance and repair for the installed model and features of each system. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials.

1.3.2.1 Lubrication Data

Include preventative maintenance lubrication data, in addition to instructions for lubrication provided under paragraph titled "Operator Service Requirements":

- a. A table showing recommended lubricants for specific temperature ranges and applications.
- b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities.
- c. A Lubrication Schedule showing service interval frequency.

1.3.2.2 Preventive Maintenance Plan and Schedule

Include manufacturer's schedule for routine preventive maintenance, inspections, tests and adjustments required to ensure proper and economical operation and to minimize corrective maintenance. Provide manufacturer's projection of preventive maintenance work-hours on a daily, weekly, monthly, and annual basis including craft requirements by type of craft. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation.

1.3.2.3 Cleaning Recommendations

Provide environmentally preferable cleaning recommendations in accordance with ASTM E 1971.

1.3.3 Corrective Maintenance (Repair)

Include manufacturer's recommended procedures and instructions for correcting problems and making repairs for the installed model and features of each system. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials.

1.3.3.1 Troubleshooting Guides and Diagnostic Techniques

Include step-by-step procedures to promptly isolate the cause of typical malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.

1.3.3.2 Wiring Diagrams and Control Diagrams

Wiring diagrams and control diagrams shall be point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering.

1.3.3.3 Maintenance and Repair Procedures

Include instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards.

1.3.3.4 Removal and Replacement Instructions

Include step-by-step procedures and a list required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Instructions shall include a combination of text and illustrations.

1.3.3.5 Spare Parts and Supply Lists

Include lists of spare parts and supplies required for maintenance and repair to ensure continued service or operation without unreasonable delays. Special consideration is required for facilities at remote locations. List spare parts and supplies that have a long lead-time to obtain.

1.3.4 Corrective Maintenance Work-Hours

Include manufacturer's projection of corrective maintenance work-hours including requirements by type of craft. Corrective maintenance that requires completion or participation of the equipment manufacturer shall be identified and tabulated separately.

1.3.5 Appendices

Provide information required below and information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment. Include the following:

1.3.5.1 Product Submittal Data

Provide a copy of all SD-03 Product Data submittals required in the applicable technical sections.

1.3.5.2 Manufacturer's Instructions

Provide a copy of all SD-08 Manufacturer's Instructions submittals required

in the applicable technical sections.

1.3.5.3 O&M Submittal Data

Provide a copy of all SD-10 Operation and Maintenance Data submittals required in the applicable technical sections.

1.3.5.4 Parts Identification

Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number that will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies in accordance with the manufacturer's standard practice. Parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as typically shown in a master parts catalog

1.3.5.5 Warranty Information

List and explain the various warranties and clearly identify the servicing and technical precautions prescribed by the manufacturers or contract documents in order to keep warranties in force. Include warranty information for primary components such as the compressor of air conditioning system.

1.3.5.6 Personnel Training Requirements

Provide information available from the manufacturers that is needed for use in training designated personnel to properly operate and maintain the equipment and systems.

1.3.5.7 Testing Equipment and Special Tool Information

Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components.

1.3.5.8 Testing and Performance Data

Include completed prefunctional checklists, functional performance test forms, and monitoring reports. Include recommended schedule for retesting and blank test forms.

1.3.5.9 Contractor Information

Provide a list that includes the name, address, and telephone number of the General Contractor and each Subcontractor who installed the product or equipment, or system. For each item, also provide the name address and telephone number of the manufacturer's representative and service organization that can provide replacements most convenient to the project site. Provide the name, address, and telephone number of the product,

equipment, and system manufacturers.

1.4 TYPES OF INFORMATION REQUIRED IN CONTROLS O&M DATA PACKAGES

Include Data Package 5 and the following for control systems:

- a. Narrative description on how to perform and apply all functions, features, modes, and other operations, including unoccupied operation, seasonal changeover, manual operation, and alarms. Include detailed technical manual for programming and customizing control loops and algorithms.
- b. Full as-built sequence of operations.
- c. Copies of all checkout tests and calibrations performed by the Contractor (not Cx tests).
- d. Full points list. A listing of rooms shall be provided with the following information for each room:
 - (1) Floor
 - (2) Room number
 - (3) Room name
 - (4) Air handler unit ID
 - (5) Reference drawing number
 - (6) Air terminal unit tag ID
 - (7) Heating and/or cooling valve tag ID
 - (8) Minimum cfm
 - (9) Maximum cfm
- e. Full print out of all schedules and set points after testing and acceptance of the system.
- f. Full as-built print out of software program.
- g. Electronic copy on disk or CD of the entire program for this facility.
- h. Marking of all system sensors and thermostats on the as-built floor plan and mechanical drawings with their control system designations.

1.5 SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES

Furnish the O&M data packages specified in individual technical sections, or if not specified in the individual technical sections, in accordance with the package usage definition. The required information for each O&M data package is as follows:

1.5.1 Data Package 1

Package Usage Definition: Use Data Package 1 for architectural items requiring simple but specific maintenance and replacement; for example,

acoustical ceiling, floor tile or carpeting system.

- a. Safety precautions
- b. Cleaning recommendations
- c. Maintenance and repair procedures
- d. Warranty information
- e. Contractor information
- f. Spare parts and supply list

1.5.2 Data Package 2

Package Usage Definition: Use Data Package 2 for an item that is less simple than required for Data Package 1; for example, an item having a motor and some sequence of operation such as a refrigerated drinking fountain.

- a. Safety precautions
- b. Normal operations
- c. Environmental conditions
- d. Lubrication data
- e. Preventive maintenance plan and schedule
- f. Cleaning recommendations
- g. Maintenance and repair procedures
- h. Removal and replacement instructions
- i. Spare parts and supply list
- j. Parts identification
- k. Warranty information
- l. Contractor information

1.5.3 Data Package 3

Package Usage Definition: Use Data Package 3 for a complex piece of equipment, having a specific troubleshooting sequence, but one which does not require an operator on watch; for example, HVAC temperature controls.

- a. Safety precautions
- b. Operator prestart
- c. Startup, shutdown, and post-shutdown procedures
- d. Normal operations

- e. Emergency operations
- f. Environmental conditions
- g. Lubrication data
- h. Preventive maintenance plan and schedule
- i. Cleaning recommendations
- j. Troubleshooting guides and diagnostic techniques
- k. Wiring diagrams and control diagrams
- l. Maintenance and repair procedures
- m. Removal and replacement instructions
- n. Spare parts and supply list
- o. Product submittal data
- p. O&M submittal data
- q. Parts identification
- r. Warranty information
- s. Testing equipment and special tool information
- t. Testing and performance data
- u. Contractor information

1.5.4 Data Package 4

Package Usage Definition: Use Data Package 4 for an extremely complex piece of equipment, having an extensive sequence of operation, a complex troubleshooting sequence and one requiring frequent operator attention; at least for start-up and shut-down. Examples of this case would be small boilers and small diesel generator sets.

- a. Safety precautions
- b. Operator prestart
- c. Startup, shutdown, and post-shutdown procedures
- d. Normal operations
- e. Emergency operations
- f. Operator service requirements
- g. Environmental conditions
- h. Lubrication data

- i. Preventive maintenance plan and schedule
- j. Cleaning recommendations
- k. Troubleshooting guides and diagnostic techniques
- l. Wiring diagrams and control diagrams
- m. Maintenance and repair procedures
- n. Removal and replacement instructions
- o. Spare parts and supply list
- p. Corrective maintenance man-hours
- q. Product submittal data
- r. O&M submittal data
- s. Parts identification
- t. Warranty information
- u. Personnel training requirements
- v. Testing equipment and special tool information
- w. Testing and performance data
- x. Contractor information

1.5.5 Data Package 5

Package Usage Definition: Use Data Package 5 for electrical equipment, components, or systems on which, wiring and control diagrams are needed for operation, maintenance, or repair. Examples of this case are 400 Hz frequency converters, annunciator panels, and cathodic protection systems.

- a. Safety precautions
- b. Operator prestart
- c. Start-up, shutdown, and post-shutdown procedures
- d. Normal operations
- e. Environmental conditions
- f. Preventive maintenance plan and schedule
- g. Troubleshooting guides and diagnostic techniques
- h. Wiring and control diagrams
- i. Maintenance and repair procedures
- j. Removal and replacement instructions

- k. Spare parts and supply list
- l. Product submittal data
- m. Manufacturer's instructions
- n. O&M submittal data
- o. Parts identification
- p. Testing equipment and special tool information
- q. Warranty information
- r. Testing and performance data
- s. Contractor information

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --